



## 2.00mm (.079") Pitch Milli-Grid™ Introduction

Molex's Milli-Grid family of high density connectors is based on a 2.00 x 2.00mm grid pattern. The system offers complete design flexibility for wire-to-board, board-to-board and cable-to-board connections in PC, consumer, telecom and other electronic industries.

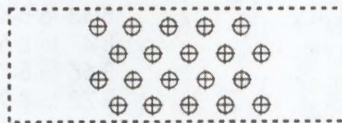
Compared to traditional 2.54mm (.100") pitch connectors, Milli-Grid connectors offer up to 40% savings in PCB real estate.

The Milli-Grid family includes crimp terminals, housings, headers and receptacles. The crimp terminals feature an early entry design that provides longer wiping action for more reliable contact. The receptacles boast a choice of mating styles in top, side and bottom entry in PCB, IDT and FPC versions. Headers are available in both shrouded and unshrouded styles.

2.00 to 2.50mm (.079 to .098") Pitch

B

### THE 2.00mm ADVANTAGE



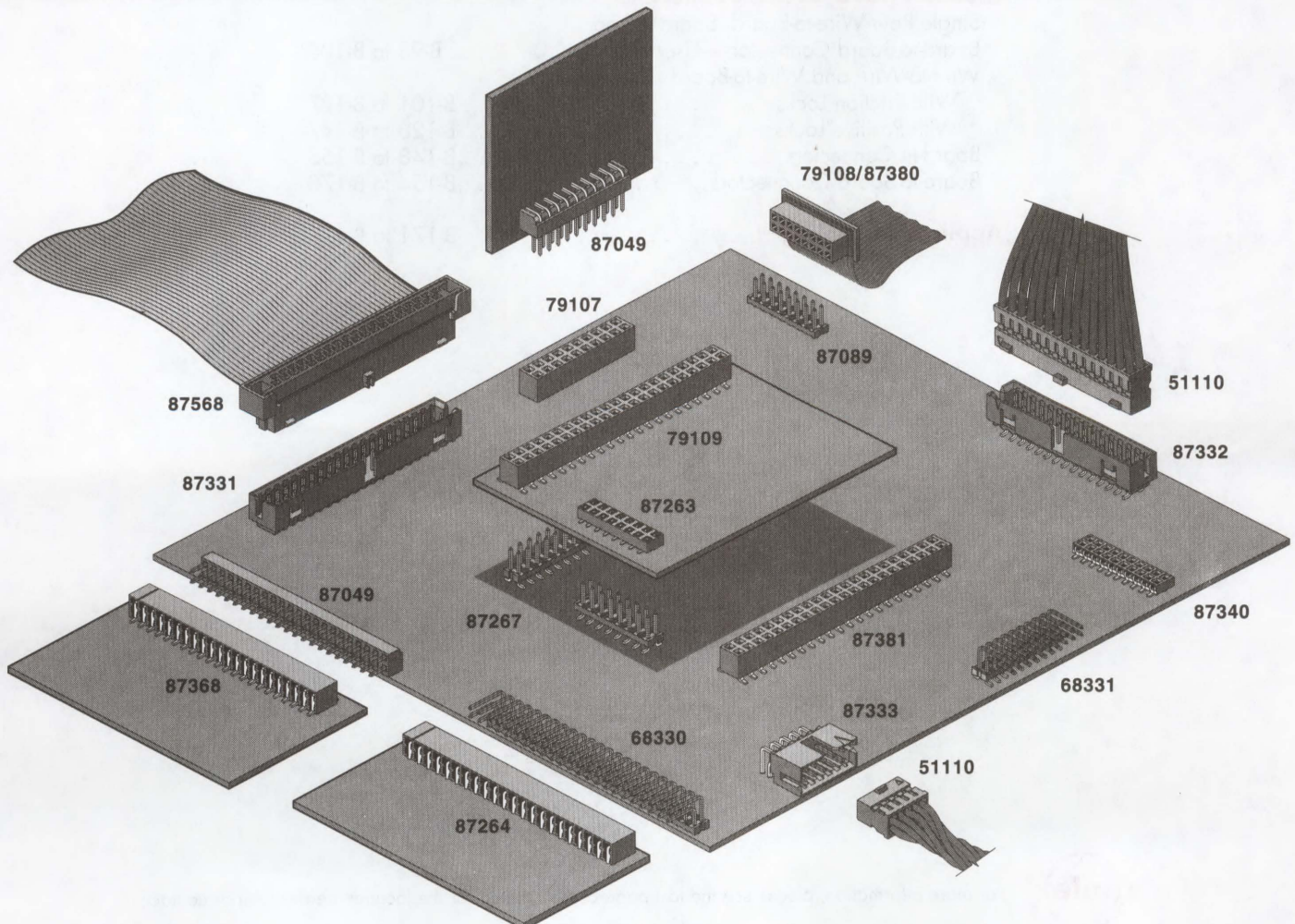
(Milli-Grid vs. 2.54 and 1.27mm Pitch)  
20-Circuit PCB Usage Comparison

Milli-Grid = 80mm<sup>2</sup>

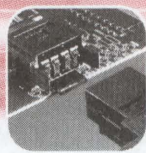
2.54mm Pitch = 125mm<sup>2</sup>

1.27mm Pitch = 185mm<sup>2</sup>

### APPLICATION OVERVIEW





**B**

## 2.00 to 2.50mm (.079 to .098") Pitch PCB and Wire Connectors

### 2.00mm (.079") Pitch Connectors

|                                                                                           |              |
|-------------------------------------------------------------------------------------------|--------------|
| Dual Row Wire-to-Board, Flex-to-Board and Board-to-Board Connectors—Milli-Grid™ . . . . . | B-2 to B-24  |
| Single/Dual Row Multi-Harness Wire-to-Wire and Wire-to-Board Connectors—Mi II™ . . . . .  | B-25 to B-42 |
| Wire-to-Wire Connectors . . . . .                                                         | B-43 to B-46 |
| Wire-to-Board Connectors . . . . .                                                        | B-47 to B-65 |
| Board-In Connectors . . . . .                                                             | B-66 to B-72 |
| Board-to-Board Connectors . . . . .                                                       | B-73 to B-90 |

### 2.20mm (.086") Pitch Panel Detachable

|                                     |              |
|-------------------------------------|--------------|
| Board-to-Board Connectors . . . . . | B-91 to B-92 |
|-------------------------------------|--------------|

### 2.50mm (.098") Pitch Connectors

|                                                                                          |                |
|------------------------------------------------------------------------------------------|----------------|
| Single Row Wire-to-Board, Board-In and Board-to-Board Connectors—User Friendly . . . . . | B-93 to B-100  |
| Wire-to-Wire and Wire-to-Board Connectors                                                |                |
| With Friction Locks . . . . .                                                            | B-101 to B-127 |
| With Positive Locks . . . . .                                                            | B-128 to B-147 |
| Board-In Connectors . . . . .                                                            | B-148 to B-153 |
| Board-to-Board Connectors . . . . .                                                      | B-154 to B-170 |

|                               |                |
|-------------------------------|----------------|
| Application Tooling . . . . . | B-171 to B-178 |
|-------------------------------|----------------|



For more information, please see the last page of the catalog for the location nearest you or contact:



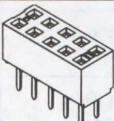
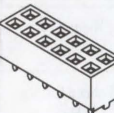
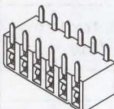
# Board-to-Board System

**molex**® Milli-Grid™ 2.00mm (.079")  
Pitch Interconnection System

**B**

2.00 to 2.50mm (.079 to .098") Pitch

| Through Hole           |                   |                   |                      | SMT               |                   |
|------------------------|-------------------|-------------------|----------------------|-------------------|-------------------|
|                        |                   |                   |                      |                   |                   |
| Series/Description     |                   |                   |                      |                   |                   |
| 87049<br>Right Angle   | 87089<br>Vertical | 87331<br>Vertical | 87333<br>Right Angle | 87267<br>Vertical | 87332<br>Vertical |
| Overall Mating Heights |                   |                   |                      |                   |                   |

|                                                                                   | Series | Description       | Contact Point | Overall Height                   | Circuits | Right Angle | Vertical    | Vertical    | Right Angle | Vertical    | Vertical    |
|-----------------------------------------------------------------------------------|--------|-------------------|---------------|----------------------------------|----------|-------------|-------------|-------------|-------------|-------------|-------------|
| Through Hole                                                                      |        |                   |               |                                  |          |             |             |             |             |             |             |
|  | 79107  | Top Entry         | 1.50 (.059)   | 4.44 (.175)                      | 4 to 50  | 8.44 (.332) | 5.94 (.234) | 6.94 (.273) | 6.94 (.273) | 7.14 (.281) | 8.14 (.320) |
|                                                                                   | 79108  | FFC/FPC Top Entry |               |                                  |          |             |             |             |             |             |             |
|  | 87380  | FFC/FPC Top Entry | 0.90 (.035)   | 4.00 (.157)                      | 6 to 50  | 8.00 (.314) | 5.50 (.216) | 6.50 (.256) | 6.50 (.256) | 6.70 (.264) | 7.70 (.303) |
|  | 87264  | Side Entry        | 1.50 (.059)   | 4.00 (.157)<br>by<br>5.00 (.197) | 8 to 50  | 9.00 (.354) | 6.50 (.256) |             |             | 7.70 (.303) |             |

|            |       |                  |             |                                  |         |             |             |             |             |             |             |
|------------|-------|------------------|-------------|----------------------------------|---------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>SMT</b> |       |                  |             |                                  |         |             |             |             |             |             |             |
|            | 79109 | Top/Bottom Entry | 1.50 (.059) | 4.65 (.183)                      | 4 to 50 | 8.65 (.341) | 6.15 (.242) | 7.15 (.281) | 7.15 (.281) | 7.35 (.289) | 8.35 (.329) |
|            | 87263 | Bottom Entry     | 1.30 (.051) | 2.80 (.110)                      | 4 to 44 | 8.38 (.330) | 5.88 (.231) |             |             | 7.08 (.279) |             |
|            | 87340 | Top Entry        | 0.90 (.035) | 2.15 (.085)                      | 4 to 20 | 6.15 (.242) | 3.65 (.144) |             |             | 4.85 (.191) |             |
|            | 87381 | Top Entry        | 1.70 (.067) | 4.50 (.177)                      | 6 to 50 | 8.50 (.335) | 6.00 (.236) | 7.00 (.276) | 7.00 (.276) | 7.20 (.283) | 8.20 (.323) |
|            | 87368 | Side Entry       | 1.50 (.059) | 4.90 (.193)<br>by<br>5.00 (.197) | 8 to 50 | 9.00 (.354) | 6.50 (.256) |             |             | 7.70 (.303) |             |

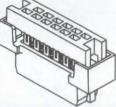
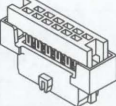
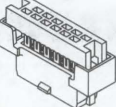
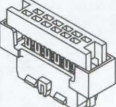
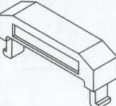
| <b>Unshrouded Headers</b> |            |          |                        |               |             |
|---------------------------|------------|----------|------------------------|---------------|-------------|
|                           | Order No.  | Circuits | Features               | Mating Length | Tail Length |
|                           | 87089-XX16 | 4 to 50  | 15μ" Gold              | 4.00 (.158)   | 2.60 (.102) |
|                           | 87089-XX17 |          | 30μ" Gold              |               |             |
|                           | 87267-XX50 | 8 to 50  | With Pegs 15μ" Gold    | 3.80 (.150)   | 1.20 (.047) |
|                           | 87267-XX51 |          | With Pegs 30μ" Gold    |               |             |
|                           | 87267-XX14 | 4 to 50  | Without Pegs 15μ" Gold |               |             |
|                           | 87267-XX15 |          | Without Pegs 30μ" Gold |               |             |
|                           | 87049-XX16 | 4 to 50  | 15μ" Gold              | 4.00 (.158)   | 2.60 (.102) |
|                           | 87049-XX17 |          | 30μ" Gold              |               |             |

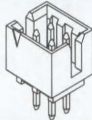
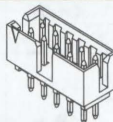
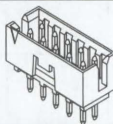
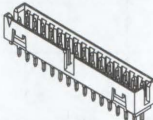
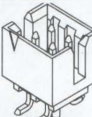
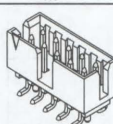
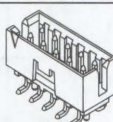
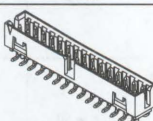
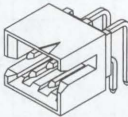
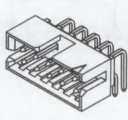
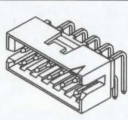
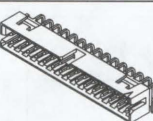


## Wire-to-Board System

| Early Entry System Terminals                                                      |            |           |                       |
|-----------------------------------------------------------------------------------|------------|-----------|-----------------------|
|  | Order No.  | Packaging | Plating               |
|                                                                                   | 50394-8053 | Reel      | Gold Flash            |
|                                                                                   | 50394-8300 | Bag       | Gold Flash            |
|                                                                                   | 50394-8051 | Reel      | 15µ" min. Select Gold |
|                                                                                   | 50394-8100 | Bag       | 15µ" min. Select Gold |
|                                                                                   | 50394-8052 | Reel      | 30µ" min. Select Gold |
|                                                                                   | 50394-8200 | Bag       | 30µ" min. Select Gold |

| Crimp Housings                                                                      |            |          |                                                                                                                          |
|-------------------------------------------------------------------------------------|------------|----------|--------------------------------------------------------------------------------------------------------------------------|
|                                                                                     | Order No.  | Circuits | Features                                                                                                                 |
|    | 51110-XX50 | 4 to 34  | Plain                                                                                                                    |
|    | 51110-XX51 | 8 to 12  | Center Polarization Key<br>             |
|   | 51110-XX60 | 4 to 12  | Center Polarization Ramp<br>          |
|  | 51110-XX51 | 14 to 34 | Locking Ramp and Polarization Key<br> |

| IDT Housings and Strain Relief                                                      |            |                                                       |                                                |
|-------------------------------------------------------------------------------------|------------|-------------------------------------------------------|------------------------------------------------|
|  | 87568-XX61 | 10, 12, 14, 16, 20, 22, 24, 26, 30, 34, 40, 44 and 50 | Plain Front<br>15µ" Gold                       |
|                                                                                     | 87568-XX62 |                                                       | Plain Front<br>30µ" Gold                       |
|  | 87568-XX41 | 14, 16, 20, 22, 24, 26, 30, 34, 40, 44 and 50         | Center Polarization Ramp<br>30µ" Gold          |
|                                                                                     | 87568-XX42 |                                                       | Center Polarization Ramp<br>15µ" Gold          |
|  | 87568-XX71 | 10 and 12                                             | Center Locking Ramp<br>15µ" Gold               |
|                                                                                     | 87568-XX72 |                                                       | Center Locking Ramp<br>30µ" Gold               |
|  | 87568-XX91 | 14, 16, 20, 22, 24, 26, 30, 34, 40, 44 and 50         | Locking Ramp and Polarization Key<br>15µ" Gold |
|                                                                                     | 87568-XX92 |                                                       | Locking Ramp and Polarization Key<br>30µ" Gold |
|  | 87569-10XX | 10, 12, 14, 16, 20, 22, 24, 26, 30, 34, 40, 44 and 50 | Strain Relief                                  |

| Shrouded Headers                                                                    |            |          |                                                          |
|-------------------------------------------------------------------------------------|------------|----------|----------------------------------------------------------|
| Through Hole                                                                        | Order No.  | Circuits | Features                                                 |
|    | 87331-XX20 | 4 to 6   | Plain<br>15µ" Gold                                       |
|                                                                                     | 87331-XX21 |          | Plain<br>30µ" Gold                                       |
|    | 87331-XX20 | 8 to 12  | Center Polarization Slot<br>15µ" Gold                    |
|                                                                                     | 87331-XX21 |          | Center Polarization Slot<br>30µ" Gold                    |
|    | 87331-XX41 | 4 to 12  | Center Locking Window<br>15µ" Gold                       |
|                                                                                     | 87331-XX42 |          | Center Locking Window<br>30µ" Gold                       |
|    | 87331-XX20 | 14 to 50 | Center Polarization Slot and Locking<br>Window 15µ" Gold |
|                                                                                     | 87331-XX21 |          | Center Polarization Slot and Locking<br>Window 30µ" Gold |
| SMT                                                                                 |            |          |                                                          |
|    | 87332-XX20 | 4 to 6   | Plain<br>15µ" Gold                                       |
|                                                                                     | 87332-XX21 |          | Plain<br>30µ" Gold                                       |
|   | 87332-XX20 | 8 to 12  | Center Polarization Slot<br>15µ" Gold                    |
|                                                                                     | 87332-XX21 |          | Center Polarization Slot<br>30µ" Gold                    |
|  | 87332-XX10 | 4 to 12  | Center Locking Window<br>15µ" Gold                       |
|                                                                                     | 87332-XX11 |          | Center Locking Window<br>30µ" Gold                       |
|  | 87332-XX20 | 14 to 50 | Center Polarization Slot and Locking<br>Window 15µ" Gold |
|                                                                                     | 87332-XX21 |          | Center Polarization Slot and Locking<br>Window 30µ" Gold |
| Right Angle                                                                         |            |          |                                                          |
|  | 87333-XX20 | 4 to 6   | Plain<br>15µ" Gold                                       |
|                                                                                     | 87333-XX21 |          | Plain<br>30µ" Gold                                       |
|  | 87333-XX20 | 8 to 12  | Center Polarization Slot<br>15µ" Gold                    |
|                                                                                     | 87333-XX21 |          | Center Polarization Slot<br>30µ" Gold                    |
|  | 87333-XX31 | 4 to 12  | Center Locking Window<br>15µ" Gold                       |
|                                                                                     | 87333-XX32 |          | Center Locking Window<br>30µ" Gold                       |
|  | 87333-XX20 | 14 to 50 | Center Polarization Slot and Locking<br>Window 15µ" Gold |
|                                                                                     | 87333-XX21 |          | Center Polarization Slot and Locking<br>Window 30µ" Gold |

**B**

2.00 to 2.50mm (.079 to .098") Pitch



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 34 circuits
- Front latches for added retention forces after mating
- Options include center polarization key and front latches version (14 to 34 circuits only), center polarization key only (8 to 12 circuits)

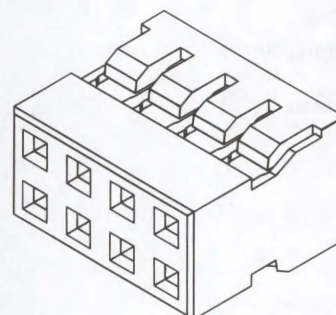
### Physical

Housing: Black glass-filled polyester, UL 94V-0  
Operating Temperature: -55 to +105°C



## 2.00mm (.079") Pitch Milli-Grid™ Crimp Housing

51110



### Reference Information

Product Specification: PS-51110

Packaging: Bag

UL File No.: E29179

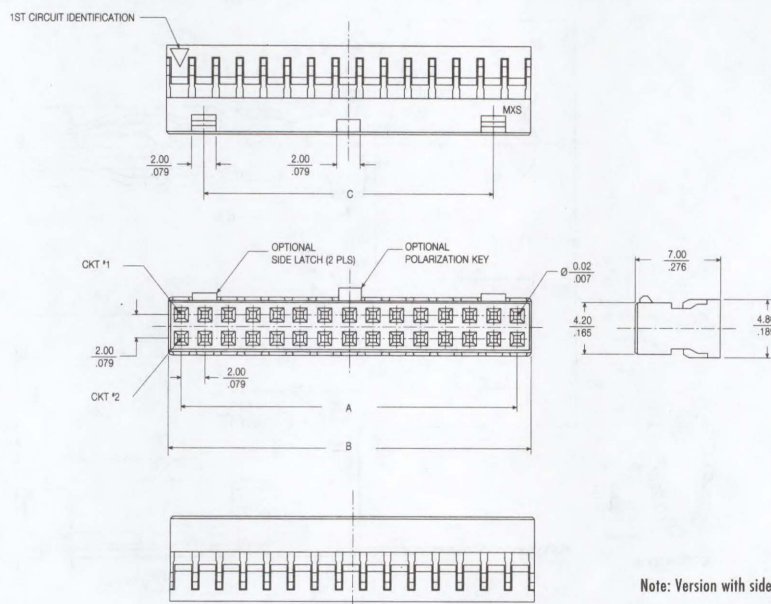
CSA File No.: LR19980

Mates With: 87331, 87332, 87333, 87089, 87267 and 87049

Use With: 50394

Designed In: Millimeters

## CATALOG DRAWING (FOR REFERENCE ONLY)



Note: Version with side latches and polarization key shown.

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  |                        | Dimension     |               |               |
|----------|------------|------------------------|---------------|---------------|---------------|
|          | Plain      | With Polarization Keys | A             | B             | C             |
| 4        | 51110-0450 | 51110-0460             | 2.00 (.079)   | 4.20 (.165)   |               |
| 6        | 51110-0650 | 51110-0660             | 4.00 (.157)   | 6.20 (.244)   |               |
| 8        | 51110-0850 | 51110-0860             | 6.00 (.236)   | 8.20 (.323)   |               |
| 10       | 51110-1050 | 51110-1060             | 8.00 (.315)   | 10.20 (.402)  |               |
| 12       | 51110-1250 | 51110-1260             | 10.00 (.394)  | 12.20 (.480)  |               |
| 14       | 51110-1450 | 51110-1451             | 12.00 (.472)  | 14.20 (.559)  | 8.00 (.315)   |
| 16       | 51110-1650 | 51110-1651             | 14.00 (.551)  | 16.20 (.638)  | 10.00 (.394)  |
| 18       | 51110-1850 | 51110-1851             | 16.00 (.630)  | 18.20 (.717)  | 12.00 (.472)  |
| 20       | 51110-2050 | 51110-2051             | 18.00 (.708)  | 20.20 (.795)  | 14.00 (.551)  |
| 22       | 51110-2250 | 51110-2251             | 20.00 (.787)  | 22.20 (.874)  | 16.00 (.630)  |
| 24       | 51110-2450 | 51110-2451             | 22.00 (.866)  | 24.20 (.953)  | 18.00 (.709)  |
| 26       | 51110-2650 | 51110-2651             | 24.00 (.945)  | 26.20 (1.031) | 20.00 (.787)  |
| 28       | 51110-2850 | 51110-2851             | 26.00 (1.024) | 28.20 (1.110) | 22.00 (.866)  |
| 30       | 51110-3050 | 51110-3051             | 28.00 (1.102) | 30.20 (1.189) | 24.00 (.945)  |
| 32       | 51110-3250 | 51110-3251             | 30.00 (1.181) | 32.20 (1.268) | 26.00 (1.024) |
| 34       | 51110-3450 | 51110-3451             | 32.00 (1.260) | 34.20 (1.346) | 28.00 (1.102) |



**molex® 2.00mm (.079") Pitch  
Milli-Grid™  
Crimp Terminal**

### Features and Benefits

- Early entry terminal design for superior contact

### Reference Information

Product Specification: PS-51110

**Packaging:** Reel

UL File No.: E29179

CSA File No.: LR19980

Mates With: 0.50mm square pins

Use With: 51110

Designed In: Millimeters

## Electrical

**Voltage: 125V**

**Current:**

|                |            |            |            |
|----------------|------------|------------|------------|
| <b>AWG</b>     | <b>26</b>  | <b>28</b>  | <b>30</b>  |
| <b>Amperes</b> | <b>1.5</b> | <b>1.0</b> | <b>0.5</b> |

**Contact Resistance: 40mΩ max.**

**Dielectric Withstanding Voltage: 500V**

Insulation Resistance: 1000 M $\Omega$  min.

## Mechanical

**Contact Insertion Force: 9.8N max.**

**Mating Force: 1.96N per circuit max.**

Unmating Force: 0.392N per circuit min.

## Physical

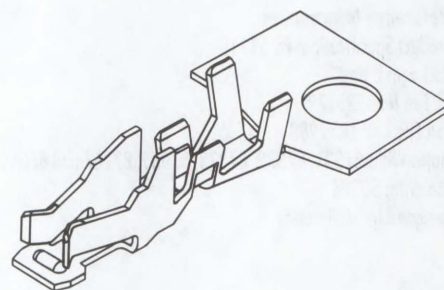
Contact: Phosphor Bronze

Plating: See Table

Operating Temperature: -40 to +105°C

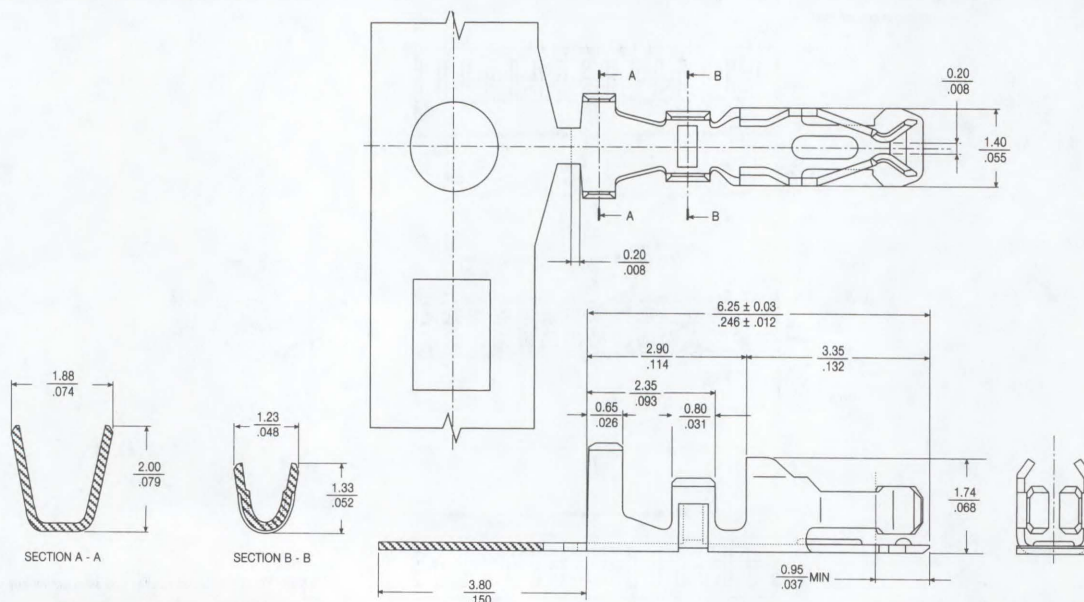
**Wire Range: 26 to 30 AWG**

Insulation Range: 1.40mm dia. max.



**2.00 to 2.50mm (.079 to .098") Pitch**

**CATALOG DRAWING (FOR REFERENCE ONLY)**



## ORDERING INFORMATION

| Order No.  | AWG     | Plating                  |
|------------|---------|--------------------------|
| 50394-8051 | 26 - 30 | 15µ" min. selective Gold |
| 50394-8052 |         | 30µ" min. selective Gold |

| Application Tooling Information |            |                 |
|---------------------------------|------------|-----------------|
| Description                     | Order No.  | Engineering No. |
| Hand Tool (US)                  | 11-01-0204 | CR 60927A       |
| Hand Tool (Europe)              | 69008-0959 | 69008-0959      |
| Mini-Mac Applicator (US)        | 11-18-2197 | MA 60837A       |
| Mini-Mac Tool Kit (US)          | 11-18-3190 | K 60837A        |
| Mini-Mac Applicator (Europe)    | 69037-1163 | 69037-1163      |
| TM-42 Applicator                | 11-40-2278 | T 63332A        |
| TM-42 Applicator Tool Kit       | 11-40-3279 | K 63332A        |
| Crimping Press                  | M15A       | M15A            |
| Mini-Crimper                    | 57117-4000 | 57117-4000      |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 50 circuits
- Ideal for dense packaging flex-to-board interconnection applications
- IR, vapor-phase and wave solder Surface Mount Compatible
- Dual beam contact design ensures reliable electrical performance
- Molded-in void locations offered for polarization to mating connector
- PC tails have tapered lead-in on for ease of insertion into FFC/FPC

### Reference Information

Product Specification: PS-79107

Packaging: Tube

UL File No.: E29179

CSA File No.: LR19980

Mates With: 0.50mm square pin headers 87049, 87089 and 87267

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.0A

Contact Resistance: 25mΩ max.

Dielectric Withstanding Voltage: 1250V

Insulation Resistance: 1000 MΩ min.

### Mechanical

Mating Force: 8 oz max.

Unmating Force: 1.5 oz min.

Normal Force: 100g

Durability: 15μ" Gold contacts—50 cycles min.

30μ" Gold contacts—100 cycles min.

### Physical

Housing: Black glass-filled LCP, UL 94V-0

Contact: Phosphor Bronze

Plating: See Table

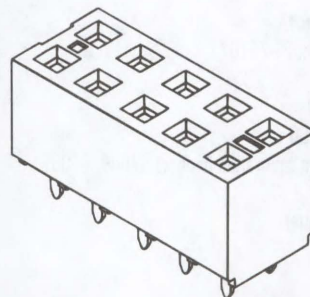
Operating Temperature: -55 to +105°C



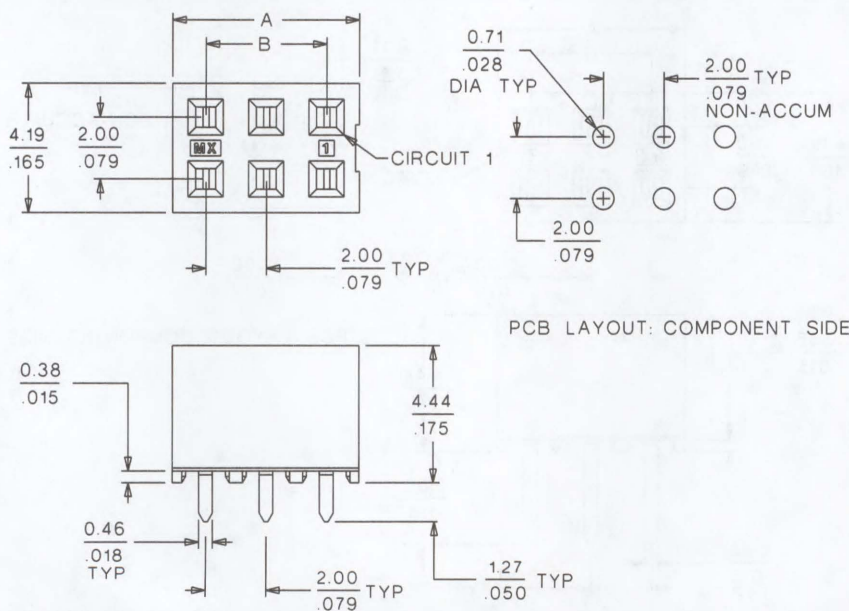
**2.00mm (.079") Pitch**  
**Milli-Grid™**  
**Flex-to-Board**  
**Receptacle**

**79108**

**Vertical, Dual Row**  
**FFC/FPC Through Hole**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.     |               | Dimension     |              |
|----------|---------------|---------------|---------------|--------------|
|          | Plating No. 1 | Plating No. 2 | A             | B            |
| 4        | • 79108-0001  | • 79108-0051  | 4.19 (.165)   | 2.00 (.079)  |
| 6        | • 79108-0002  | • 79108-0052  | 6.19 (.244)   | 4.00 (.157)  |
| 8        | • 79108-0003  | • 79108-0053  | 8.19 (.322)   | 6.00 (.236)  |
| 10       | • 79108-0004  | • 79108-0054  | 10.19 (.401)  | 8.00 (.315)  |
| 12       | • 79108-0005  | • 79108-0055  | 12.19 (.480)  | 10.00 (.394) |
| 14       | • 79108-0006  | • 79108-0056  | 14.19 (.559)  | 12.00 (.472) |
| 16       | • 79108-0007  | • 79108-0057  | 16.19 (.637)  | 14.00 (.551) |
| 18       | • 79108-0008  | • 79108-0058  | 18.19 (.716)  | 16.00 (.630) |
| 20       | • 79108-0009  | • 79108-0059  | 20.19 (.795)  | 18.00 (.709) |
| 22       | • 79108-0010  | • 79108-0060  | 22.19 (.874)  | 20.00 (.787) |
| 24       | • 79108-0011  | • 79108-0061  | 24.19 (.952)  | 22.00 (.866) |
| 26       | • 79108-0012  | • 79108-0062  | 26.19 (1.031) | 24.00 (.945) |

| Circuits | Order No.     |               | Dimension     |               |
|----------|---------------|---------------|---------------|---------------|
|          | Plating No. 1 | Plating No. 2 | A             | B             |
| 28       | • 79108-0013  | • 79108-0063  | 28.19 (1.110) | 26.00 (1.024) |
| 30       | • 79108-0014  | • 79108-0064  | 30.19 (1.188) | 28.00 (1.102) |
| 32       | • 79108-0015  | • 79108-0065  | 32.19 (1.267) | 30.00 (1.181) |
| 34       | • 79108-0016  | • 79108-0066  | 34.19 (1.346) | 32.00 (1.260) |
| 36       | • 79108-0017  | • 79108-0067  | 36.19 (1.425) | 34.00 (1.338) |
| 38       | • 79108-0018  | • 79108-0068  | 38.19 (1.504) | 36.00 (1.417) |
| 40       | • 79108-0019  | • 79108-0069  | 40.19 (1.582) | 38.00 (1.496) |
| 42       | • 79108-0020  | • 79108-0070  | 42.19 (1.661) | 40.00 (1.575) |
| 44       | • 79108-0021  | • 79108-0071  | 44.19 (1.740) | 42.00 (1.654) |
| 46       | • 79108-0022  | • 79108-0072  | 46.19 (1.818) | 44.00 (1.732) |
| 48       | • 79108-0023  | • 79108-0073  | 48.19 (1.897) | 46.00 (1.811) |
| 50       | • 79108-0024  | • 79108-0074  | 50.19 (1.976) | 48.00 (1.890) |

• US Standard Product, available through Molex franchised distributors

Plating No. 1: 15μ" min. Gold plate in selected area and 75μ" min. Tin/Lead in selected area, over Nickel overall

Plating No. 2: 30μ" min. Gold plate in selected area and 75μ" min. Tin/Lead in selected area, over Nickel overall



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 50 circuits
- IR, vapor-phase and wave solder Surface Mount Compatible
- Dual beam contact design ensures reliable electrical performance
- Molded-in void locations offered for polarization to mating connector
- PC tails have tapered lead-in on for ease of insertion into the PC board
- Also available with shortened 1.91mm (.075") tail length for 0.79mm (.031") thick PC boards

### Reference Information

Product Specification: PS-79107

Packaging: Tube

UL File No.: E29179

CSA File No.: LR19980

Mates With: 0.50mm square pin headers 87049, 87089 and 87267

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.0A

Contact Resistance: 25mΩ max.

Dielectric Withstanding Voltage: 1250V

Insulation Resistance: 1000 MΩ min.

### Mechanical

Mating Force: 8 oz max.

Unmating Force: 1.5 oz min.

Normal Force: 100g

Durability: 15μ" Gold contacts—50 cycles min.

30μ" Gold contacts—100 cycles min.

### Physical

Housing: Black glass-filled LCP, UL 94V-0

Contact: Phosphor Bronze

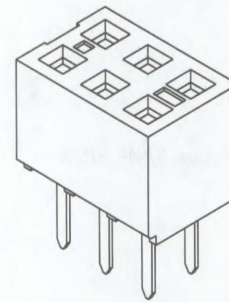
Plating: See Table

Operating Temperature: -55 to +105°C

# molex® 2.00mm (.079") Pitch Milli-Grid™ Board-to-Board Receptacle

## 79107

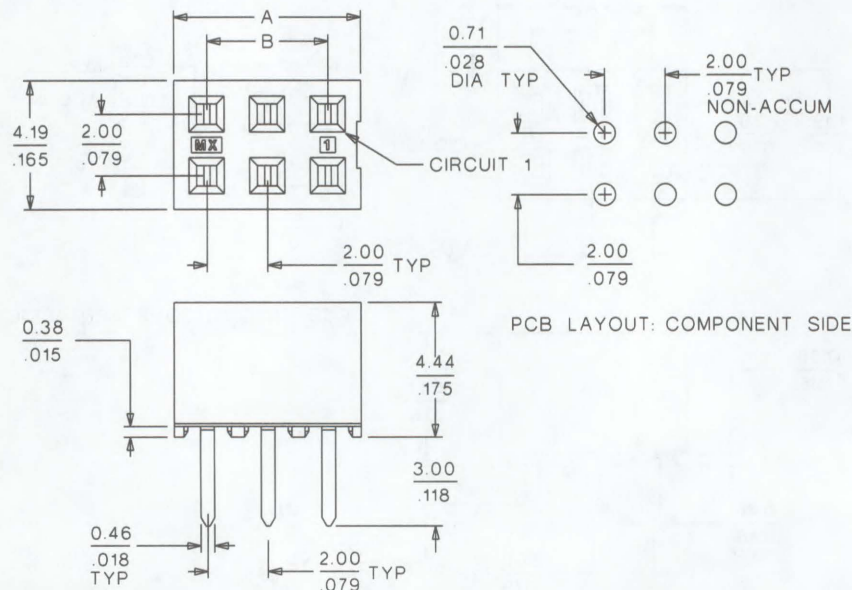
## Vertical, Dual Row Through Hole



B

2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.     |               | Dimension     |               |
|----------|---------------|---------------|---------------|---------------|
|          | Plating No. 1 | Plating No. 2 | A             | B             |
| 4        | • 79107-0001  | • 79107-0051  | 4.19 (1.165)  | 2.00 (0.079)  |
| 6        | • 79107-0002  | • 79107-0052  | 6.19 (1.244)  | 4.00 (1.157)  |
| 8        | • 79107-0003  | • 79107-0053  | 8.19 (1.322)  | 6.00 (1.236)  |
| 10       | • 79107-0004  | • 79107-0054  | 10.19 (1.401) | 8.00 (1.315)  |
| 12       | • 79107-0005  | • 79107-0055  | 12.19 (1.480) | 10.00 (1.394) |
| 14       | • 79107-0006  | • 79107-0056  | 14.19 (1.559) | 12.00 (1.472) |
| 16       | • 79107-0007  | • 79107-0057  | 16.19 (1.637) | 14.00 (1.551) |
| 18       | • 79107-0008  | • 79107-0058  | 18.19 (1.716) | 16.00 (1.630) |
| 20       | • 79107-0009  | • 79107-0059  | 20.19 (1.795) | 18.00 (1.709) |
| 22       | • 79107-0010  | • 79107-0060  | 22.19 (1.874) | 20.00 (1.787) |
| 24       | • 79107-0011  | • 79107-0061  | 24.19 (1.952) | 22.00 (1.866) |
| 26       | • 79107-0012  | • 79107-0062  | 26.19 (1.031) | 24.00 (1.945) |

| Circuits | Order No.     |               | Dimension     |               |
|----------|---------------|---------------|---------------|---------------|
|          | Plating No. 1 | Plating No. 2 | A             | B             |
| 28       | • 79107-0013  | • 79107-0063  | 28.19 (1.110) | 26.00 (1.024) |
| 30       | • 79107-0014  | • 79107-0064  | 30.19 (1.188) | 28.00 (1.102) |
| 32       | • 79107-0015  | • 79107-0065  | 32.19 (1.267) | 30.00 (1.181) |
| 34       | • 79107-0016  | • 79107-0066  | 34.19 (1.346) | 32.00 (1.260) |
| 36       | • 79107-0017  | • 79107-0067  | 36.19 (1.425) | 34.00 (1.338) |
| 38       | • 79107-0018  | • 79107-0068  | 38.19 (1.504) | 36.00 (1.417) |
| 40       | • 79107-0019  | • 79107-0069  | 40.19 (1.582) | 38.00 (1.496) |
| 42       | • 79107-0020  | • 79107-0070  | 42.19 (1.661) | 40.00 (1.575) |
| 44       | • 79107-0021  | • 79107-0071  | 44.19 (1.740) | 42.00 (1.654) |
| 46       | • 79107-0022  | • 79107-0072  | 46.19 (1.818) | 44.00 (1.732) |
| 48       | • 79107-0023  | • 79107-0073  | 48.19 (1.897) | 46.00 (1.811) |
| 50       | • 79107-0024  | • 79107-0074  | 50.19 (1.976) | 48.00 (1.890) |

• US Standard Product, available through Molex franchised distributors

Plating No. 1: 15μ" min. Gold plate in selected area and 75μ" min. Tin/Lead in selected area, over Nickel overall

Plating No. 2: 30μ" min. Gold plate in selected area and 75μ" min. Tin/Lead in selected area, over Nickel overall



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 50 circuits
- Dual beam contact design ensures reliable electrical performance
- Molded-in void locations offered for polarization to mating connector
- Can be used as either top or bottom entry receptacle

### Reference Information

Product Specification: PS-79107  
 Packaging: Tube or tape and reel  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 0.50mm square pin headers 87049, 87089 and 87267  
 Designed In: Millimeters

### Electrical

Voltage: 125V  
 Current: 1.0A  
 Contact Resistance: 25mΩ max.  
 Dielectric Withstanding Voltage: 1250V  
 Insulation Resistance: 1000 MΩ min.

### Mechanical

Mating Force: 2.22N (.50 lb) max.  
 Unmating Force: 0.42N (.09 lb) min.  
 Normal Force: 0.98N (.22 lb)  
 Durability: 15μ" Gold contacts—50 cycles min.  
 30μ" Gold contacts—100 cycles min.

### Physical

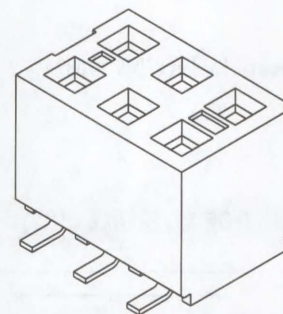
Housing: Black glass-filled LCP, UL 94V-0  
 Contact: Phosphor Bronze  
 Plating: See Table  
 Operating Temperature: -55 to +105°C



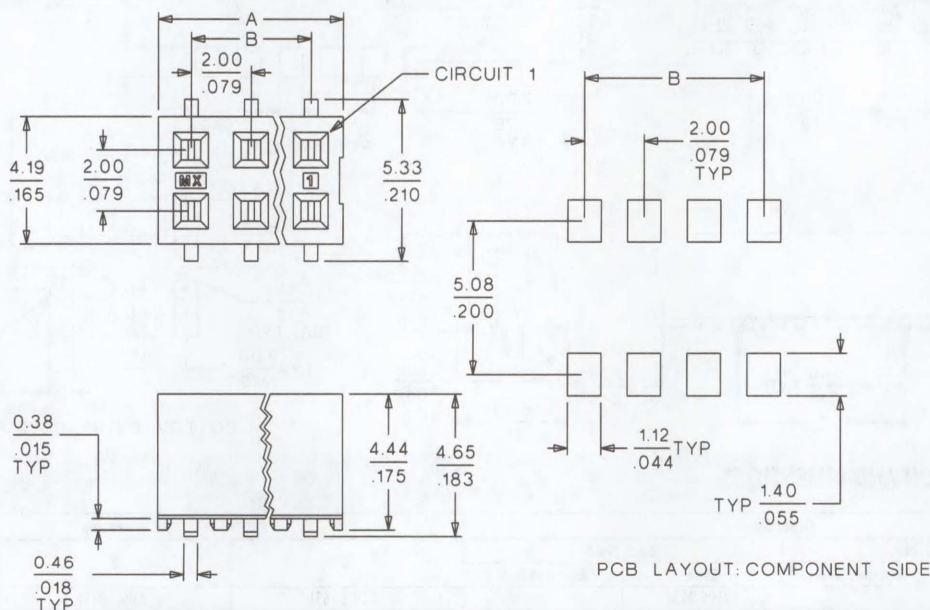
## 2.00mm (.079") Pitch Milli-Grid™ Board-to-Board Receptacle

### 79109

### Vertical, Dual Row Top/Bottom Entry, SMT Without Pegs



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  |               |            |               | Dimension     |              |
|----------|------------|---------------|------------|---------------|---------------|--------------|
|          | 15μ" Gold  |               | 30μ" Gold  |               | A             | B            |
|          | Tube       | Tape and Reel | Tube       | Tape and Reel |               |              |
| 4        | 79109-0001 | *             | 79109-0051 | *             | 4.19 (.165)   | 2.00 (.079)  |
| 6        | 79109-0002 | 79109-8002    | 79109-0052 | 79109-8052    | 6.19 (.244)   | 4.00 (.157)  |
| 8        | 79109-0003 | 79109-8003    | 79109-0053 | 79109-8053    | 8.19 (.322)   | 6.00 (.236)  |
| 10       | 79109-0004 | 79109-8004    | 79109-0054 | 79109-8054    | 10.19 (.401)  | 8.00 (.315)  |
| 12       | 79109-0005 | 79109-8005    | 79109-0055 | 79109-8055    | 12.19 (.480)  | 10.00 (.394) |
| 14       | 79109-0006 | 79109-8006    | 79109-0056 | 79109-8056    | 14.19 (.559)  | 12.00 (.472) |
| 16       | 79109-0007 | 79109-8007    | 79109-0057 | 79109-8057    | 16.19 (.637)  | 14.00 (.551) |
| 18       | 79109-0008 | 79109-8008    | 79109-0058 | 79109-8058    | 18.19 (.716)  | 16.00 (.630) |
| 20       | 79109-0009 | 79109-8009    | 79109-0059 | 79109-8059    | 20.19 (.795)  | 18.00 (.709) |
| 22       | 79109-0010 | 79109-8010    | 79109-0060 | 79109-8060    | 22.19 (.874)  | 20.00 (.787) |
| 24       | 79109-0011 | 79109-8011    | 79109-0061 | 79109-8061    | 24.19 (.952)  | 22.00 (.866) |
| 26       | 79109-0012 | 79109-8012    | 79109-0062 | 79109-8062    | 26.19 (1.031) | 24.00 (.945) |

| Circuits | Order No.  |               |            |               | Dimension     |               |
|----------|------------|---------------|------------|---------------|---------------|---------------|
|          | 15μ" Gold  |               | 30μ" Gold  |               | A             | B             |
|          | Tube       | Tape and Reel | Tube       | Tape and Reel |               |               |
| 28       | 79109-0013 | 79109-8013    | 79109-0063 | 79109-8063    | 28.19 (1.110) | 26.00 (1.024) |
| 30       | 79109-0014 | 79109-8014    | 79109-0064 | 79109-8064    | 30.19 (1.188) | 28.00 (1.102) |
| 32       | 79109-0015 | 79109-8015    | 79109-0065 | 79109-8065    | 32.19 (1.267) | 30.00 (1.181) |
| 34       | 79109-0016 | 79109-8016    | 79109-0066 | 79109-8066    | 34.19 (1.346) | 32.00 (1.260) |
| 36       | 79109-0017 | 79109-8017    | 79109-0067 | 79109-8067    | 36.19 (1.425) | 34.00 (1.338) |
| 38       | 79109-0018 | 79109-8018    | 79109-0068 | 79109-8068    | 38.19 (1.504) | 36.00 (1.417) |
| 40       | 79109-0019 | 79109-8019    | 79109-0069 | 79109-8069    | 40.19 (1.582) | 38.00 (1.496) |
| 42       | 79109-0020 | 79109-8020    | 79109-0070 | 79109-8070    | 42.19 (1.661) | 40.00 (1.575) |
| 44       | 79109-0021 | 79109-8021    | 79109-0071 | 79109-8071    | 44.19 (1.740) | 42.00 (1.654) |
| 46       | 79109-0022 | 79109-8022    | 79109-0072 | 79109-8072    | 46.19 (1.818) | 44.00 (1.732) |
| 48       | 79109-0023 | 79109-8023    | 79109-0073 | 79109-8073    | 48.19 (1.897) | 46.00 (1.811) |
| 50       | 79109-0024 | 79109-8024    | 79109-0074 | 79109-8074    | 50.19 (1.976) | 48.00 (1.890) |

\* Contact Molex



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 50 circuits
- Dual beam contact design ensures reliable electrical performance
- Molded-in void locations offered for polarization to mating connector
- Can be used as either a top or bottom entry receptacle
- Pegs offer press-fit retention to PC board

### Reference Information

Product Specification: PS-79107

Packaging: Tube or tape and reel

UL File No.: E29179

CSA File No.: LR19980

Mates With: 0.50mm square pin headers 87049, 87089 and 87267

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.0A

Contact Resistance: 25mΩ max.

Dielectric Withstanding Voltage: 1250V

Insulation Resistance: 1000 MΩ min.

### Mechanical

Mating Force: 8 oz max.

Unmating Force: 1.5 oz min.

Normal Force: 100g

Durability: 15μ" Gold contacts—50 cycles min.

30μ" Gold contacts—100 cycles min.

### Physical

Housing: Black glass-filled LCP, UL 94V-0

Contact: Phosphor Bronze

Plating: See Table

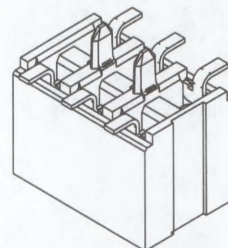
Operating Temperature: -55 to +105°C



## 2.00mm (.079") Pitch Milli-Grid™ Board-to-Board Receptacle

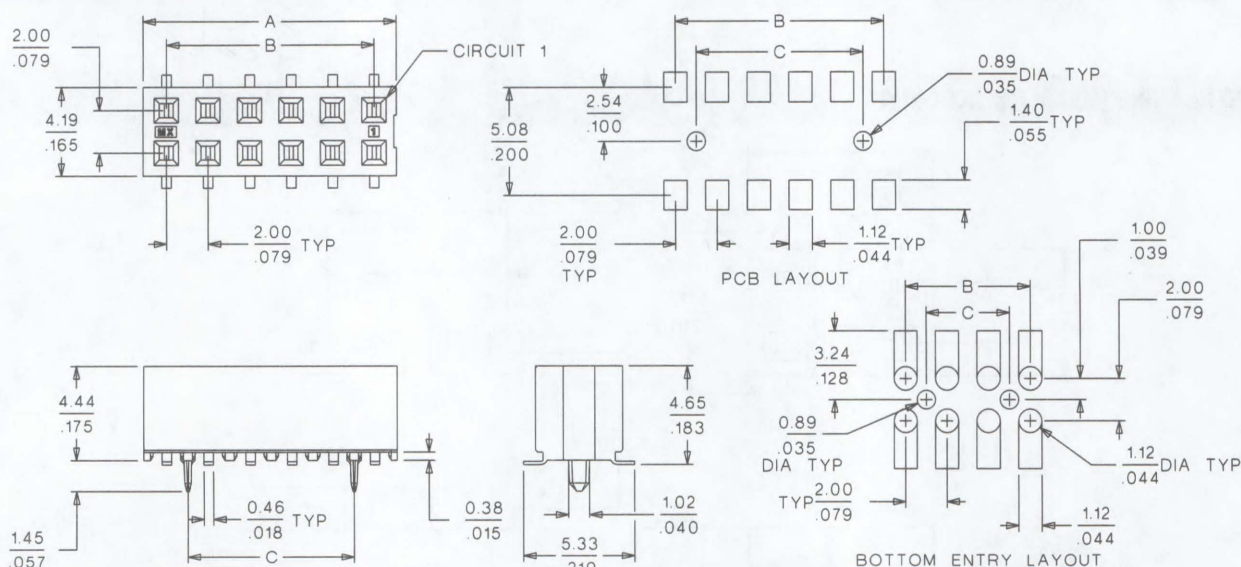
### 79109

### Vertical, Dual Row, Top/ Bottom Entry, SMT, with Pegs



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  |               |            |               | Dimension     |               |               |
|----------|------------|---------------|------------|---------------|---------------|---------------|---------------|
|          | 15μ" Gold  |               | 30μ" Gold  |               | A             | B             | C             |
|          | Tube       | Tape and Reel | Tube       | Tape and Reel |               |               |               |
| 4        | 79109-0201 | *             | 79109-0251 | *             | 4.19 (.165)   | 2.00 (.079)   |               |
| 6        | 79109-0202 | 79109-8202    | 79109-0252 | 79109-8252    | 6.19 (.244)   | 4.00 (.157)   | 2.00 (.079)   |
| 8        | 79109-0203 | 79109-8203    | 79109-0253 | 79109-8253    | 8.19 (.322)   | 6.00 (.236)   | 4.00 (.157)   |
| 10       | 79109-0204 | 79109-8204    | 79109-0254 | 79109-8254    | 10.19 (.401)  | 8.00 (.315)   | 6.00 (.236)   |
| 12       | 79109-0205 | 79109-8205    | 79109-0255 | 79109-8255    | 12.19 (.480)  | 10.00 (.394)  | 8.00 (.315)   |
| 14       | 79109-0206 | 79109-8206    | 79109-0256 | 79109-8256    | 14.19 (.559)  | 12.00 (.472)  | 10.00 (.394)  |
| 16       | 79109-0207 | 79109-8207    | 79109-0257 | 79109-8257    | 16.19 (.637)  | 14.00 (.551)  | 12.00 (.472)  |
| 18       | 79109-0208 | 79109-8208    | 79109-0258 | 79109-8258    | 18.19 (.716)  | 16.00 (.630)  | 14.00 (.551)  |
| 20       | 79109-0209 | 79109-8209    | 79109-0259 | 79109-8259    | 20.19 (.795)  | 18.00 (.709)  | 16.00 (.630)  |
| 22       | 79109-0210 | 79109-8210    | 79109-0260 | 79109-8260    | 22.19 (.874)  | 20.00 (.787)  | 18.00 (.709)  |
| 24       | 79109-0211 | 79109-8211    | 79109-0261 | 79109-8261    | 24.19 (.952)  | 22.00 (.866)  | 20.00 (.787)  |
| 26       | 79109-0212 | 79109-8212    | 79109-0262 | 79109-8262    | 26.19 (1.031) | 24.00 (.945)  | 22.00 (.866)  |
| 28       | 79109-0213 | 79109-8213    | 79109-0263 | 79109-8263    | 28.19 (1.110) | 26.00 (1.024) | 24.00 (.945)  |
| 30       | 79109-0214 | 79109-8214    | 79109-0264 | 79109-8264    | 30.19 (1.188) | 28.00 (1.102) | 26.00 (1.024) |
| 32       | 79109-0215 | 79109-8215    | 79109-0265 | 79109-8265    | 32.19 (1.267) | 30.00 (1.181) | 28.00 (1.102) |
| 34       | 79109-0216 | 79109-8216    | 79109-0266 | 79109-8266    | 34.19 (1.346) | 32.00 (1.260) | 30.00 (1.181) |
| 36       | 79109-0217 | 79109-8217    | 79109-0267 | 79109-8267    | 36.19 (1.425) | 34.00 (1.338) | 32.00 (1.260) |
| 38       | 79109-0218 | 79109-8218    | 79109-0268 | 79109-8268    | 38.19 (1.504) | 36.00 (1.417) | 34.00 (1.338) |
| 40       | 79109-0219 | 79109-8219    | 79109-0269 | 79109-8269    | 40.19 (1.582) | 38.00 (1.496) | 36.00 (1.417) |
| 42       | 79109-0220 | 79109-8220    | 79109-0270 | 79109-8270    | 42.19 (1.661) | 40.00 (1.575) | 38.00 (1.496) |
| 44       | 79109-0221 | 79109-8221    | 79109-0271 | 79109-8271    | 44.19 (1.740) | 42.00 (1.654) | 40.00 (1.575) |
| 46       | 79109-0222 | 79109-8222    | 79109-0272 | 79109-8272    | 46.19 (1.818) | 44.00 (1.732) | 42.00 (1.654) |
| 48       | 79109-0223 | 79109-8223    | 79109-0273 | 79109-8273    | 48.19 (1.897) | 46.00 (1.811) | 44.00 (1.732) |
| 50       | 79109-0224 | 79109-8224    | 79109-0274 | 79109-8274    | 50.19 (1.976) | 48.00 (1.890) | 46.00 (1.811) |

\* Contact Molex



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 8 to 50 circuits
- Surface Mount Compatible

### Reference Information

Product Specification: PS-87264  
 Packaging: Tube  
 UL File No.: E29179  
 CSA File No.: LR19980-182  
 Mates With: 0.50mm square pin headers  
 Designed In: Millimeters

### Electrical

Voltage: 125V  
 Current: 1.0A  
 Contact Resistance: 15mΩ max.  
 Dielectric Withstanding Voltage: 500V  
 Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 180g max.  
 Normal Force: 50g min.

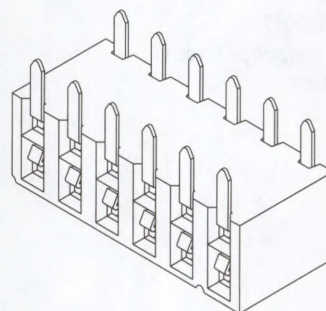
### Physical

Housing: Black high-temperature nylon, UL 94V-0  
 Contact: Phosphor Bronze  
 Plating: See Table  
 Operating Temperature: -55 to +105°C  
 PCB Thickness: 1.60 ± 0.10mm

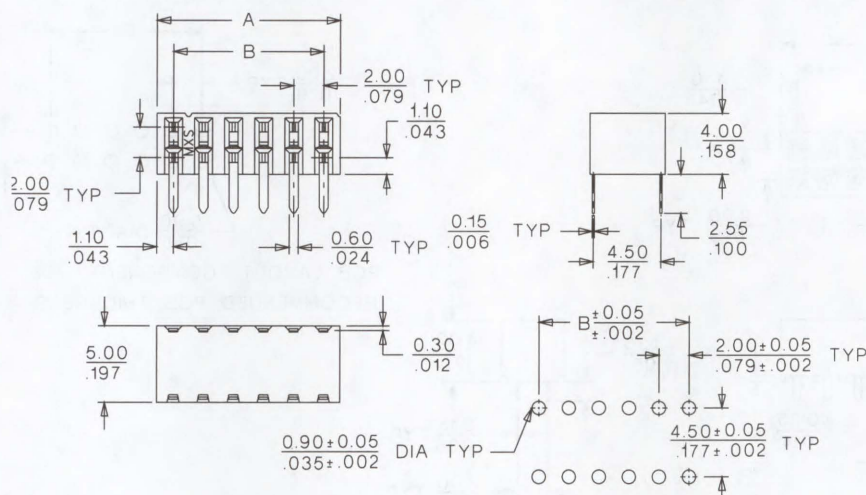
**molex** 2.00mm (.079") Pitch  
 Milli-Grid™  
 Receptacle

**87264**

**Side Entry**



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS: 1.60 ± 0.10  
 .063 ± .004

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.        |                  | Dimension     |               |
|----------|------------------|------------------|---------------|---------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B             |
| 8        | 87264-0850       | 87264-0851       | 8.20 (.323)   | 6.00 (.236)   |
| 10       | 87264-1050       | 87264-1051       | 10.20 (.402)  | 8.00 (.315)   |
| 12       | 87264-1250       | 87264-1251       | 12.20 (.480)  | 10.00 (.394)  |
| 14       | 87264-1450       | 87264-1451       | 14.20 (.559)  | 12.00 (.472)  |
| 16       | 87264-1650       | 87264-1651       | 16.20 (.638)  | 14.00 (.551)  |
| 18       | 87264-1850       | 87264-1851       | 18.20 (.717)  | 16.00 (.630)  |
| 20       | 87264-2050       | 87264-2051       | 20.20 (.795)  | 18.00 (.709)  |
| 22       | 87264-2250       | 87264-2251       | 22.20 (.874)  | 20.00 (.787)  |
| 24       | 87264-2450       | 87264-2451       | 24.20 (.953)  | 22.00 (.866)  |
| 26       | 87264-2650       | 87264-2651       | 26.20 (1.031) | 24.00 (.945)  |
| 28       | 87264-2850       | 87264-2851       | 28.20 (1.110) | 26.00 (1.024) |

| Circuits | Order No.        |                  | Dimension     |               |
|----------|------------------|------------------|---------------|---------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B             |
| 30       | 87264-3050       | 87264-3051       | 30.20 (1.189) | 28.00 (1.102) |
| 32       | 87264-3250       | 87264-3251       | 32.20 (1.268) | 30.00 (1.181) |
| 34       | 87264-3450       | 87264-3451       | 34.20 (1.346) | 32.00 (1.260) |
| 36       | 87264-3650       | 87264-3651       | 36.20 (1.425) | 34.00 (1.339) |
| 38       | 87264-3850       | 87264-3851       | 38.20 (1.504) | 36.00 (1.417) |
| 40       | 87264-4050       | 87264-4051       | 40.20 (1.583) | 38.00 (1.496) |
| 42       | 87264-4250       | 87264-4251       | 42.20 (1.661) | 40.00 (1.575) |
| 44       | 87264-4450       | 87264-4451       | 44.20 (1.740) | 42.00 (1.654) |
| 46       | 87264-4650       | 87264-4651       | 46.20 (1.819) | 44.00 (1.732) |
| 48       | 87264-4850       | 87264-4851       | 48.20 (1.898) | 46.00 (1.811) |
| 50       | 87264-5050       | 87264-5051       | 50.20 (1.976) | 48.00 (1.890) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 6 to 50 circuits
- Low profile height 4.00mm
- Optional locating peg version, 4.50mm height version
- Longer PC tail option available, contact Molex

### Reference Information

Product Specification: PS-87380  
Packaging: Tube  
UL File No.: E29179  
CSA File No.: LR19980-212  
Mates With: 0.50mm square pin headers  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current: 1.0A  
Contact Resistance: 15mΩ max.  
Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 180g max.  
Normal Force: 50g min.

### Physical

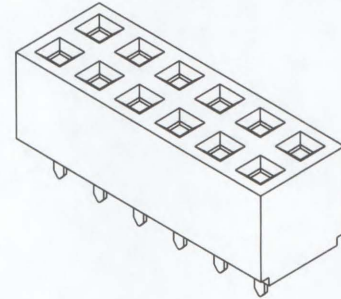
Housing: Black nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: See Table  
Operating Temperature: -55 to +105°C  
PCB Thickness: 0.89 ± 0.13mm



**2.00mm (.079") Pitch**  
**Milli-Grid™**  
**Receptacle**

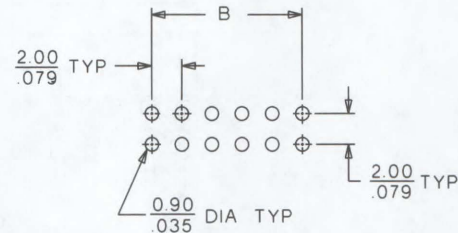
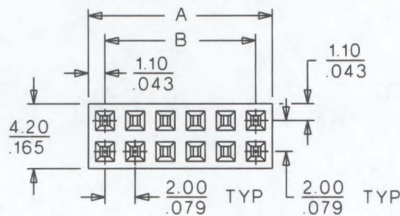
**87380**

**FPC/PCB**  
**Vertical, SMC**

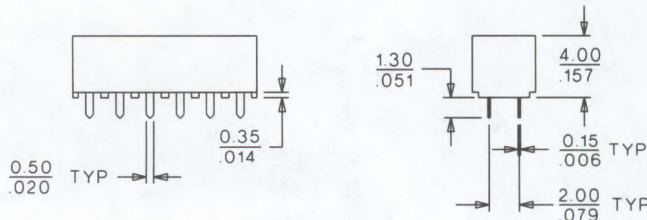


**2.00 to 2.50mm (.079 to .098") Pitch**

## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT : COMPONENT SIDE.  
RECOMMENDED PCB THICKNESS: 0.90 (.035)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.        |                  | Dimension     |               |
|----------|------------------|------------------|---------------|---------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B             |
| 6        | 87380-0602       | 87380-0601       | 6.00 (.236)   | 4.00 (.157)   |
| 8        | 87380-0802       | 87380-0801       | 8.00 (.315)   | 6.00 (.236)   |
| 10       | 87380-1002       | 87380-1001       | 10.00 (.394)  | 8.00 (.315)   |
| 12       | 87380-1202       | 87380-1201       | 12.00 (.472)  | 10.00 (.394)  |
| 14       | 87380-1402       | 87380-1401       | 14.00 (.551)  | 12.00 (.472)  |
| 16       | 87380-1602       | 87380-1601       | 16.00 (.630)  | 14.00 (.551)  |
| 18       | 87380-1802       | 87380-1801       | 18.00 (.709)  | 16.00 (.630)  |
| 20       | 87380-2002       | 87380-2001       | 20.00 (.787)  | 18.00 (.709)  |
| 22       | 87380-2202       | 87380-2201       | 22.00 (.866)  | 20.00 (.787)  |
| 24       | 87380-2402       | 87380-2401       | 24.00 (.945)  | 22.00 (.866)  |
| 26       | 87380-2602       | 87380-2601       | 26.00 (1.024) | 24.00 (.945)  |
| 28       | 87380-2802       | 87380-2801       | 28.00 (1.102) | 26.00 (1.024) |

| Circuits | Order No.        |                  | Dimension     |               |
|----------|------------------|------------------|---------------|---------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B             |
| 30       | 87380-3002       | 87380-3001       | 30.00 (1.181) | 28.00 (1.102) |
| 32       | 87380-3202       | 87380-3201       | 32.00 (1.260) | 30.00 (1.181) |
| 34       | 87380-3402       | 87380-3401       | 34.00 (1.339) | 32.00 (1.260) |
| 36       | 87380-3602       | 87380-3601       | 36.00 (1.417) | 34.00 (1.339) |
| 38       | 87380-3802       | 87380-3801       | 38.00 (1.496) | 36.00 (1.417) |
| 40       | 87380-4002       | 87380-4001       | 40.00 (1.575) | 38.00 (1.496) |
| 42       | 87380-4202       | 87380-4201       | 42.00 (1.654) | 40.00 (1.575) |
| 44       | 87380-4402       | 87380-4401       | 44.00 (1.732) | 42.00 (1.654) |
| 46       | 87380-4602       | 87380-4601       | 46.00 (1.811) | 44.00 (1.732) |
| 48       | 87380-4802       | 87380-4801       | 48.00 (1.890) | 46.00 (1.811) |
| 50       | 87380-5002       | 87380-5001       | 50.00 (1.969) | 48.00 (1.890) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 42 circuits
- Locating peg version standard
- Optional without peg version

### Reference Information

Product Specification: PS-87263

Packaging: Tube (contact Molex for embossed tape and cap)

UL File No.: E29179

CSA File No.: LR19980

Mates With: 0.50mm square pin headers

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.0A

Contact Resistance: 15mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 300g max.

Normal Force: 50g min.

### Physical

Housing: Black high-temperature nylon, UL 94V-0

Contact: Phosphor Bronze

Plating: See Table

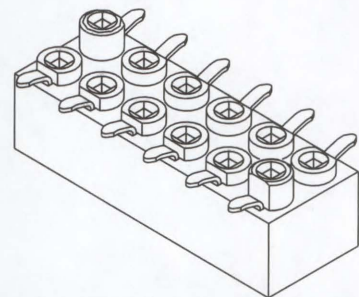
Operating Temperature: -55 to +105°C



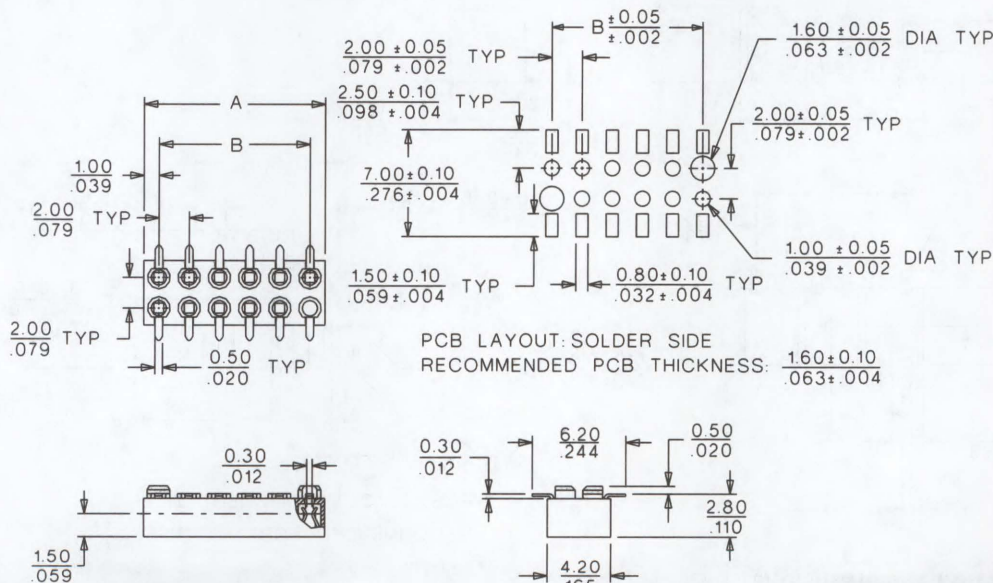
## 2.00mm (.079") Pitch Milli-Grid™ Receptacle

### 87263

## Bottom Entry SMT



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.        |                  | Dimension    |              |
|----------|------------------|------------------|--------------|--------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A            | B            |
| 4        | 87263-0420       | 87263-0422       | 4.00 (.157)  | 2.00 (.079)  |
| 6        | 87263-0620       | 87263-0622       | 6.00 (.236)  | 4.00 (.157)  |
| 8        | 87263-0820       | 87263-0822       | 8.00 (.315)  | 6.00 (.236)  |
| 10       | 87263-1020       | 87263-1022       | 10.00 (.394) | 8.00 (.315)  |
| 12       | 87263-1220       | 87263-1222       | 12.00 (.472) | 10.00 (.394) |
| 14       | 87263-1420       | 87263-1422       | 14.00 (.551) | 12.00 (.472) |
| 16       | 87263-1620       | 87263-1622       | 16.00 (.630) | 14.00 (.551) |
| 18       | 87263-1820       | 87263-1822       | 18.00 (.709) | 16.00 (.630) |
| 20       | 87263-2020       | 87263-2022       | 20.00 (.787) | 18.00 (.709) |
| 22       | 87263-2220       | 87263-2222       | 22.00 (.866) | 20.00 (.787) |

| Circuits | Order No.        |                  | Dimension     |               |
|----------|------------------|------------------|---------------|---------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B             |
| 24       | 87263-2420       | 87263-2422       | 24.00 (.945)  | 22.00 (.866)  |
| 26       | 87263-2620       | 87263-2622       | 26.00 (1.024) | 24.00 (.945)  |
| 28       | 87263-2820       | 87263-2822       | 28.00 (1.102) | 26.00 (1.024) |
| 30       | 87263-3020       | 87263-3022       | 30.00 (1.181) | 28.00 (1.102) |
| 32       | 87263-3220       | 87263-3222       | 32.00 (1.259) | 30.00 (1.181) |
| 34       | 87263-3420       | 87263-3422       | 34.00 (1.338) | 32.00 (1.259) |
| 36       | 87263-3620       | 87263-3622       | 36.00 (1.417) | 34.00 (1.338) |
| 38       | 87263-3820       | 87263-3822       | 38.00 (1.496) | 36.00 (1.417) |
| 40       | 87263-4020       | 87263-4022       | 40.00 (1.574) | 38.00 (1.496) |
| 42       | 87263-4220       | 87263-4222       | 42.00 (1.653) | 40.00 (1.574) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 10 to 50 circuits
- MCC compatible
- Polarization peg version standard
- Optional without peg version

### Reference Information

Product Specification: PS-87264

Packaging: Tube

Mates With: 0.50mm square pin headers

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.0A

Contact Resistance: 15mΩ max.

Dielectric Withstanding Voltage: 500V

Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 180g max.

Normal Force: 50g min.

### Physical

Housing: Black nylon, UL 94V-0

Contact: Phosphor Bronze

Plating: See Table

Operating Temperature: -55 to +105°C

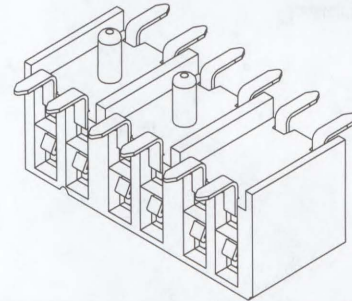
PCB Thickness: 1.60 ± 0.10mm



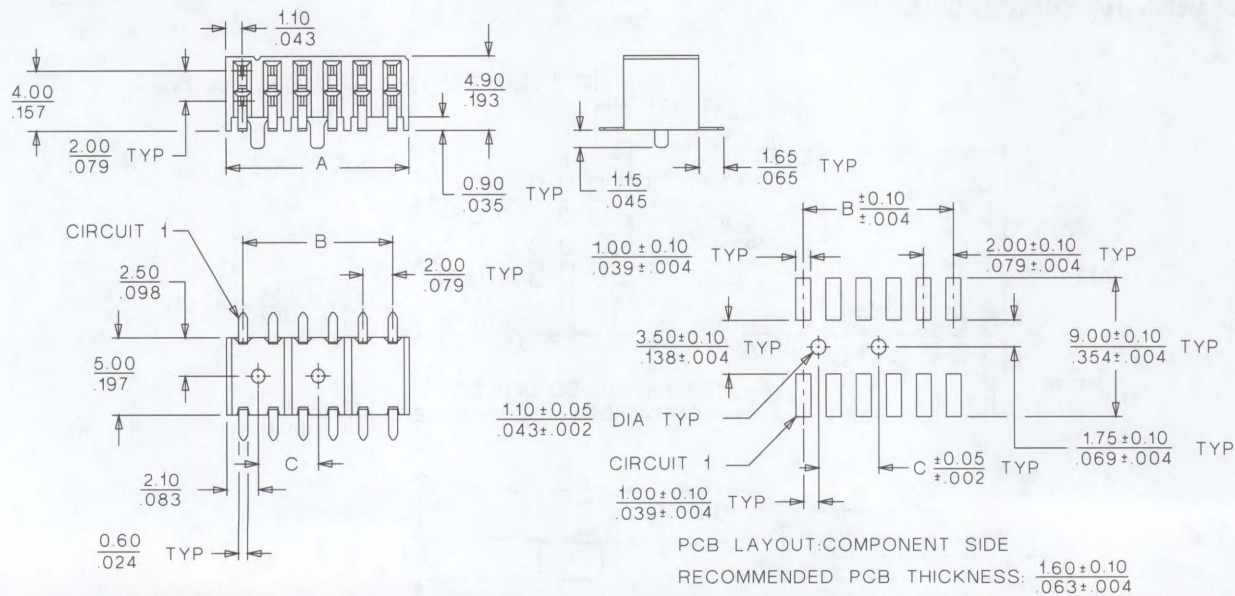
## 2.00mm (.079") Pitch Milli-Grid™ Receptacle

**87368**

**Side Entry  
SMT**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.        |                  | Dimension     |               |               |
|----------|------------------|------------------|---------------|---------------|---------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B             | C             |
| 10       | 87368-1020       | 87368-1021       | 10.20 (.402)  | 8.00 (.315)   | 4.00 (.157)   |
| 12       | 87368-1220       | 87368-1221       | 12.20 (.480)  | 10.00 (.394)  | 4.00 (.157)   |
| 14       | 87368-1420       | 87368-1421       | 14.20 (.559)  | 12.00 (.472)  | 6.00 (.236)   |
| 16       | 87368-1620       | 87368-1621       | 16.20 (.638)  | 14.00 (.551)  | 8.00 (.315)   |
| 18       | 87368-1820       | 87368-1821       | 18.20 (.717)  | 16.00 (.630)  | 10.00 (.394)  |
| 20       | 87368-2020       | 87368-2021       | 20.20 (.795)  | 18.00 (.709)  | 12.00 (.472)  |
| 22       | 87368-2220       | 87368-2221       | 22.20 (.874)  | 20.00 (.787)  | 14.00 (.551)  |
| 24       | 87368-2420       | 87368-2421       | 24.20 (.953)  | 22.00 (.866)  | 16.00 (.630)  |
| 26       | 87368-2620       | 87368-2621       | 26.20 (1.031) | 24.00 (.945)  | 18.00 (.709)  |
| 28       | 87368-2820       | 87368-2821       | 28.20 (1.110) | 26.00 (1.024) | 20.00 (.787)  |
| 30       | 87368-3020       | 87368-3021       | 30.20 (1.189) | 28.00 (1.102) | 22.00 (.866)  |
| 32       | 87368-3220       | 87368-3221       | 32.20 (1.268) | 30.00 (1.181) | 24.00 (.945)  |
| 34       | 87368-3420       | 87368-3421       | 34.20 (1.346) | 32.00 (1.260) | 26.00 (1.024) |
| 36       | 87368-3620       | 87368-3621       | 36.20 (1.425) | 34.00 (1.339) | 28.00 (1.102) |
| 38       | 87368-3820       | 87368-3821       | 38.20 (1.504) | 36.00 (1.417) | 30.00 (1.181) |
| 40       | 87368-4020       | 87368-4021       | 40.20 (1.583) | 38.00 (1.496) | 32.00 (1.260) |
| 42       | 87368-4220       | 87368-4221       | 42.20 (1.661) | 40.00 (1.575) | 34.00 (1.339) |
| 44       | 87368-4420       | 87368-4421       | 44.20 (1.740) | 42.00 (1.654) | 36.00 (1.417) |
| 46       | 87368-4620       | 87368-4621       | 46.20 (1.819) | 44.00 (1.732) | 38.00 (1.496) |
| 48       | 87368-4820       | 87368-4821       | 48.20 (1.898) | 46.00 (1.811) | 40.00 (1.575) |
| 50       | 87368-5020       | 87368-5021       | 50.20 (1.976) | 48.00 (1.890) | 42.00 (1.654) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 20 circuits
- Locating peg version standard
- Very low profile height 2.15mm
- End-to-end stackable
- Optional without peg version
- Contact Molex for pick-and-place cap or embossed tape

### Reference Information

Product Specification: PS-87340  
 Packaging: Tube  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 0.50mm square pin headers  
 Designed In: Millimeters

### Electrical

Voltage: 125V  
 Current: 1.0A  
 Contact Resistance: 15mΩ max.  
 Dielectric Withstanding Voltage: 1000V  
 Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 180g max.  
 Contact Retention to Housing: 0.32kg min.  
 Normal Force: 50g min.

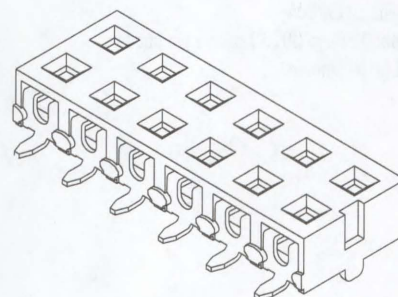
### Physical

Housing: Black LCP, UL 94V-0  
 Contact: Phosphor Bronze  
 Plating: See Table  
 Operating Temperature: -55 to +105°C

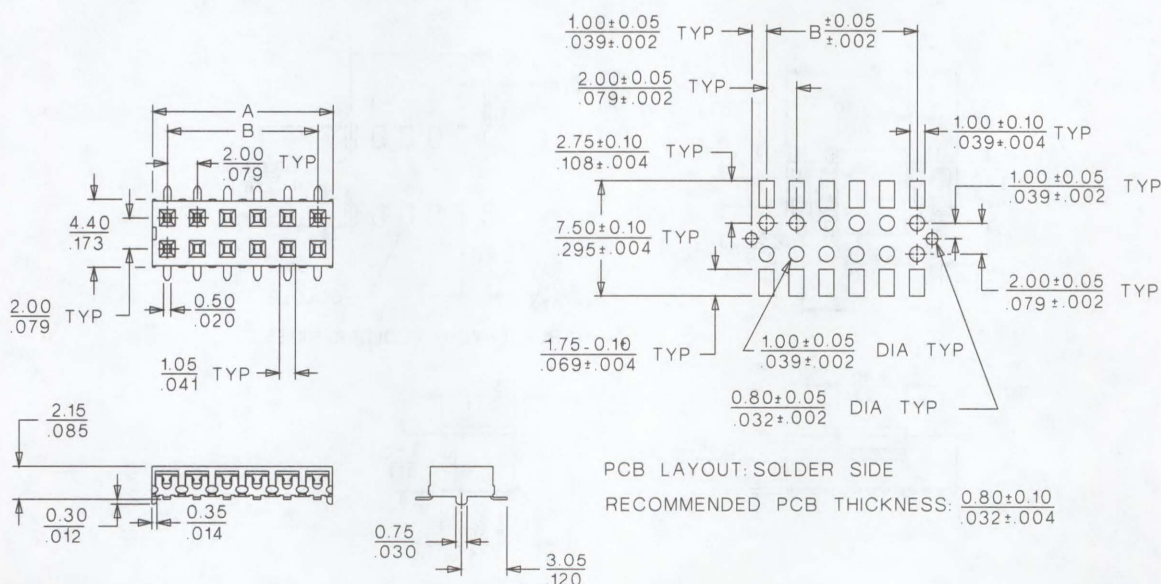
## molex® 2.00mm (.079") Pitch Milli-Grid™ Receptacle

### 87340

### Top Entry SMT (VLPR2)



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.        |                  | Dimension    |              |
|----------|------------------|------------------|--------------|--------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A            | B            |
| 4        | 87340-0422       | 87340-0421       | 4.00 (.157)  | 2.00 (.079)  |
| 6        | 87340-0622       | 87340-0621       | 6.00 (.236)  | 4.00 (.157)  |
| 8        | 87340-0822       | 87340-0821       | 8.00 (.315)  | 6.00 (.236)  |
| 10       | 87340-1022       | 87340-1021       | 10.00 (.394) | 8.00 (.315)  |
| 12       | 87340-1222       | 87340-1221       | 12.00 (.472) | 10.00 (.394) |
| 14       | 87340-1422       | 87340-1421       | 14.00 (.551) | 12.00 (.472) |
| 16       | 87340-1622       | 87340-1621       | 16.00 (.630) | 14.00 (.551) |
| 18       | 87340-1822       | 87340-1821       | 18.00 (.709) | 16.00 (.630) |
| 20       | 87340-2022       | 87340-2021       | 20.00 (.787) | 18.00 (.709) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Size 6 to 24, 28 to 50 circuits
- Other plating and void pin options available
- Cap version for robotic delivery
- Contact Molex for peg version

### Reference Information

Product Specification: PS-87380  
 Packaging: Tube (Contact Molex for tape and reel packaging)  
 UL File No.: E29179  
 CSA File No.: LR19980A  
 Mates With: 0.50mm (.020") square pin headers  
 Designed In: Millimeters

### Electrical

Current: 2.0A max.  
 Contact Resistance: 15mΩ max.  
 Dielectric Withstanding Voltage: 1000V AC/1min.  
 Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 1.77N (.40 lb) max.  
 Contact Retention to Housing: 5.38N (1.21 lb) min.  
 Durability: 25 cycles

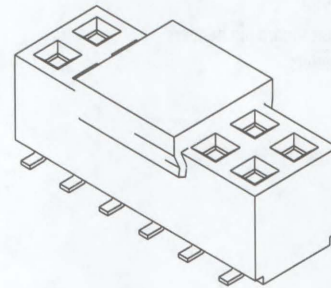
### Physical

Housing: 4/6 nylon, UL 94V-0  
 Contact: Phosphor Bronze  
 Plating: See Table  
 Operating Temperature: -55 to +105°C

**molex®** 2.00mm (.079") Pitch  
**Milli-Grid™**  
**Receptacle**

**87381**

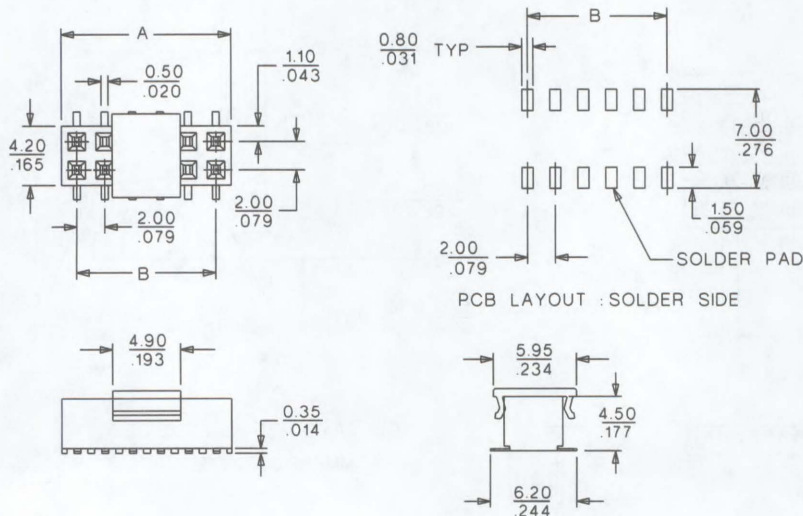
**Dual Row, SMT**  
**Top Entry**



**B**

2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.          |                    | Dimension     |              |
|----------|--------------------|--------------------|---------------|--------------|
|          | 0.38μm (15μ") Gold | 0.76μm (30μ") Gold | A             | B            |
| 6        | 87381-0662         | 87381-0661         | 6.00 (.236)   | 4.00 (.157)  |
| 8        | 87381-0862         | 87381-0861         | 8.00 (.315)   | 6.00 (.236)  |
| 10       | 87381-1062         | 87381-1061         | 10.00 (.394)  | 8.00 (.315)  |
| 12       | 87381-1262         | 87381-1261         | 12.00 (.472)  | 10.00 (.394) |
| 14       | 87381-1462         | 87381-1461         | 14.00 (.551)  | 12.00 (.472) |
| 16       | 87381-1662         | 87381-1661         | 16.00 (.630)  | 14.00 (.551) |
| 18       | 87381-1862         | 87381-1861         | 18.00 (.709)  | 16.00 (.630) |
| 20       | 87381-2062         | 87381-2061         | 20.00 (.787)  | 18.00 (.709) |
| 22       | 87381-2262         | 87381-2261         | 22.00 (.866)  | 20.00 (.787) |
| 24       | 87381-2462         | 87381-2461         | 24.00 (.945)  | 22.00 (.866) |
| 28       | 87381-2862         | 87381-2861         | 28.00 (1.102) | 24.00 (.945) |

| Circuits | Order No.          |                    | Dimension     |               |
|----------|--------------------|--------------------|---------------|---------------|
|          | 0.38μm (15μ") Gold | 0.76μm (30μ") Gold | A             | B             |
| 30       | 87381-3062         | 87381-3061         | 30.00 (1.181) | 28.00 (1.102) |
| 32       | 87381-3262         | 87381-3261         | 32.00 (1.260) | 30.00 (1.181) |
| 34       | 87381-3462         | 87381-3461         | 34.00 (1.339) | 32.00 (1.260) |
| 36       | 87381-3662         | 87381-3661         | 36.00 (1.417) | 34.00 (1.339) |
| 38       | 87381-3862         | 87381-3861         | 38.00 (1.496) | 36.00 (1.417) |
| 40       | 87381-4062         | 87381-4061         | 40.00 (1.575) | 38.00 (1.496) |
| 42       | 87381-4262         | 87381-4261         | 42.00 (1.654) | 40.00 (1.575) |
| 44       | 87381-4462         | 87381-4461         | 44.00 (1.732) | 42.00 (1.654) |
| 46       | 87381-4662         | 87381-4661         | 46.00 (1.811) | 44.00 (1.732) |
| 48       | 87381-4862         | 87381-4861         | 48.00 (1.890) | 46.00 (1.811) |
| 50       | 87381-5062         | 87381-5061         | 50.00 (1.969) | 48.00 (1.890) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 10 to 50 circuits
- Provide additional cable retention

### Reference Information

Product Specification: PS-87568-004

Packaging: Bag

Use With: 87568

Designed In: Millimeters

### Physical

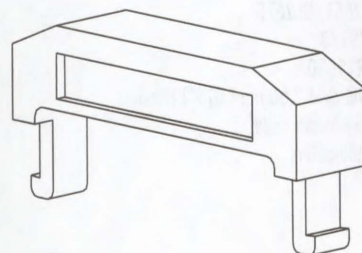
Housing: Thermoplastic, UL 94V-0



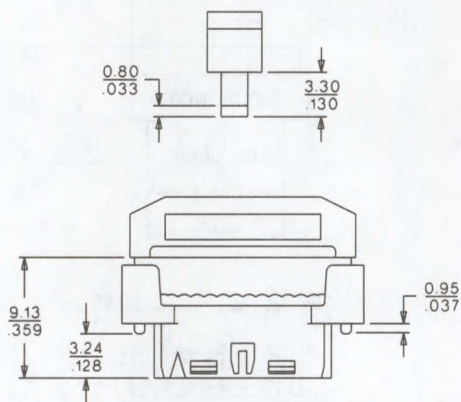
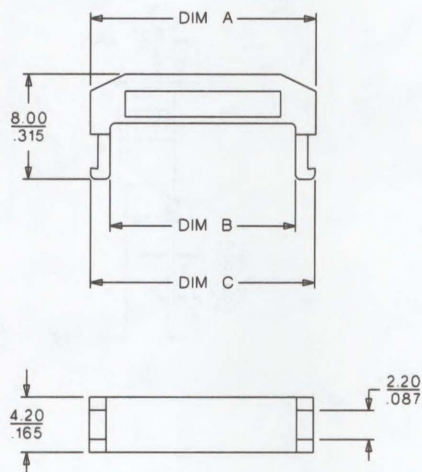
## 2.00mm (.079") Pitch Milli-Grid™ Cable-to-Board Strain Relief

87569

IDT



## CATALOG DRAWING (FOR REFERENCE ONLY)



CABLE LOADED ASSEMBLY  
WITH STRAIN RELIEF

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 10       | 87569-1010 | 15.40 (.610)  | 12.20 (.480)  | 14.10 (.560)  |
| 12       | 87569-1012 | 17.40 (.690)  | 14.20 (.560)  | 16.10 (.630)  |
| 14       | 87569-1014 | 19.40 (.760)  | 16.20 (.640)  | 18.10 (.710)  |
| 16       | 87569-1016 | 21.40 (.840)  | 18.20 (.720)  | 20.10 (.790)  |
| 20       | 87569-1020 | 25.40 (1.000) | 22.20 (.870)  | 24.10 (.950)  |
| 22       | 87569-1022 | 27.40 (1.080) | 24.20 (.950)  | 26.10 (1.030) |
| 24       | 87569-1024 | 29.40 (1.160) | 26.20 (1.030) | 28.10 (1.110) |
| 26       | 87569-1026 | 31.40 (1.240) | 28.20 (1.110) | 30.10 (1.190) |
| 30       | 87569-1030 | 35.40 (1.390) | 32.20 (1.270) | 34.10 (1.340) |
| 34       | 87569-1034 | 39.40 (1.550) | 36.20 (1.430) | 38.10 (1.500) |
| 40       | 87569-1040 | 45.40 (1.790) | 42.20 (1.660) | 44.10 (1.740) |
| 44       | 87569-1044 | 49.40 (1.940) | 46.20 (1.820) | 48.10 (1.890) |
| 50       | 87569-1050 | 55.40 (2.180) | 52.20 (2.060) | 54.10 (2.130) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Pre-loaded upper housing offers precise cover-to-base alignment, ensuring a reliable termination
- Early-entry single-beam contact provides long wiping action during mating
- Optional polarization and locking ramp
- Optional strain relief is available

### Reference Information

Product Specification: PS-87568-004  
 Packaging: Tray  
 Wire Style: UL2651, UL2678  
 UL File No.: E29179  
 CSA File No: LR19980  
 Mates With: Milli-Grid 2.00mm (.079") Headers  
 Use With: 87569 Strain Relief  
 Designed In: Millimeters

### Electrical

Voltage: 125V DC  
 Current: 1.0A  
 Contact Resistance: 30mΩ max.  
 Dielectric Withstanding Voltage: 500V AC  
 Insulation Resistance: 5000 MΩ min.

### Mechanical

Contact Retention to Housing: 1.96N (0.44 lb) max.  
 Wire Pull-Out Force: 2.45N (0.55 lb) max.  
 Mating Force: 1.96N (0.44 lb) max.  
 Unmating Force: 0.39N (0.09 lb) min.  
 Durability: 600 cycles max.

### Physical

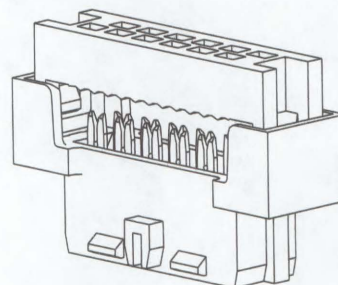
Housing: High Thermoplastic, UL 94V-0  
 Contact: Copper Alloy  
 Plating: Contact Area—See Table Below  
 Underplating—Nickel  
 Operating Temperature: -20 to +85°C  
 Cable: 1.00mm Flat Cable, 7 Strands, 28 AWG



## 2.00mm (.079") Pitch Milli-Grid™ Cable-to-Board Receptacle

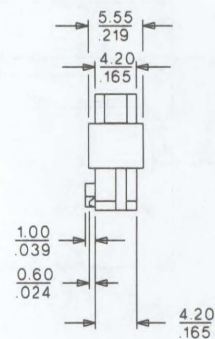
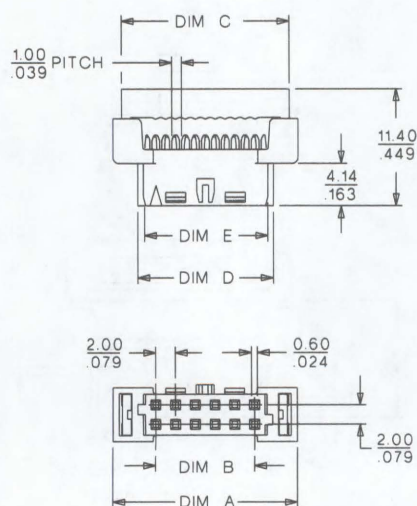
**87568**

**Dual Row, IDT**



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.          |                    | Dimension     |               |               |               |               |
|----------|--------------------|--------------------|---------------|---------------|---------------|---------------|---------------|
|          | 0.38μm (15μ") Gold | 0.76μm (30μ") Gold | A             | B             | C             | D             | E             |
| 10       | 87568-10X1         | 87568-10X2         | 16.65 (.660)  | 8.00 (.310)   | 14.90 (.590)  | 11.65 (.460)  | 10.55 (.420)  |
| 12       | 87568-12X1         | 87568-12X2         | 18.65 (.730)  | 10.00 (.390)  | 16.90 (.670)  | 13.65 (.540)  | 12.55 (.490)  |
| 14       | 87568-14X1         | 87568-14X2         | 20.65 (.810)  | 12.00 (.470)  | 18.90 (.740)  | 15.65 (.620)  | 14.55 (.570)  |
| 16       | 87568-16X1         | 87568-16X2         | 22.65 (.890)  | 14.00 (.550)  | 20.90 (.820)  | 17.65 (.690)  | 16.55 (.650)  |
| 20       | 87568-20X1         | 87568-20X2         | 26.65 (1.050) | 18.00 (.710)  | 24.90 (.980)  | 21.65 (.850)  | 20.55 (.810)  |
| 22       | 87568-22X1         | 87568-22X2         | 28.65 (1.130) | 20.00 (.790)  | 26.90 (1.060) | 23.65 (.930)  | 22.55 (.890)  |
| 24       | 87568-24X1         | 87568-24X2         | 30.65 (1.210) | 22.00 (.870)  | 28.90 (1.140) | 25.65 (1.010) | 24.55 (.970)  |
| 26       | 87568-26X1         | 87568-26X2         | 32.65 (1.290) | 24.00 (.940)  | 30.90 (1.220) | 27.65 (1.090) | 26.55 (1.050) |
| 30       | 87568-30X1         | 87568-30X2         | 36.65 (1.440) | 28.00 (1.100) | 34.90 (1.370) | 31.65 (1.250) | 30.55 (1.200) |
| 34       | 87568-34X1         | 87568-34X2         | 40.65 (1.600) | 32.00 (1.260) | 38.90 (1.530) | 35.65 (1.400) | 34.55 (1.360) |
| 40       | 87568-40X1         | 87568-40X2         | 46.65 (1.840) | 38.00 (1.500) | 44.90 (1.770) | 41.65 (1.640) | 40.55 (1.600) |
| 44       | 87568-44X1         | 87568-44X2         | 50.65 (1.990) | 42.00 (1.650) | 48.90 (1.930) | 45.65 (1.800) | 44.55 (1.750) |
| 50       | 87568-50X1         | 87568-50X2         | 56.65 (2.230) | 48.00 (1.890) | 54.90 (2.160) | 51.65 (2.430) | 50.55 (1.990) |

| Circuits | X=4<br>With Center<br>Polarization | X=6<br>Without<br>Polarization<br>and Locking<br>Ramp | X=7<br>With Single<br>Locking<br>Ramp | X=9<br>With<br>Polarization<br>and Locking<br>Ramp |
|----------|------------------------------------|-------------------------------------------------------|---------------------------------------|----------------------------------------------------|
| 10       | No                                 | Yes                                                   | Yes                                   | No                                                 |
| 12       | No                                 | Yes                                                   | Yes                                   | No                                                 |
| 14       | Yes                                | Yes                                                   | No                                    | Yes                                                |
| 16       | Yes                                | Yes                                                   | No                                    | Yes                                                |
| 20       | Yes                                | Yes                                                   | No                                    | Yes                                                |
| 22       | Yes                                | Yes                                                   | No                                    | Yes                                                |
| 24       | Yes                                | Yes                                                   | No                                    | Yes                                                |
| 26       | Yes                                | Yes                                                   | No                                    | Yes                                                |
| 30       | Yes                                | Yes                                                   | No                                    | Yes                                                |
| 34       | Yes                                | Yes                                                   | No                                    | Yes                                                |
| 40       | Yes                                | Yes                                                   | No                                    | Yes                                                |
| 44       | Yes                                | Yes                                                   | No                                    | Yes                                                |
| 50       | Yes                                | Yes                                                   | No                                    | Yes                                                |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 8 to 50 circuits
- Locating peg version standard
- Optional voided pin version and without peg version
- Contact Molex for pick-and-place cap or embossed tape

### Reference Information

**Product Specification: PS-87049**

**Packaging:** Tube (contact Molex for embossed tape)

UL File No.: E29179

CSA File No.: LR19980-202

**Mates With: Milli-Grid 2.00mm Receptacles**

**Designed In: Millimeters**

## Electrical

Voltage: 125V

Current: 2.0A

**Dielectric Withstanding Voltage: 500V**

Insulation Resistance: 1000 M $\Omega$  min.

### Physical

**Housing:** Black high-temperature nylon, UL 94V-0

Contact: Phosphor Bronze, 0.50mm square

Plating: See Table

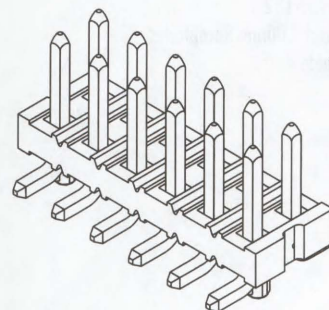
Operating Temperature: -55 to +105°C

PCB Thickness:  $1.60 \pm 0.10\text{mm}$

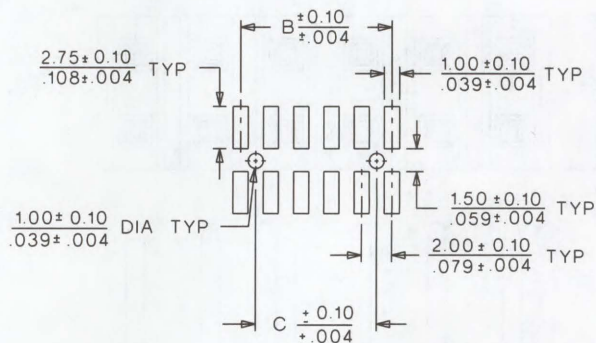
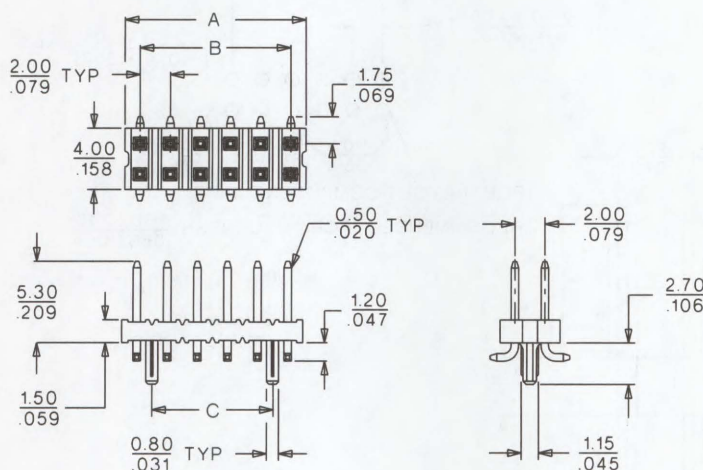
**molex® 2.00mm (.079") Pitch  
Milli-Grid™  
Header**

87267

## Vertical SMT



**CATALOG DRAWING (FOR REFERENCE ONLY)**



PCB LAYOUT: SOLDER SIDE

RECOMMENDED PCB THICKNESS:  $\frac{1.60 \pm 0.10}{0.063 \pm 0.004}$

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.        |                  | Dimension     |               |
|----------|------------------|------------------|---------------|---------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B             |
| 8        | 87267-0850       | 87267-0851       | 7.90 (.311)   | 6.00 (.236)   |
| 10       | 87267-1050       | 87267-1051       | 9.90 (.390)   | 8.00 (.315)   |
| 12       | 87267-1250       | 87267-1251       | 11.90 (.469)  | 10.00 (.394)  |
| 14       | 87267-1450       | 87267-1451       | 13.90 (.547)  | 12.00 (.472)  |
| 16       | 87267-1650       | 87267-1651       | 15.90 (.626)  | 14.00 (.551)  |
| 18       | 87267-1850       | 87267-1851       | 17.90 (.709)  | 16.00 (.630)  |
| 20       | 87267-2050       | 87267-2051       | 19.90 (.783)  | 18.00 (.709)  |
| 22       | 87267-2250       | 87267-2251       | 21.90 (.862)  | 20.00 (.787)  |
| 24       | 87267-2450       | 87267-2451       | 23.90 (.941)  | 22.00 (.866)  |
| 26       | 87267-2650       | 87267-2651       | 25.90 (1.020) | 24.00 (.945)  |
| 28       | 87267-2850       | 87267-2851       | 27.90 (1.098) | 26.00 (1.024) |

| Circuits | Order No.        |                  | Dimension     |               |
|----------|------------------|------------------|---------------|---------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B             |
| 30       | 87267-3050       | 87267-3051       | 29.90 (1.177) | 28.00 (1.102) |
| 32       | 87267-3250       | 87267-3251       | 31.90 (1.256) | 30.00 (1.181) |
| 34       | 87267-3450       | 87267-3451       | 33.90 (1.335) | 32.00 (1.260) |
| 36       | 87267-3650       | 87267-3651       | 35.90 (1.413) | 34.00 (1.339) |
| 38       | 87267-3850       | 87267-3851       | 37.90 (1.492) | 36.00 (1.417) |
| 40       | 87267-4050       | 87267-4051       | 39.90 (1.571) | 38.00 (1.496) |
| 42       | 87267-4250       | 87267-4251       | 41.90 (1.650) | 40.00 (1.575) |
| 44       | 87267-4450       | 87267-4451       | 43.90 (1.728) | 42.00 (1.654) |
| 46       | 87267-4650       | 87267-4651       | 45.90 (1.807) | 44.00 (1.732) |
| 48       | 87267-4850       | 87267-4851       | 47.90 (1.886) | 46.00 (1.811) |
| 50       | 87267-5050       | 87267-5051       | 49.90 (1.965) | 48.00 (1.890) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 50 circuits
- End-to-end stackable
- Optional voided pin version, kinked PC tail and other PC tail lengths
- Surface Mount Compatible

### Reference Information

Product Specification: PS-87049

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980-182

Mates With: Milli-Grid 2.00mm Receptacles

Designed In: Millimeters

### Electrical

Current: 2.0A

Dielectric Withstanding Voltage: 500V

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: High-temperature 4/6 nylon, UL 94V-0

Contact: Phosphor Bronze, 0.50mm square

Plating: See Table

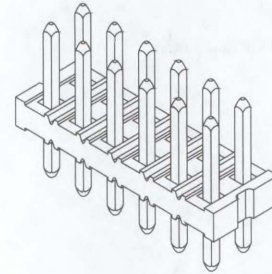
Operating Temperature: -55 to +105°C

PCB Thickness: 1.60 ± 0.10mm

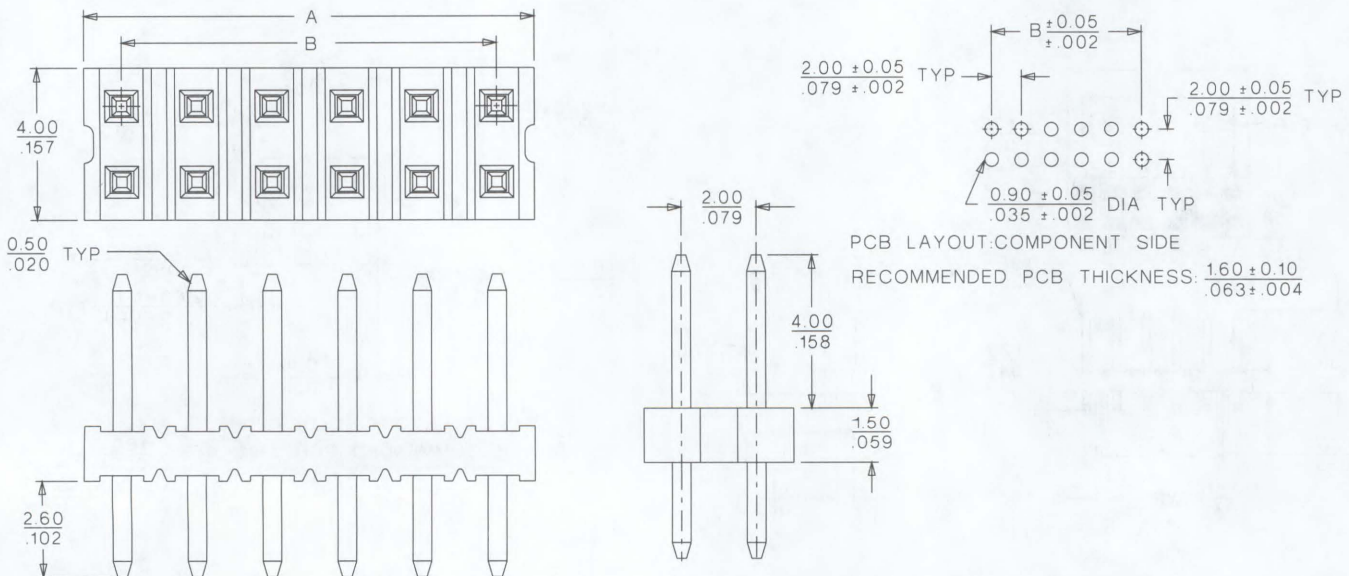
**molex** 2.00mm (.079") Pitch  
**Milli-Grid™**  
**Header**

**87089**

**Vertical**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.        |                  | Dimension     |              |
|----------|------------------|------------------|---------------|--------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B            |
| 4        | 87089-0416       | 87089-0417       | 3.90 (.154)   | 2.00 (.079)  |
| 6        | 87089-0616       | 87089-0617       | 5.90 (.232)   | 4.00 (.157)  |
| 8        | 87089-0816       | 87089-0817       | 7.90 (.311)   | 6.00 (.236)  |
| 10       | 87089-1016       | 87089-1017       | 9.90 (.390)   | 8.00 (.315)  |
| 12       | 87089-1216       | 87089-1217       | 11.90 (.469)  | 10.00 (.394) |
| 14       | 87089-1416       | 87089-1417       | 13.90 (.547)  | 12.00 (.472) |
| 16       | 87089-1616       | 87089-1617       | 15.90 (.626)  | 14.00 (.551) |
| 18       | 87089-1816       | 87089-1817       | 17.90 (.705)  | 16.00 (.630) |
| 20       | 87089-2016       | 87089-2017       | 19.90 (.783)  | 18.00 (.709) |
| 22       | 87089-2216       | 87089-2217       | 21.90 (.862)  | 20.00 (.787) |
| 24       | 87089-2416       | 87089-2417       | 23.90 (.941)  | 22.00 (.866) |
| 26       | 87089-2616       | 87089-2617       | 25.90 (1.020) | 24.00 (.945) |

| Circuits | Order No.        |                  | Dimension     |               |
|----------|------------------|------------------|---------------|---------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B             |
| 28       | 87089-2816       | 87089-2817       | 27.90 (1.098) | 26.00 (1.024) |
| 30       | 87089-3016       | 87089-3017       | 29.90 (1.177) | 28.00 (1.102) |
| 32       | 87089-3216       | 87089-3217       | 31.90 (1.256) | 30.00 (1.181) |
| 34       | 87089-3416       | 87089-3417       | 33.90 (1.335) | 32.00 (1.260) |
| 36       | 87089-3616       | 87089-3617       | 35.90 (1.413) | 34.00 (1.339) |
| 38       | 87089-3816       | 87089-3817       | 37.90 (1.492) | 36.00 (1.417) |
| 40       | 87089-4016       | 87089-4017       | 39.90 (1.571) | 38.00 (1.496) |
| 42       | 87089-4216       | 87089-4217       | 41.90 (1.650) | 40.00 (1.575) |
| 44       | 87089-4416       | 87089-4417       | 43.90 (1.728) | 42.00 (1.654) |
| 46       | 87089-4616       | 87089-4617       | 45.90 (1.807) | 44.00 (1.732) |
| 48       | 87089-4816       | 87089-4817       | 47.90 (1.886) | 46.00 (1.811) |
| 50       | 87089-5016       | 87089-5017       | 49.90 (1.965) | 48.00 (1.890) |

2.00 to 2.50mm (.079 to .098") Pitch



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 50 circuits
- Fully shrouded to protect pins during mating/unmating
- Center slot for polarization
- Front latches for mechanical locking
- Center polarization slot (6 to 12 circuits); center polarization slot and front latches (14 to 50 circuits)

### Electrical

Current: 2.0A  
Dielectric Withstanding Voltage: 1000V  
Insulation Resistance: 1000 MΩ min.

### Physical

Housing: Black 4/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: See Table  
Operating Temperature: -55 to +105°C

### Reference Information

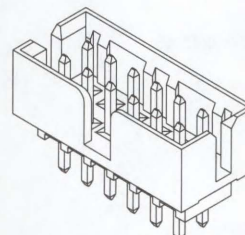
Product Specification: PS-87331  
Packaging: Tube  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 50394, 51110 and 87568  
Designed In: Millimeters



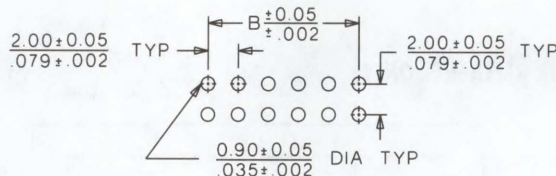
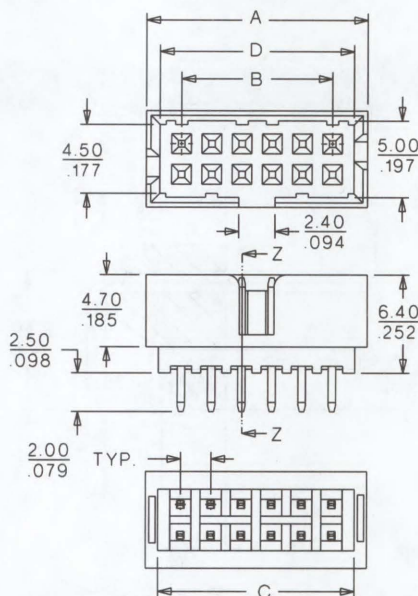
**2.00mm (.079") Pitch**  
**Milli-Grid™**  
**Header**

**87331**

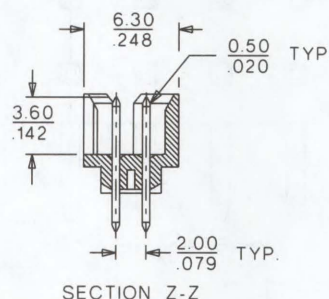
**Shrouded**  
**Vertical, SMC**



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE.  
RECOMMENDED PCB THICKNESS: 1.60 ± 0.10 / .063 ± .004



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.        |                  | Dimension     |               |               |               |
|----------|------------------|------------------|---------------|---------------|---------------|---------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B             | C             | D             |
| 4        | 87331-0420       | 87331-0421       | 6.65 (.262)   | 2.00 (.079)   | 5.00 (.197)   | 4.85 (.191)   |
| 6        | 87331-0620       | 87331-0621       | 8.65 (.341)   | 4.00 (.157)   | 7.00 (.276)   | 6.85 (.270)   |
| 8        | 87331-0820       | 87331-0821       | 10.65 (.419)  | 6.00 (.236)   | 9.00 (.354)   | 8.85 (.348)   |
| 10       | 87331-1020       | 87331-1021       | 12.65 (.498)  | 8.00 (.315)   | 11.00 (.433)  | 10.85 (.427)  |
| 12       | 87331-1220       | 87331-1221       | 14.65 (.577)  | 10.00 (.394)  | 13.00 (.512)  | 12.85 (.506)  |
| 14       | 87331-1420       | 87331-1421       | 16.65 (.656)  | 12.00 (.472)  | 15.00 (.591)  | 14.85 (.585)  |
| 16       | 87331-1620       | 87331-1621       | 18.65 (.734)  | 14.00 (.551)  | 17.00 (.669)  | 16.85 (.663)  |
| 18       | 87331-1820       | 87331-0621       | 20.65 (.813)  | 16.00 (.630)  | 19.00 (.748)  | 18.85 (.742)  |
| 20       | 87331-2020       | 87331-2021       | 22.65 (.892)  | 18.00 (.709)  | 21.00 (.827)  | 20.85 (.821)  |
| 22       | 87331-2220       | 87331-2221       | 24.65 (.970)  | 20.00 (.787)  | 23.00 (.906)  | 22.85 (.900)  |
| 24       | 87331-2420       | 87331-2421       | 26.65 (1.049) | 22.00 (.866)  | 25.00 (.984)  | 24.85 (.978)  |
| 26       | 87331-2620       | 87331-2621       | 28.65 (1.128) | 24.00 (.945)  | 27.00 (1.063) | 26.85 (1.057) |
| 28       | 87331-2820       | 87331-2821       | 30.65 (1.207) | 26.00 (1.024) | 29.00 (1.142) | 28.85 (1.136) |
| 30       | 87331-3020       | 87331-3021       | 32.65 (1.285) | 28.00 (1.102) | 31.00 (1.220) | 30.85 (1.215) |
| 32       | 87331-3220       | 87331-3221       | 34.65 (1.364) | 30.00 (1.181) | 33.00 (1.299) | 32.85 (1.293) |
| 34       | 87331-3420       | 87331-3421       | 36.65 (1.443) | 32.00 (1.260) | 35.00 (1.378) | 34.85 (1.372) |
| 36       | 87331-3620       | 87331-3621       | 38.65 (1.522) | 34.00 (1.339) | 37.00 (1.457) | 36.85 (1.451) |
| 38       | 87331-3820       | 87331-3821       | 40.65 (1.600) | 36.00 (1.417) | 39.00 (1.535) | 38.85 (1.530) |
| 40       | 87331-4020       | 87331-4021       | 42.65 (1.679) | 38.00 (1.496) | 41.00 (1.614) | 40.85 (1.608) |
| 42       | 87331-4220       | 87331-4221       | 44.65 (1.758) | 40.00 (1.575) | 43.00 (1.693) | 42.85 (1.687) |
| 44       | 87331-4420       | 87331-4421       | 46.65 (1.837) | 42.00 (1.654) | 45.00 (1.771) | 44.85 (1.766) |
| 46       | 87331-4620       | 87331-4621       | 48.65 (1.915) | 44.00 (1.732) | 47.00 (1.850) | 46.85 (1.844) |
| 48       | 87331-4820       | 87331-4821       | 50.65 (1.994) | 46.00 (1.811) | 49.00 (1.929) | 48.85 (1.923) |
| 50       | 87331-5020       | 87331-5021       | 52.65 (2.073) | 48.00 (1.890) | 51.00 (2.008) | 50.85 (2.002) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 50 circuits
- End-to-end stackable
- Optional voided pin version and kinked PC tail
- I.R. reflow version (plastic material), contact Molex

### Reference Information

Product Specification: PS-87049  
 Packaging: Tray  
 UL File No.: E29179  
 CSA File No.: LR19980-182  
 Mates With: Milli-Grid 2.00mm receptacles  
 Designed In: Millimeters

### Electrical

Voltage: 125V  
 Current: 2.0A  
 Dielectric Withstanding Voltage: 500V  
 Insulation Resistance: 1000 MΩ min.

### Physical

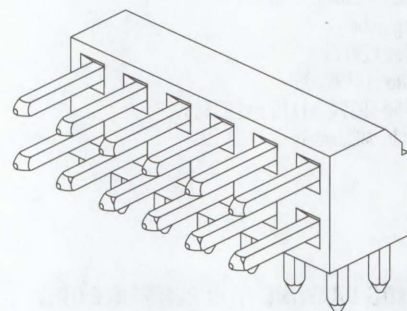
Housing: Black glass-filled polyester, UL 94V-0  
 Contact: Phosphor Bronze, 0.50mm square  
 Plating: See Table  
 Operating Temperature: -55 to +105°C  
 PCB Thickness: 1.60 ± 0.10mm



**2.00mm (.079") Pitch  
 Milli-Grid™  
 Header**

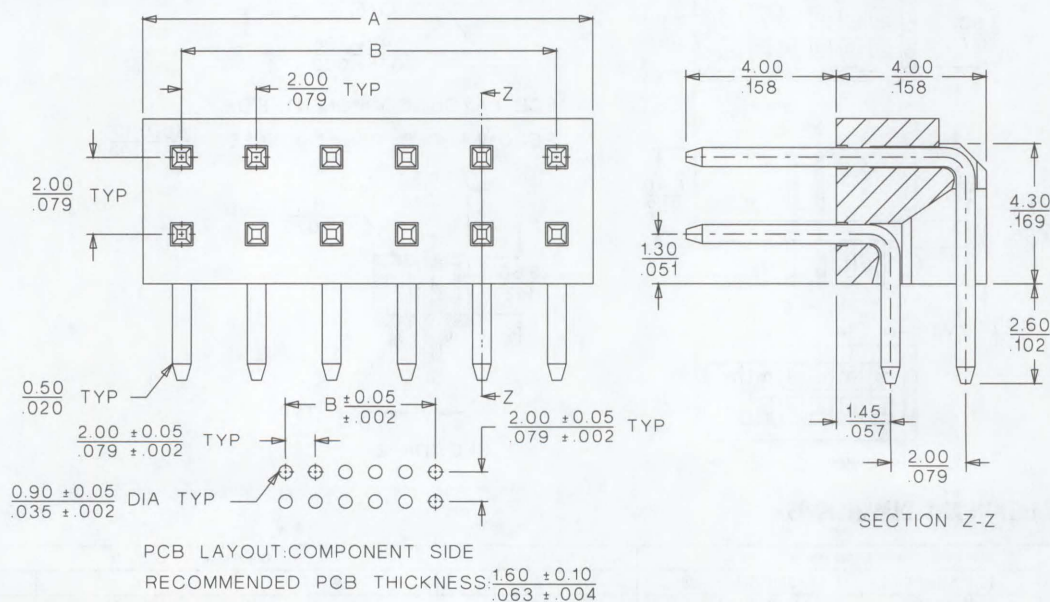
**87049**

**Right Angle**



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.        |                  | Dimension     |              |
|----------|------------------|------------------|---------------|--------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B            |
| 4        | 87049-0416       | 87049-0417       | 4.00 (.157)   | 2.00 (.079)  |
| 6        | 87049-0616       | 87049-0617       | 6.00 (.236)   | 4.00 (.157)  |
| 8        | 87049-0816       | 87049-0817       | 8.00 (.315)   | 6.00 (.236)  |
| 10       | 87049-1016       | 87049-1017       | 10.00 (.394)  | 8.00 (.315)  |
| 12       | 87049-1216       | 87049-1217       | 12.00 (.472)  | 10.00 (.394) |
| 14       | 87049-1416       | 87049-1417       | 14.00 (.551)  | 12.00 (.472) |
| 16       | 87049-1616       | 87049-1617       | 16.00 (.630)  | 14.00 (.551) |
| 18       | 87049-1816       | 87049-1817       | 18.00 (.709)  | 16.00 (.630) |
| 20       | 87049-2016       | 87049-2017       | 20.00 (.787)  | 18.00 (.709) |
| 22       | 87049-2216       | 87049-2217       | 22.00 (.866)  | 20.00 (.787) |
| 24       | 87049-2416       | 87049-2417       | 24.00 (.945)  | 22.00 (.866) |
| 26       | 87049-2616       | 87049-2617       | 26.00 (1.024) | 24.00 (.945) |

| Circuits | Order No.        |                  | Dimension     |               |
|----------|------------------|------------------|---------------|---------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B             |
| 28       | 87049-2816       | 87049-2817       | 28.00 (1.102) | 26.00 (1.024) |
| 30       | 87049-3016       | 87049-3017       | 30.00 (1.181) | 28.00 (1.102) |
| 32       | 87049-3216       | 87049-3217       | 32.00 (1.260) | 30.00 (1.181) |
| 34       | 87049-3416       | 87049-3417       | 34.00 (1.339) | 32.00 (1.260) |
| 36       | 87049-3616       | 87049-3617       | 36.00 (1.417) | 34.00 (1.339) |
| 38       | 87049-3816       | 87049-3817       | 38.00 (1.496) | 36.00 (1.417) |
| 40       | 87049-4016       | 87049-4017       | 40.00 (1.575) | 38.00 (1.496) |
| 42       | 87049-4216       | 87049-4217       | 42.00 (1.654) | 40.00 (1.575) |
| 44       | 87049-4416       | 87049-4417       | 44.00 (1.732) | 42.00 (1.654) |
| 46       | 87049-4616       | 87049-4617       | 46.00 (1.811) | 44.00 (1.732) |
| 48       | 87049-4816       | 87049-4817       | 48.00 (1.890) | 46.00 (1.811) |
| 50       | 87049-5016       | 87049-5017       | 50.00 (1.969) | 48.00 (1.890) |



2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 50 circuits
- Fully shrouded to protect pins during mating/unmating
- Center slot for polarization
- Front latches for mechanical locking
- Center polarization slot (6 to 12 circuits); center polarization slot and front latches (14 to 50 circuits)
- Surface Mount Compatible

### Reference Information

Product Specification: PS-87331  
Packaging: Tube  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 50394, 51110 and 87568  
Designed In: Millimeters

### Electrical

Current: 2.0A  
Dielectric Withstanding Voltage: 1000V  
Insulation Resistance: 1000 MΩ min.

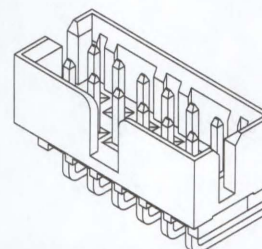
### Physical

Housing: Black 4/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: See Table  
Operating Temperature: -55 to +105°C

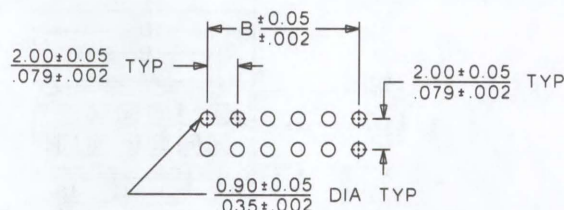
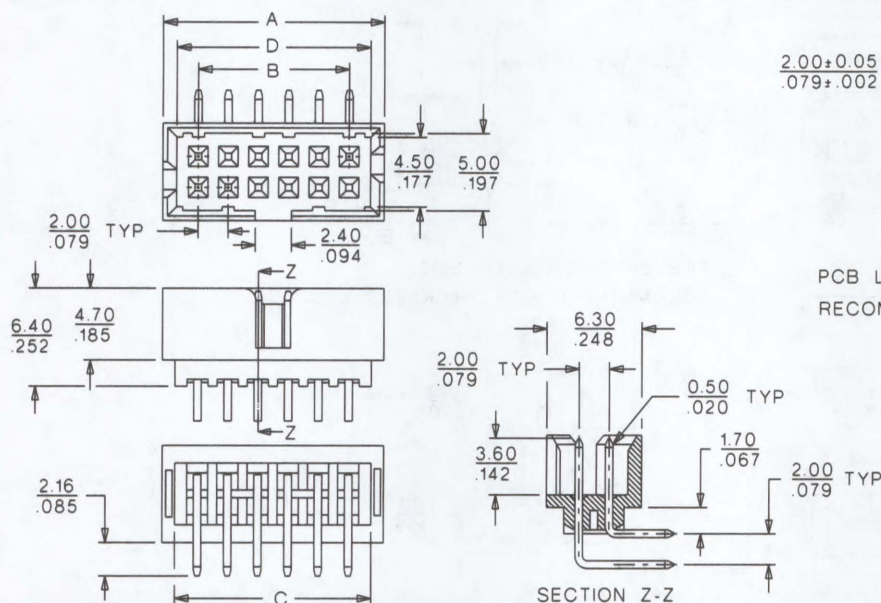


## 2.00mm (.079") Pitch Milli-Grid™ Header

### 87333 Shrouded Right Angle



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT : COMPONENT SIDE.  
RECOMMENDED PCB THICKNESS:  $\frac{1.60 \pm 0.10}{.063 \pm .004}$

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.        |                  | Dimension     |               |               |               |
|----------|------------------|------------------|---------------|---------------|---------------|---------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B             | C             | D             |
| 4        | 87333-0420       | 87333-0421       | 6.65 (.262)   | 2.00 (.079)   | 5.00 (.197)   | 4.85 (.191)   |
| 6        | 87333-0620       | 87333-0621       | 8.65 (.341)   | 4.00 (.157)   | 7.00 (.276)   | 6.85 (.270)   |
| 8        | 87333-0820       | 87333-0821       | 10.65 (.419)  | 6.00 (.236)   | 9.00 (.354)   | 8.85 (.348)   |
| 10       | 87333-1020       | 87333-1021       | 12.65 (.498)  | 8.00 (.315)   | 11.00 (.433)  | 10.85 (.427)  |
| 12       | 87333-1220       | 87333-1221       | 14.65 (.577)  | 10.00 (.394)  | 13.00 (.512)  | 12.85 (.506)  |
| 14       | 87333-1420       | 87333-1421       | 16.65 (.656)  | 12.00 (.472)  | 15.00 (.591)  | 14.85 (.585)  |
| 16       | 87333-1620       | 87333-1621       | 18.65 (.734)  | 14.00 (.551)  | 17.00 (.669)  | 16.85 (.663)  |
| 18       | 87333-1820       | 87333-1821       | 20.65 (.813)  | 16.00 (.630)  | 19.00 (.748)  | 18.85 (.742)  |
| 20       | 87333-2020       | 87333-2021       | 22.65 (.892)  | 18.00 (.709)  | 21.00 (.827)  | 20.85 (.821)  |
| 22       | 87333-2220       | 87333-2221       | 24.65 (.970)  | 20.00 (.787)  | 23.00 (.906)  | 22.85 (.900)  |
| 24       | 87333-2420       | 87333-2421       | 26.65 (1.049) | 22.00 (.866)  | 25.00 (.984)  | 24.85 (.978)  |
| 26       | 87333-2620       | 87333-2621       | 28.65 (1.128) | 24.00 (.945)  | 27.00 (1.063) | 26.85 (1.057) |
| 28       | 87333-2820       | 87333-2821       | 30.65 (1.207) | 26.00 (1.024) | 29.00 (1.142) | 28.85 (1.136) |
| 30       | 87333-3020       | 87333-3021       | 32.65 (1.285) | 28.00 (1.102) | 31.00 (1.220) | 30.85 (1.215) |
| 32       | 87333-3220       | 87333-3221       | 34.65 (1.364) | 30.00 (1.181) | 33.00 (1.299) | 32.85 (1.293) |
| 34       | 87333-3420       | 87333-3421       | 36.65 (1.443) | 32.00 (1.260) | 35.00 (1.378) | 34.85 (1.372) |
| 36       | 87333-3620       | 87333-3621       | 38.65 (1.522) | 34.00 (1.339) | 37.00 (1.457) | 36.85 (1.451) |
| 38       | 87333-3820       | 87333-3821       | 40.65 (1.600) | 36.00 (1.417) | 39.00 (1.535) | 38.85 (1.530) |
| 40       | 87333-4020       | 87333-4021       | 42.65 (1.679) | 38.00 (1.496) | 41.00 (1.614) | 40.85 (1.608) |
| 42       | 87333-4220       | 87333-4221       | 44.65 (1.758) | 40.00 (1.575) | 43.00 (1.693) | 42.85 (1.687) |
| 44       | 87333-4420       | 87333-4421       | 46.65 (1.837) | 42.00 (1.654) | 45.00 (1.792) | 44.85 (1.766) |
| 46       | 87333-4620       | 87333-4621       | 48.65 (1.915) | 44.00 (1.732) | 47.00 (1.850) | 46.85 (1.844) |
| 48       | 87333-4820       | 87333-4821       | 50.65 (1.994) | 46.00 (1.811) | 49.00 (1.929) | 48.85 (1.923) |
| 50       | 87333-5020       | 87333-5021       | 52.65 (2.073) | 48.00 (1.890) | 51.00 (2.008) | 50.85 (2.002) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 50 circuits
- Fully shrouded to protect pins during mating/unmating
- Center slot for polarization
- Front latches for mechanical locking
- Locating pegs for automatic insertion process
- Center polarization slot (6 to 12 circuits); center polarization and front latches (14 to 50 circuits)

### Reference Information

Product Specification: PS-87331

Packaging: Tube

UL File No.: E29179

CSA File No.: LR19980

Mates With: 50394, 51110 and 87568

Designed In: Millimeters

### Electrical

Current: 2.0A

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: Black 4/6 nylon, UL 94V-0

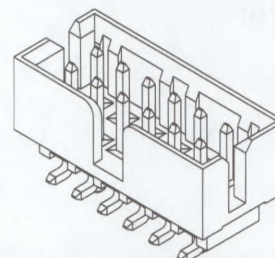
Contact: Phosphor Bronze

Plating: See Table

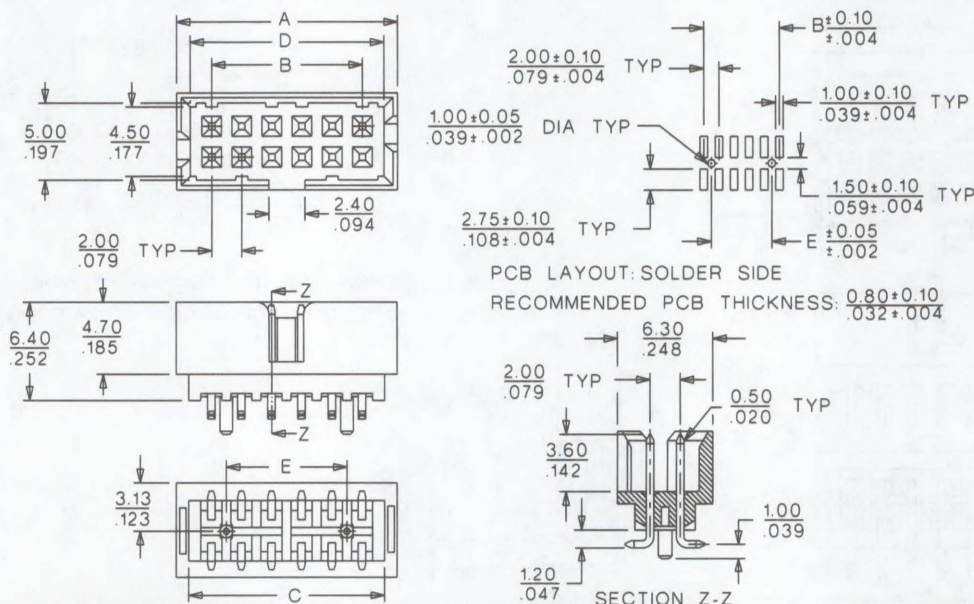
Operating Temperature: -55 to +105°C

**molex®** 2.00mm (.079") Pitch  
**Milli-Grid™**  
**Header**

**87332**  
**Shrouded**  
**SMT**



## CATALOG DRAWING (FOR REFERENCE ONLY)

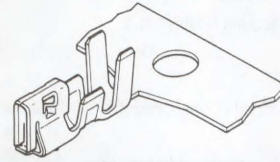


## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.        |                  | Dimension     |               |               |               |               |
|----------|------------------|------------------|---------------|---------------|---------------|---------------|---------------|
|          | 15μ" Select Gold | 30μ" Select Gold | A             | B             | C             | D             | E             |
| 4        | 87332-0420       | 87332-0421       | 6.65 (.262)   | 2.00 (.079)   | 5.00 (.197)   | 4.85 (.191)   |               |
| 6        | 87332-0620       | 87332-0621       | 8.65 (.341)   | 4.00 (.157)   | 7.00 (.276)   | 6.85 (.270)   | 2.00 (.079)   |
| 8        | 87332-0820       | 87332-0821       | 10.65 (.419)  | 6.00 (.236)   | 9.00 (.354)   | 8.85 (.348)   | 4.00 (.157)   |
| 10       | 87332-1020       | 87332-1021       | 12.65 (.498)  | 8.00 (.315)   | 11.00 (.433)  | 10.85 (.427)  | 6.00 (.236)   |
| 12       | 87332-1220       | 87332-1221       | 14.65 (.577)  | 10.00 (.394)  | 13.00 (.512)  | 12.85 (.506)  | 8.00 (.315)   |
| 14       | 87332-1420       | 87332-1421       | 16.65 (.656)  | 12.00 (.472)  | 15.00 (.591)  | 14.85 (.585)  | 10.00 (.394)  |
| 16       | 87332-1620       | 87332-1621       | 18.65 (.734)  | 14.00 (.551)  | 17.00 (.669)  | 16.85 (.663)  | 12.00 (.472)  |
| 18       | 87332-1820       | 87332-1821       | 20.65 (.813)  | 16.00 (.630)  | 19.00 (.748)  | 18.85 (.742)  | 14.00 (.551)  |
| 20       | 87332-2020       | 87332-2021       | 22.65 (.892)  | 18.00 (.709)  | 21.00 (.827)  | 20.85 (.821)  | 16.00 (.630)  |
| 22       | 87332-2220       | 87332-2221       | 24.65 (.970)  | 20.00 (.787)  | 23.00 (.906)  | 22.85 (.900)  | 18.00 (.709)  |
| 24       | 87332-2420       | 87332-2421       | 26.65 (1.049) | 22.00 (.866)  | 25.00 (.984)  | 24.85 (.978)  | 20.00 (.787)  |
| 26       | 87332-2620       | 87332-2621       | 28.65 (1.128) | 24.00 (.945)  | 27.00 (1.063) | 26.85 (1.057) | 22.00 (.866)  |
| 28       | 87332-2820       | 87332-2821       | 30.65 (1.207) | 26.00 (1.024) | 29.00 (1.142) | 28.85 (1.136) | 24.00 (.945)  |
| 30       | 87332-3020       | 87332-3021       | 32.65 (1.285) | 28.00 (1.102) | 31.00 (1.220) | 30.85 (1.215) | 26.00 (1.024) |
| 32       | 87332-3220       | 87332-3221       | 34.65 (1.364) | 30.00 (1.181) | 33.00 (1.299) | 32.85 (1.293) | 28.00 (1.102) |
| 34       | 87332-3420       | 87332-3421       | 36.65 (1.443) | 32.00 (1.260) | 35.00 (1.378) | 34.85 (1.372) | 30.00 (1.181) |
| 36       | 87332-3620       | 87332-3621       | 38.65 (1.522) | 34.00 (1.339) | 37.00 (1.457) | 36.85 (1.451) | 32.00 (1.260) |
| 38       | 87332-3820       | 87332-3821       | 40.65 (1.600) | 36.00 (1.417) | 39.00 (1.535) | 38.85 (1.530) | 34.00 (1.339) |
| 40       | 87332-4020       | 87332-4021       | 42.65 (1.679) | 38.00 (1.496) | 41.00 (1.614) | 40.85 (1.608) | 36.00 (1.417) |
| 42       | 87332-4220       | 87332-4221       | 44.65 (1.758) | 40.00 (1.575) | 43.00 (1.693) | 42.85 (1.687) | 38.00 (1.496) |
| 44       | 87332-4420       | 87332-4421       | 46.65 (1.837) | 42.00 (1.654) | 45.00 (1.792) | 44.85 (1.766) | 40.00 (1.575) |
| 46       | 87332-4620       | 87332-4621       | 48.65 (1.915) | 44.00 (1.732) | 47.00 (1.850) | 46.85 (1.844) | 42.00 (1.654) |
| 48       | 87332-4820       | 87332-4821       | 50.65 (1.994) | 46.00 (1.811) | 49.00 (1.929) | 48.85 (1.923) | 44.00 (1.732) |
| 50       | 87332-5020       | 87332-5021       | 52.65 (2.073) | 48.00 (1.890) | 51.00 (2.008) | 50.85 (2.002) | 46.00 (1.811) |



**50212  
Terminal**

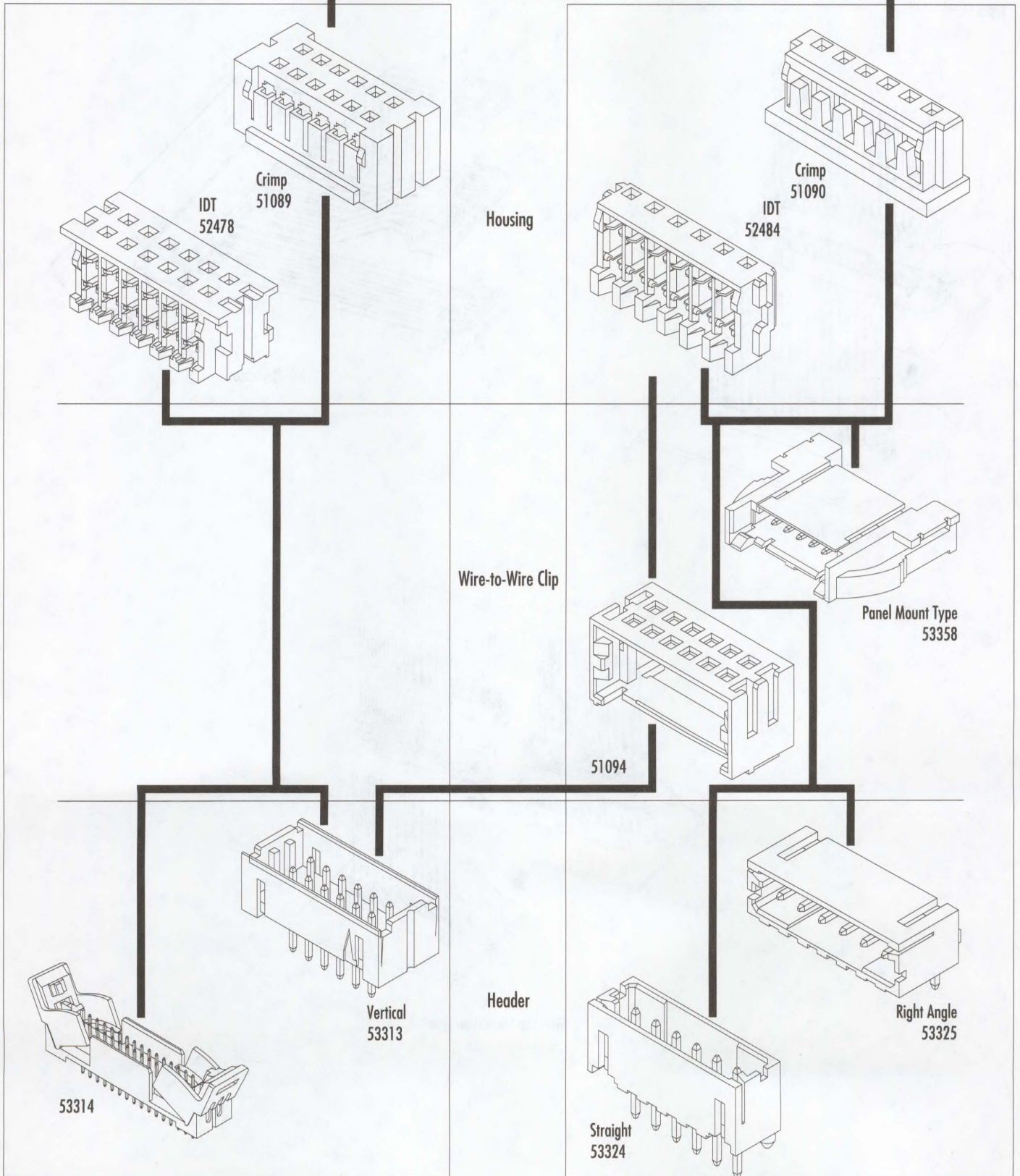


Dual Row

Single Row

**B**

2.00 to 2.50mm (.079 to .098") Pitch





## FEATURES

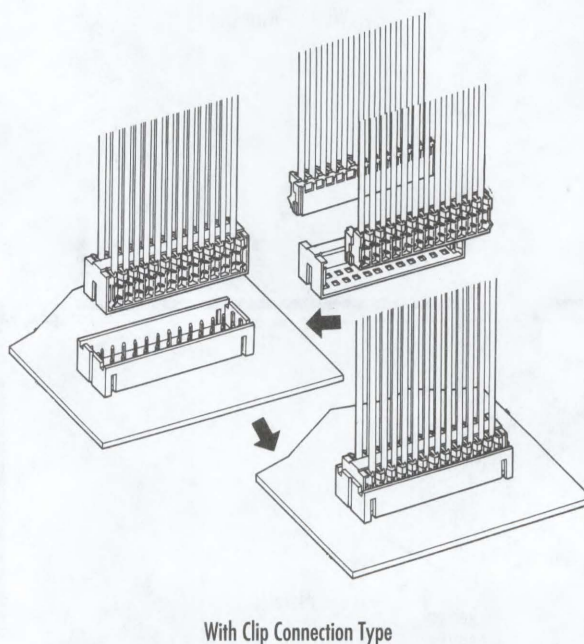
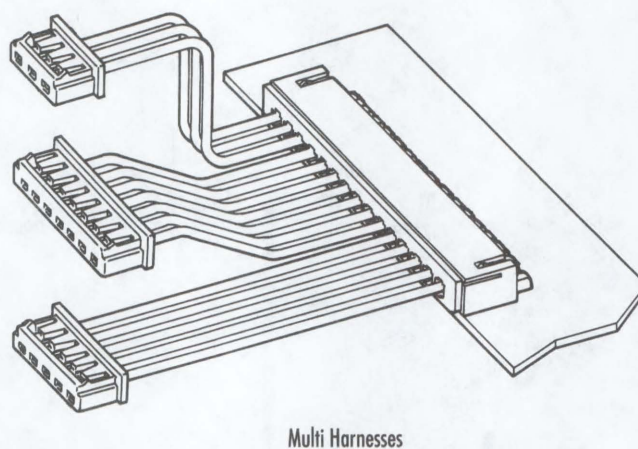
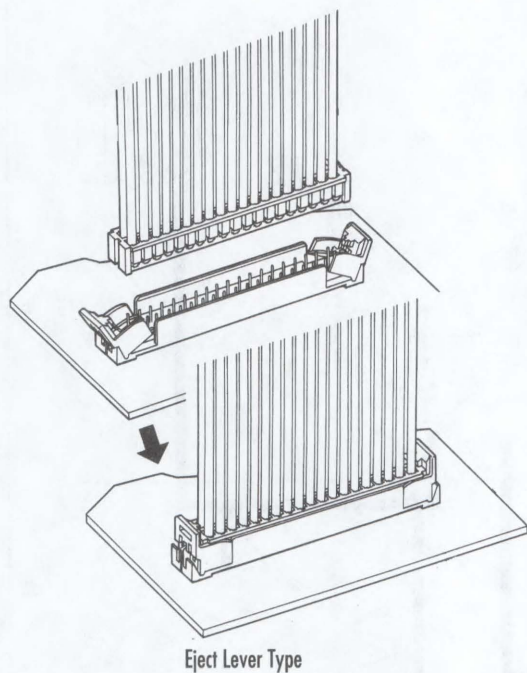
- 2.00mm pitch low profile wire-to-board connector
- Single and dual row, crimp and IDT
- Low insertion force design, locking features and high reliability
- Kinked header pins
- Clip allows back-to-back stacking of single row IDT assemblies
- Application tooling for use in assembling harnesses
- Board-in type is available in vertical and right angle types



## Mi II (2.00 x 2.50mm) Connection System

**B**

2.00 to 2.50mm (.079 to .098") Pitch





2.00 to 2.50mm (.079 to .098") Pitch

B

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 10 circuits
- Internal positive lock provides secure housing retention, space savings and easy mating/unmating
- Housing locking lance for terminal retention
- Polarized to ensure correct terminal and housing insertion
- Guide ledge facilitates receptacle insertion
- Stagger design to accommodate wire size

### Reference Information

Product Specification: Contact Molex  
 Packaging: Bag  
 Mates With: 52484  
 Use With: 59342 terminal and 58916 retainer  
 Designed In: Millimeters

### Electrical

Voltage: 125V  
 Current: 2.5A  
 Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 500V AC/1 min.  
 Insulation Resistance: 1000 MΩ min.

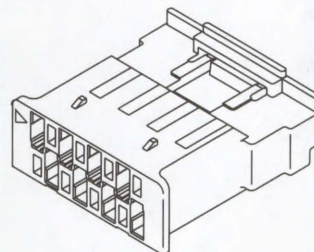
### Physical

Housing: White PBT, UL 94V-0  
 Operating Temperature: -40 to +105°C

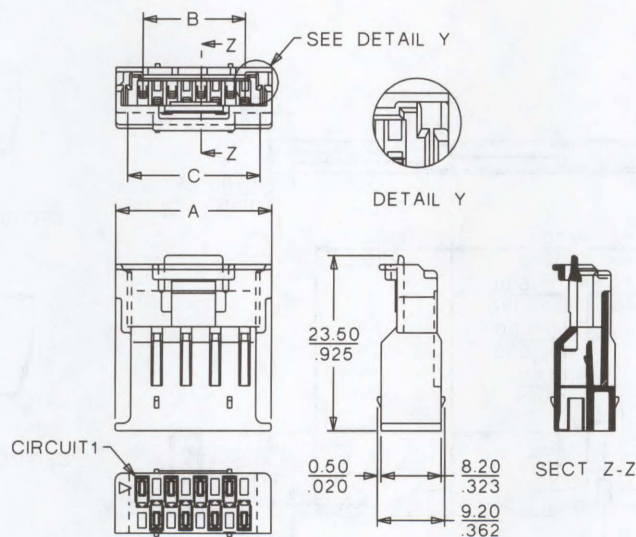


## 2.00mm (.079") Pitch Mi II System Wire-to-Wire Housing

51206



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |              |              |
|----------|------------|--------------|--------------|--------------|
|          |            | A            | B            | C            |
| 2        | 51206-0200 | 9.30 (.366)  | 2.00 (.079)  | 6.10 (.240)  |
| 3        | 51206-0300 | 11.30 (.445) | 4.00 (.157)  | 8.10 (.319)  |
| 4        | 51206-0400 | 13.30 (.524) | 6.00 (.236)  | 10.10 (.398) |
| 5        | 51206-0500 | 15.30 (.602) | 8.00 (.315)  | 12.10 (.476) |
| 6        | 51206-0600 | 17.30 (.681) | 10.00 (.394) | 14.10 (.555) |
| 7        | 51206-0700 | 19.30 (.760) | 12.00 (.472) | 16.10 (.634) |
| 8        | 51206-0800 | 21.30 (.839) | 14.00 (.551) | 18.10 (.713) |
| 9        | 51206-0900 | 23.30 (.917) | 16.00 (.630) | 20.10 (.791) |
| 10       | 51206-1000 | 25.30 (.996) | 18.00 (.709) | 22.10 (.870) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Long tab-style terminal provides low insertion force and secure contact
- Housing locking window provides secure terminal retention
- High wall design accommodates retainer

### Reference Information

Product Specification: Contact Molex

Packaging: Reel or bag

Use With: 51206

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 2.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Contact: Phosphor Bronze

Plating: Tin

Wire Range: 22 to 26 AWG

Insulation Diameter: 1.20 to 1.80mm (.047 to .071")

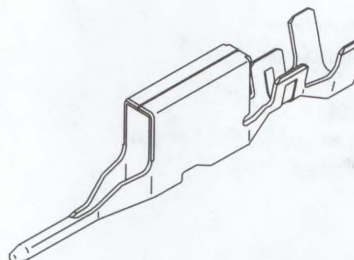
Strip Length: 2.30 to 2.80mm (.091 to .110")

Operating Temperature: -40 to +105°C



## 2.00mm (.079") Pitch Mi II System Wire-to-Wire Terminal

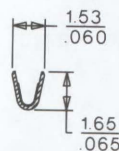
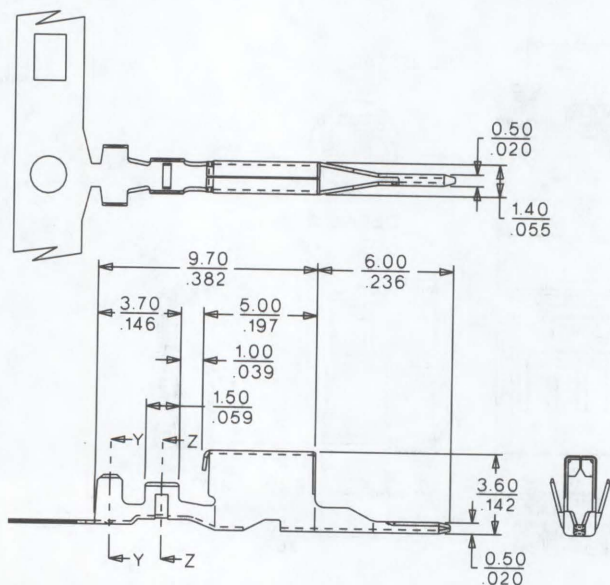
56035



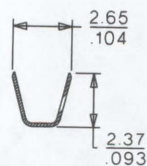
2.00 to 2.50mm (.079 to .098") Pitch

B

## CATALOG DRAWING (FOR REFERENCE ONLY)



SECTION Z-Z



SECTION Y-Y

## ORDERING INFORMATION

| Order No.  | Packaging |
|------------|-----------|
| 56035-8000 | Reel      |
| 56035-8100 | Bag       |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits

### Reference Information

Packaging: Bag  
UL File No.: E29179-K  
Mates With: 53324 and 53325  
Use With: 50212  
Designed In: Millimeters

### Electrical

Voltage: 125V

Current:

| AWG     | 24  | 26  | 28  | 30  |
|---------|-----|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5 |

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: PBT, UL 94V-0

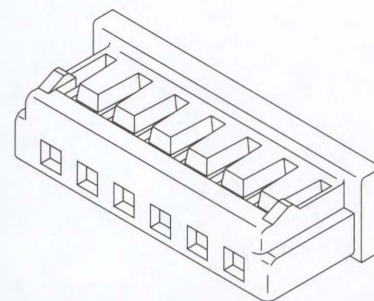
Operating Temperature: -40 to +105°C



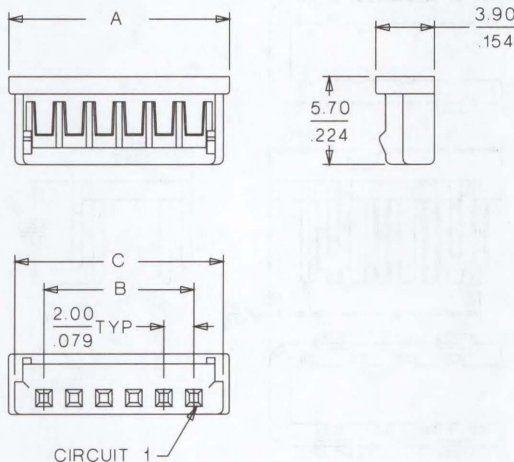
## 2.00mm (.079") Pitch Mi II System Wire-to-Board Housing

**51090**

## Single Row Crimp



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 2        | 51090-0200 | 6.90 (.272)   | 2.00 (.079)   | 6.00 (.236)   |
| 3        | 51090-0300 | 8.90 (.350)   | 4.00 (.157)   | 8.00 (.315)   |
| 4        | 51090-0400 | 10.90 (.429)  | 6.00 (.236)   | 10.00 (.394)  |
| 5        | 51090-0500 | 12.90 (.508)  | 8.00 (.315)   | 12.00 (.472)  |
| 6        | 51090-0600 | 14.90 (.587)  | 10.00 (.394)  | 14.00 (.551)  |
| 7        | 51090-0700 | 16.90 (.665)  | 12.00 (.472)  | 16.00 (.630)  |
| 8        | 51090-0800 | 18.90 (.744)  | 14.00 (.551)  | 18.00 (.709)  |
| 9        | 51090-0900 | 20.90 (.823)  | 16.00 (.630)  | 20.00 (.787)  |
| 10       | 51090-1000 | 22.90 (.902)  | 18.00 (.709)  | 22.00 (.866)  |
| 11       | 51090-1100 | 24.90 (.980)  | 20.00 (.787)  | 24.00 (.945)  |
| 12       | 51090-1200 | 26.90 (1.059) | 22.00 (.866)  | 26.00 (1.024) |
| 13       | 51090-1300 | 28.90 (1.138) | 24.00 (.945)  | 28.00 (1.102) |
| 14       | 51090-1400 | 30.90 (1.217) | 26.00 (1.024) | 30.00 (1.181) |
| 15       | 51090-1500 | 32.90 (1.295) | 28.00 (1.102) | 32.00 (1.260) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 10 circuits
- Provides additional terminal retention
- Snaps easily onto housing

### Reference Information

Product Specification: Contact Molex

Packaging: Tray

Use With: 51206

Designed In: Millimeters

### Physical

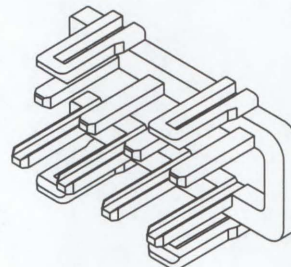
Housing: Gray PBT, UL 94V-0

Operating Temperature: -40 to +105°C



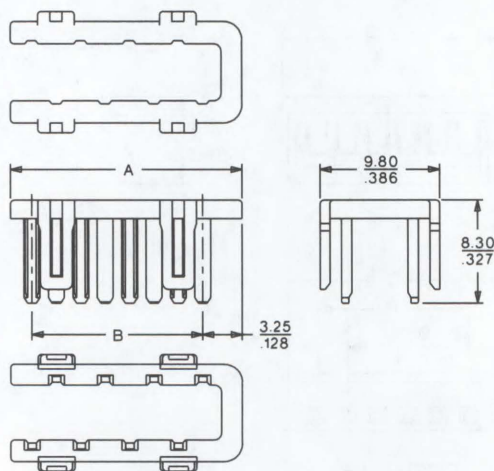
## 2.00mm (.079") Pitch Mi II System Wire-to-Wire Retainer

**58916**



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |              |
|----------|------------|--------------|--------------|
|          |            | A            | B            |
| 2        | 58916-0205 | 7.00 (.276)  | 2.00 (.079)  |
| 3        | 58916-0305 | 9.00 (.354)  | 4.00 (.157)  |
| 4        | 58916-0405 | 11.00 (.433) | 6.00 (.236)  |
| 5        | 58916-0505 | 13.00 (.512) | 8.00 (.315)  |
| 6        | 58916-0605 | 15.00 (.591) | 10.00 (.394) |
| 7        | 58916-0705 | 17.00 (.669) | 12.00 (.472) |
| 8        | 58916-0805 | 19.00 (.748) | 14.00 (.551) |
| 9        | 58916-0905 | 21.00 (.827) | 16.00 (.630) |
| 10       | 58916-1005 | 23.00 (.906) | 18.00 (.709) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 6 to 30 circuits
- Joins two single row receptacles (52484) to mate with a dual row header (53313)

### Physical

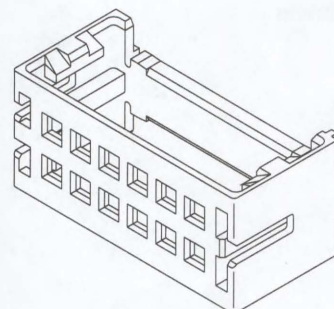
Housing: Gray PBT, UL 94V-0  
Operating Temperature: -40 to +105°C



**2.00mm (.079") Pitch**  
**Mi II System**  
**Clip**

**51094**

**Dual Row**



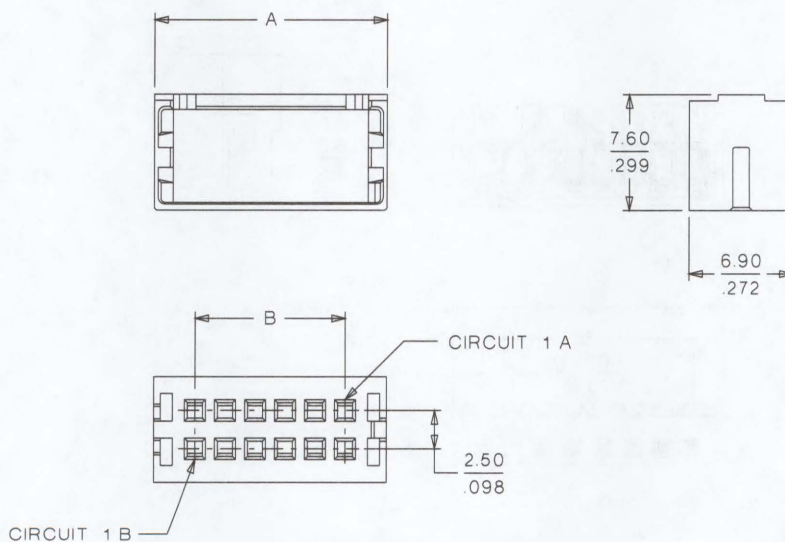
**B**

**2.00 to 2.50mm (.079 to .098") Pitch**

### Reference Information

Packaging: Bag  
CSA File No.: LR19980  
Mates With: 53313  
Use With: 52484  
Designed In: Millimeters

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 6        | 51094-0605 | 9.50 (.374)   | 4.00 (.157)   |
| 8        | 51094-0805 | 11.50 (.452)  | 6.00 (.236)   |
| 10       | 51094-1005 | 13.50 (.531)  | 8.00 (.315)   |
| 12       | 51094-1205 | 15.50 (.610)  | 10.00 (.394)  |
| 14       | 51094-1405 | 17.50 (.688)  | 12.00 (.472)  |
| 16       | 51094-1605 | 19.50 (.767)  | 14.00 (.551)  |
| 18       | 51094-1805 | 21.50 (.846)  | 16.00 (.630)  |
| 20       | 51094-2005 | 23.50 (.925)  | 18.00 (.709)  |
| 22       | 51094-2205 | 25.50 (1.003) | 20.00 (.787)  |
| 24       | 51094-2405 | 27.50 (1.082) | 22.00 (.866)  |
| 26       | 51094-2605 | 29.50 (1.161) | 24.00 (.945)  |
| 28       | 51094-2805 | 31.50 (1.240) | 26.00 (1.024) |
| 30       | 51094-3005 | 33.50 (1.318) | 28.00 (1.102) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- IDT provides secure and cost-effective termination

### Reference Information

Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 53324, 53325, 53358 and 53313 (with 51094 clip)  
 Use With: 51094 clip  
 Designed In: Millimeters

### Electrical

Voltage: 125V  
 Current:

| AWG    | 26  | 28  |
|--------|-----|-----|
| Ampere | 1.5 | 1.0 |

Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 500V  
 Insulation Resistance: 1000 MΩ min.

### Physical

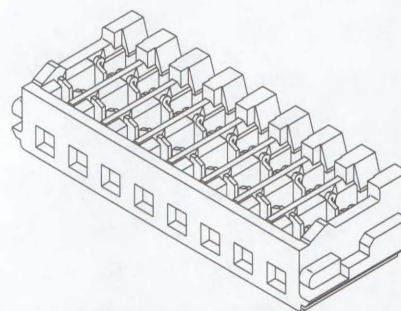
Housing: Glass-filled 6/6 nylon, UL 94V-0  
 Contact: Phosphor Bronze  
 Plating: Tin  
 Wire Range: 26 to 28 AWG  
 Insulation Range: 0.85 to 1.05mm dia.  
 Operating Temperature: -40 to +105°C



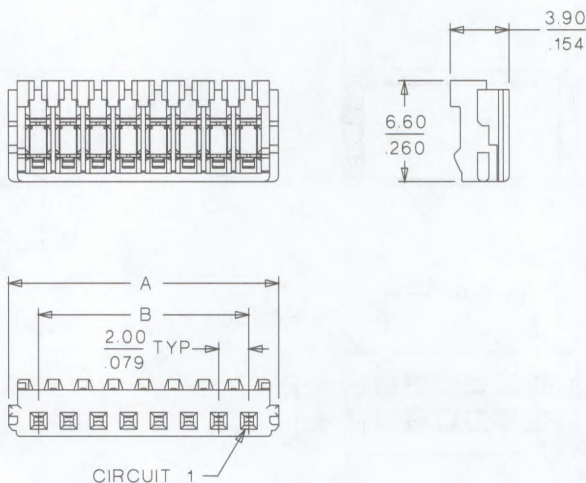
**2.00mm (.079") Pitch**  
**Mi II System**  
**Wire-to-Board**  
**Receptacle**

**52484**

**Single Row**  
**IDT**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 52484-0210 | 6.00 (.236)   | 2.00 (.079)   |
| 3        | 52484-0310 | 8.00 (.315)   | 4.00 (.157)   |
| 4        | 52484-0410 | 10.00 (.394)  | 6.00 (.236)   |
| 5        | 52484-0510 | 12.00 (.472)  | 8.00 (.315)   |
| 6        | 52484-0610 | 14.00 (.551)  | 10.00 (.394)  |
| 7        | 52484-0710 | 16.00 (.630)  | 12.00 (.472)  |
| 8        | 52484-0810 | 18.00 (.709)  | 14.00 (.551)  |
| 9        | 52484-0910 | 20.00 (.787)  | 16.00 (.630)  |
| 10       | 52484-1010 | 22.00 (.866)  | 18.00 (.709)  |
| 11       | 52484-1110 | 24.00 (.945)  | 20.00 (.787)  |
| 12       | 52484-1210 | 26.00 (1.024) | 22.00 (.866)  |
| 13       | 52484-1310 | 28.00 (1.102) | 24.00 (.945)  |
| 14       | 52484-1410 | 30.00 (1.181) | 26.00 (1.024) |
| 15       | 52484-1510 | 32.00 (1.260) | 28.00 (1.102) |

**B**

**2.00 to 2.50mm (.079 to .098") Pitch**



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Outer pins are kinked
- Polarization peg ensures proper PCB placement

### Reference Information

Packaging: Tray  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 51090 and 52484  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current:

| AWG     | 24  | 26  | 28  | 30  |
|---------|-----|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5 |

Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V  
Insulation Resistance: 1000 MΩ min.

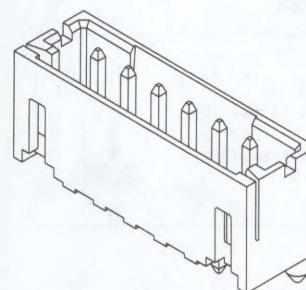
### Physical

Housing: Glass-filled PBT, UL 94V-0  
Contact: Brass  
Plating: Tin  
Operating Temperature: -40 to +105°C



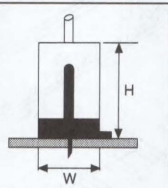
## 2.00mm (.079") Pitch Mi II System Wire-to-Board Header

### 53324 Single Row Vertical

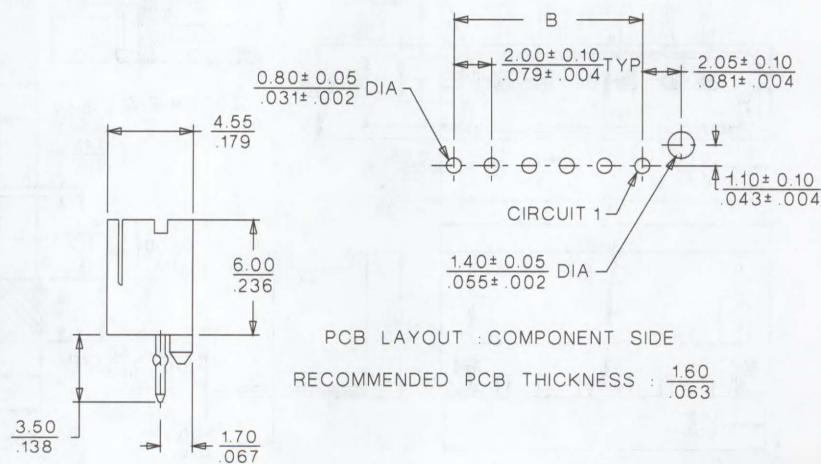
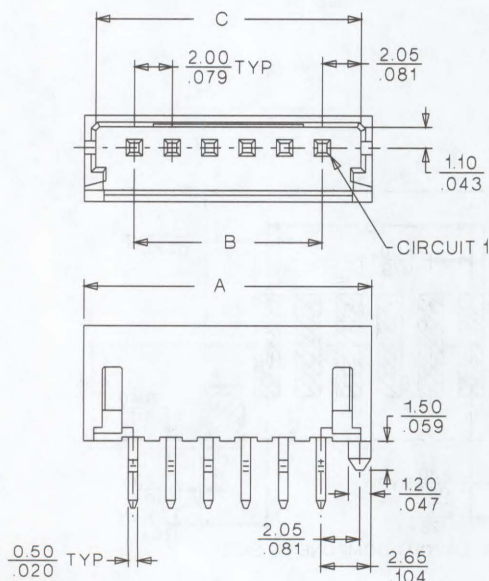


#### Mating Dimensions

- 53324 • 51090 • 50212  
H=7.3mm W=4.55mm
- 53324 • 52484  
H=8.2mm W=4.55mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 2        | 53324-0210 | 7.30 (.287)   | 2.00 (.079)   | 6.10 (.240)   |
| 3        | 53324-0310 | 9.30 (.366)   | 4.00 (.157)   | 8.10 (.319)   |
| 4        | 53324-0410 | 11.30 (.445)  | 6.00 (.236)   | 10.10 (.398)  |
| 5        | 53324-0510 | 13.30 (.524)  | 8.00 (.315)   | 12.10 (.476)  |
| 6        | 53324-0610 | 15.30 (.602)  | 10.00 (.394)  | 14.10 (.555)  |
| 7        | 53324-0710 | 17.30 (.681)  | 12.00 (.472)  | 16.10 (.634)  |
| 8        | 53324-0810 | 19.30 (.760)  | 14.00 (.551)  | 18.10 (.713)  |
| 9        | 53324-0910 | 21.30 (.839)  | 16.00 (.630)  | 20.10 (.791)  |
| 10       | 53324-1010 | 23.30 (.917)  | 18.00 (.709)  | 22.10 (.870)  |
| 11       | 53324-1110 | 25.30 (.996)  | 20.00 (.787)  | 24.10 (.949)  |
| 12       | 53324-1210 | 27.30 (1.075) | 22.00 (.866)  | 26.10 (1.028) |
| 13       | 53324-1310 | 29.30 (1.154) | 24.00 (.940)  | 28.10 (1.106) |
| 14       | 53324-1410 | 31.30 (1.232) | 26.00 (1.024) | 30.10 (1.185) |
| 15       | 53324-1510 | 33.30 (1.311) | 28.00 (1.102) | 32.10 (1.264) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 3 to 13 circuits
- Beveled side walls help facilitate mating
- Polarization feature ensures proper mating orientation
- Metal solder tabs provide PCB hold-down and strain-relief for SMT tails
- Long solder area ensures secure solder joints

### Reference Information

Product Specification: PS-52484-011

Packaging: Embossed tape

Mates With: 51090 and 52484

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: PPA, UL 94V-0

Contact: Brass

Plating: Tin/Lead over Copper

Solder Tabs: Phosphor Bronze, Tin/Lead over Copper

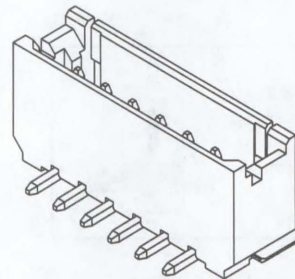
Operating Temperature: -40 to +105°C



## 2.00mm (.079") Pitch Mi II System Wire-to-Board Header

**55460**

**Single Row  
Vertical, SMT**



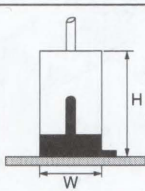
### Mating Dimensions

1. 55460/51090/50212

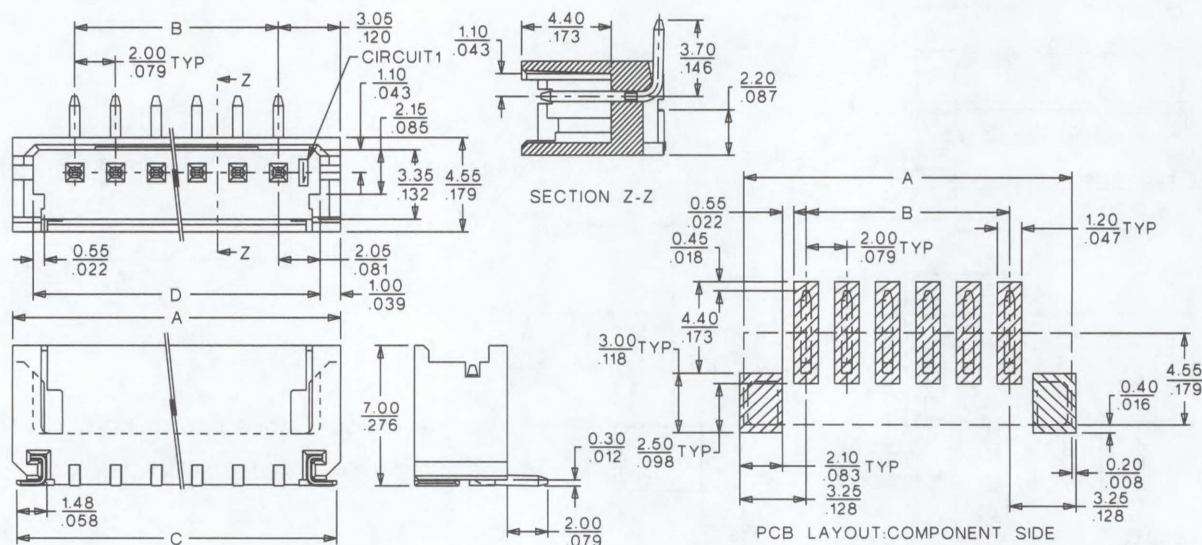
H=8.30mm (.327") W=4.55mm (.179")

2. 55460/52484

H=9.20mm (.362") W=4.55mm (.179")



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |              |               |               | Carrier Tape Width |
|----------|------------|---------------|--------------|---------------|---------------|--------------------|
|          |            | A             | B            | C             | D             |                    |
| 3        | 55460-0390 | 10.10 (.398)  | 4.00 (.157)  | 9.70 (.382)   | 8.10 (.319)   | 24.00 (.945)       |
| 4        | 55460-0490 | 12.10 (.476)  | 6.00 (.236)  | 11.70 (.461)  | 10.10 (.398)  |                    |
| 5        | 55460-0590 | 14.10 (.555)  | 8.00 (.315)  | 13.70 (.539)  | 12.10 (.476)  |                    |
| 7        | 55460-0790 | 18.10 (.713)  | 12.00 (.472) | 17.70 (.697)  | 16.10 (.634)  | 32.00 (1.260)      |
| 12       | 55460-1290 | 28.10 (1.106) | 22.00 (.866) | 27.70 (1.091) | 26.10 (1.028) | 44.00 (1.732)      |
| 13       | 55460-1390 | 30.10 (1.185) | 24.00 (.945) | 29.70 (1.169) | 28.10 (1.106) | 44.00 (1.732)      |

2.00 to 2.50mm (.079 to .098") Pitch



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 10 to 60 circuits
- Housing lance provides extra terminal retention
- Friction lock on circuits 10 to 28 provides additional mating retention

### Reference Information

Packaging: Bag  
CSA File No.: LR 19980  
Mates With: 53313 and 53314  
Use With: 50212  
Designed In: Millimeters

### Electrical

Voltage: 125V

Current:

| AWG     | 24  | 26  | 28  | 30  |
|---------|-----|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5 |

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: Gray glass-filled PBT, UL 94V-0

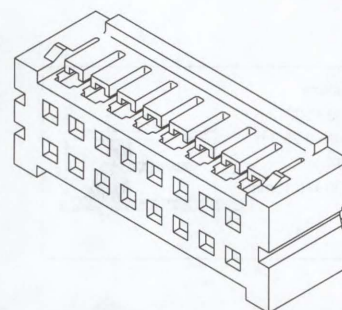
Operating Temperature: -40 to +105°C



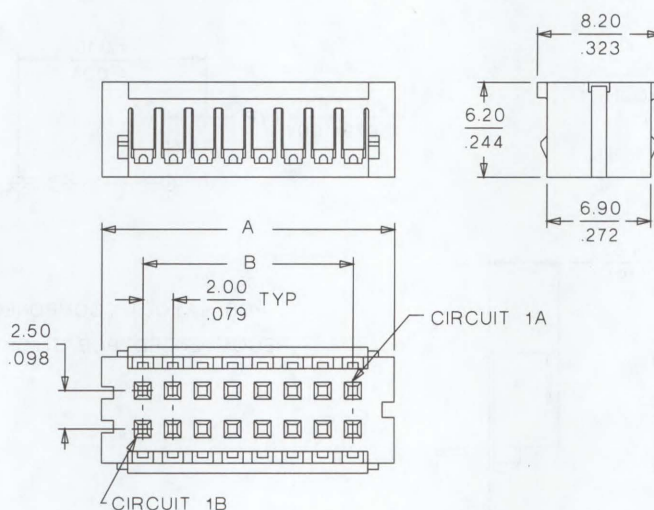
## 2.00mm (.079") Pitch Mi II System Wire-to-Board Housing

**51089**

## Dual Row Crimp



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               | Friction Lock |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             |               |
| 10       | 51089-1005 | 13.50 (.531)  | 8.00 (.315)   | Yes           |
| 12       | 51089-1205 | 15.50 (.610)  | 10.00 (.394)  | Yes           |
| 14       | 51089-1405 | 17.50 (.689)  | 12.00 (.472)  | Yes           |
| 16       | 51089-1605 | 19.50 (.768)  | 14.00 (.551)  | Yes           |
| 18       | 51089-1805 | 21.50 (.846)  | 16.00 (.630)  | Yes           |
| 20       | 51089-2005 | 23.50 (.925)  | 18.00 (.709)  | Yes           |
| 22       | 51089-2205 | 25.50 (1.004) | 20.00 (.787)  | Yes           |
| 24       | 51089-2405 | 27.50 (1.083) | 22.00 (.866)  | Yes           |
| 26       | 51089-2605 | 29.50 (1.161) | 24.00 (.945)  | Yes           |
| 28       | 51089-2805 | 31.50 (1.240) | 26.00 (1.024) | Yes           |
| 30       | 51089-3005 | 33.50 (1.319) | 28.00 (1.102) | No            |
| 34       | 51089-3405 | 37.50 (1.476) | 32.00 (1.260) | No            |
| 40       | 51089-4005 | 43.50 (1.713) | 38.00 (1.496) | No            |
| 50       | 51089-5005 | 53.50 (2.106) | 48.00 (1.890) | No            |
| 60       | 51089-6005 | 63.50 (2.500) | 58.00 (2.283) | No            |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Outer pins are kinked

### Reference Information

Packaging: Tray  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 51090 and 52484  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current:

| AWG     | 24  | 26  | 28  | 30  |
|---------|-----|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5 |

Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V  
Insulation Resistance: 1000 MΩ min.

### Physical

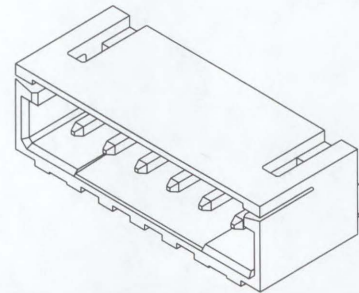
Housing: Glass-filled PBT, UL 94V-0  
Contact: Brass  
Plating: Tin  
Operating Temperature: -40 to +105°C



## 2.00mm (.079") Pitch Mi II System Wire-to-Board Header

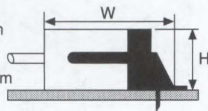
**53325**

## Single Row Right Angle

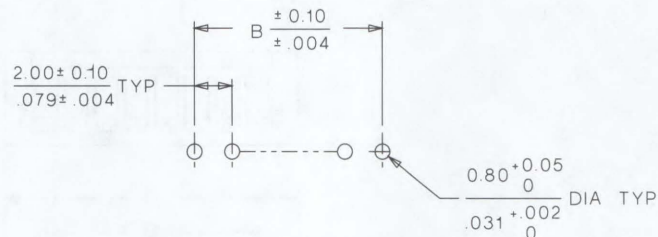
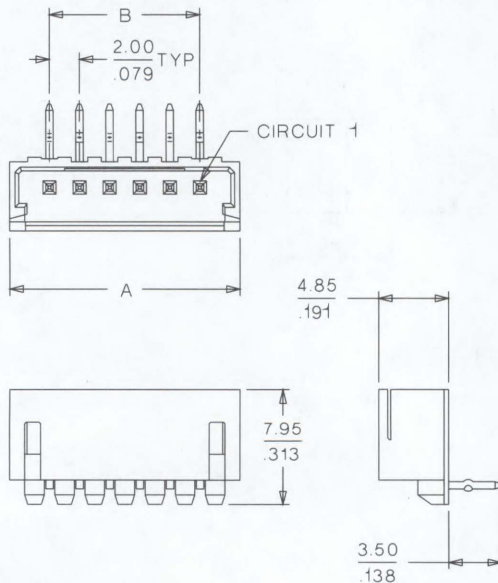


### Mating Dimensions

1. 53325 • 51090 • 50212  
H=4.85mm W=9.25mm  
2. 53324 • 52484  
H=4.85mm W=10.15mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT : COMPONENT SIDE  
RECOMMENDED PCB THICKNESS :  $\frac{1.60}{.063}$

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 53325-0210 | 7.30 (.287)   | 2.00 (.079)   |
| 3        | 53325-0310 | 9.30 (.366)   | 4.00 (.157)   |
| 4        | 53325-0410 | 11.30 (.445)  | 6.00 (.236)   |
| 5        | 53325-0510 | 13.30 (.524)  | 8.00 (.315)   |
| 6        | 53325-0610 | 15.30 (.602)  | 10.00 (.394)  |
| 7        | 53325-0710 | 17.30 (.681)  | 12.00 (.472)  |
| 8        | 53325-0810 | 19.30 (.760)  | 14.00 (.551)  |
| 9        | 53325-0910 | 21.30 (.839)  | 16.00 (.630)  |
| 10       | 53325-1010 | 23.30 (.917)  | 18.00 (.709)  |
| 11       | 53325-1110 | 25.30 (.996)  | 20.00 (.787)  |
| 12       | 53325-1210 | 27.30 (1.075) | 22.00 (.866)  |
| 13       | 53325-1310 | 29.30 (1.154) | 24.00 (.940)  |
| 14       | 53325-1410 | 31.30 (1.232) | 26.00 (1.024) |
| 15       | 53325-1510 | 33.30 (1.311) | 28.00 (1.102) |

**B**

**2.00 to 2.50mm (.079 to .098") Pitch**



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 6 to 60 circuits
- Polarization peg provides correct PCB placement

### Reference Information

Packaging: Tray  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 51089, 52478 and 52484 (with 51094 clip)  
 Accepts: 51094 clip with two 52484 IDT receptacles  
 Designed In: Millimeters

### Electrical

Voltage: 125V  
 Current:

| AWG     | 24  | 26  | 28  | 30  |
|---------|-----|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5 |

Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 500V  
 Insulation Resistance: 1000 MΩ min.

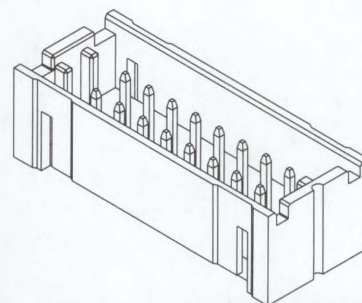
### Physical

Housing: Gray glass-filled PBT, UL 94V-0  
 Contact: Brass  
 Plating: Tin  
 Operating Temperature: -40 to +105°C



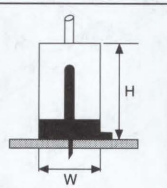
## 2.00mm (.079") Pitch Mi II System Wire-to-Board Header

## 53313 Dual Row Vertical

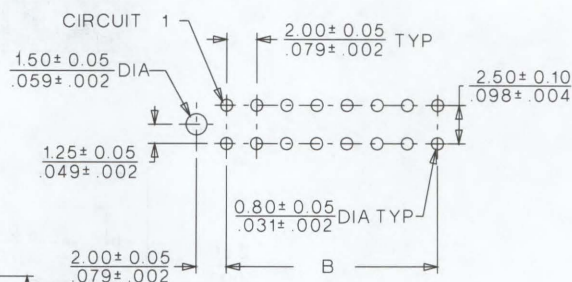
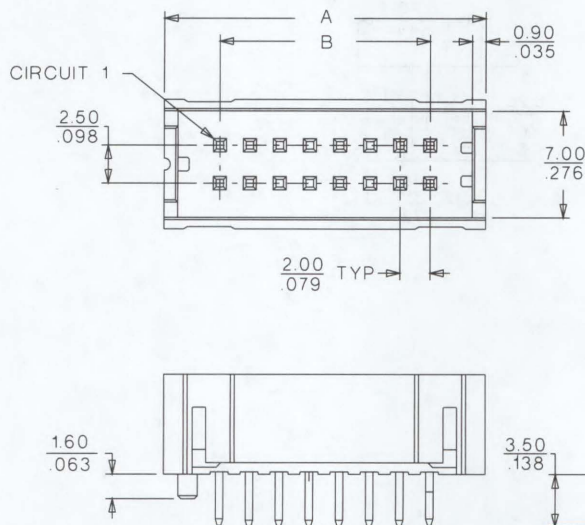


### Mating Dimensions

- 53313 • 51089 • 50212  
 H=7.8mm W=8.2mm
- 53313 • 52478  
 H=7.8mm W=8.2mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT : COMPONENT SIDE  
 RECOMMENDED PCB THICKNESS :  $\frac{1.60 \pm 0.13}{.063 \pm .005}$

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 6        | 53313-0615 | 11.40 (.449)  | 4.00 (.157)   |
| 8        | 53313-0815 | 13.40 (.528)  | 6.00 (.236)   |
| 10       | 53313-1015 | 15.40 (.606)  | 8.00 (.315)   |
| 12       | 53313-1215 | 17.40 (.685)  | 10.00 (.394)  |
| 14       | 53313-1415 | 19.40 (.764)  | 12.00 (.472)  |
| 16       | 53313-1615 | 21.40 (.843)  | 14.00 (.551)  |
| 18       | 53313-1815 | 23.40 (.921)  | 16.00 (.630)  |
| 20       | 53313-2015 | 25.40 (1.000) | 18.00 (.709)  |
| 22       | 53313-2215 | 27.40 (1.079) | 20.00 (.787)  |
| 24       | 53313-2415 | 29.40 (1.157) | 22.00 (.866)  |
| 26       | 53313-2615 | 31.40 (1.236) | 24.00 (.945)  |
| 28       | 53313-2815 | 33.40 (1.315) | 26.00 (1.024) |
| 30       | 53313-3015 | 35.40 (1.394) | 28.00 (1.102) |
| 34       | 53313-3415 | 39.40 (1.551) | 32.00 (1.260) |
| 40       | 53313-4015 | 45.40 (1.787) | 38.00 (1.496) |
| 50       | 53313-5015 | 55.40 (2.181) | 48.00 (1.890) |
| 60       | 53313-6015 | 65.40 (2.575) | 58.00 (2.283) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 10 to 60 circuits
- Friction lock on circuits 10 to 26 provides additional mating retention

### Reference Information

Packaging: Tray

CSA File No.: LR19980

Mates With: 53313 and 53314

Designed In: Millimeters

### Electrical

Voltage: 125V

Current:

| AWG     | 26  | 28  |
|---------|-----|-----|
| Amperes | 1.5 | 1.0 |

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: Gray glass-filled PBT, UL 94V-0

Contact: Phosphor Bronze

Plating: Tin

Wire Range: 26 to 28 AWG

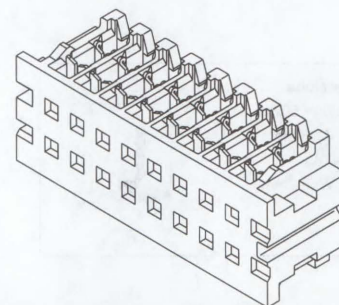
Insulation Range: 0.85 to 1.05mm dia.

Operating Temperature: -40 to +105°C

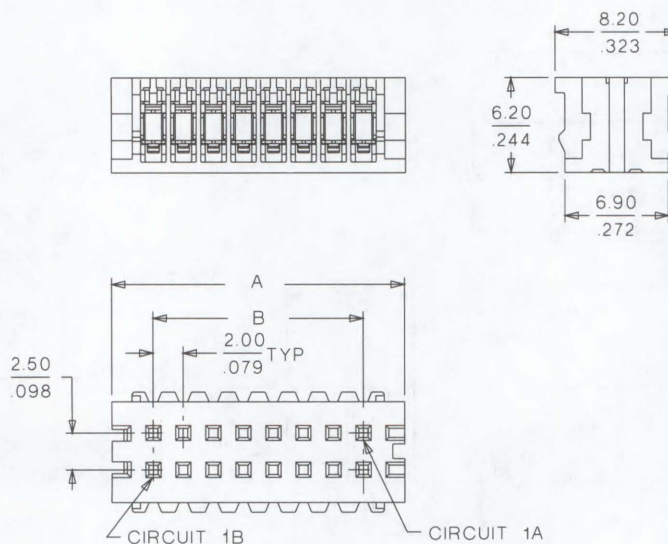


## 2.00mm (.079") Pitch Mi II System Wire-to-Board Receptacle

**52478**  
**Dual Row**  
**IDT**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               | Friction Lock |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             |               |
| 10       | 52478-1015 | 13.50 (.531)  | 8.00 (.315)   | Yes           |
| 12       | 52478-1215 | 15.50 (.610)  | 10.00 (.394)  | Yes           |
| 14       | 52478-1415 | 17.50 (.689)  | 12.00 (.472)  | Yes           |
| 16       | 52478-1615 | 19.50 (.768)  | 14.00 (.551)  | Yes           |
| 18       | 52478-1815 | 21.50 (.846)  | 16.00 (.630)  | Yes           |
| 20       | 52478-2015 | 23.50 (.925)  | 18.00 (.709)  | Yes           |
| 22       | 52478-2215 | 25.50 (1.004) | 20.00 (.787)  | Yes           |
| 24       | 52478-2415 | 27.50 (1.083) | 22.00 (.866)  | Yes           |
| 26       | 52478-2615 | 29.50 (1.161) | 24.00 (.945)  | Yes           |
| 28       | 52478-2815 | 31.50 (1.240) | 26.00 (1.024) | Yes           |
| 30       | 52478-3015 | 33.50 (1.319) | 28.00 (1.102) | No            |
| 34       | 52478-3415 | 37.50 (1.476) | 32.00 (1.260) | No            |
| 40       | 52478-4015 | 43.50 (1.713) | 38.00 (1.496) | No            |
| 50       | 52478-5015 | 53.50 (2.106) | 48.00 (1.890) | No            |
| 60       | 52478-6015 | 63.50 (2.500) | 58.00 (2.283) | No            |

**B**

2.00 to 2.50mm (.079 to .098") Pitch



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 30 to 60 circuits
- Polarization peg provides correct PCB placement

### Reference Information

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

Mates With: 51089 and 52478

Designed In: Millimeters

### Electrical

Voltage: 125V

Current:

| AWG     | 24  | 26  | 28  | 30  |
|---------|-----|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5 |

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: Gray glass-filled PBT, UL 94V-0

Contact: Brass

Plating: Tin

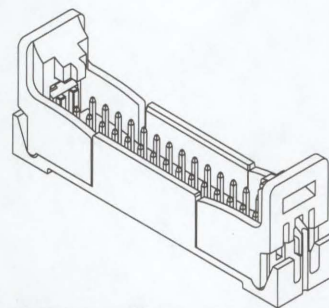
Operating Temperature: -40 to +105°C



## 2.00mm (.079") Pitch Mi II System Wire-to-Board Header

**53314**

### Dual Row, Vertical With Eject Levers



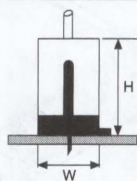
### Mating Dimensions

1. 53314 • 51089 • 50212

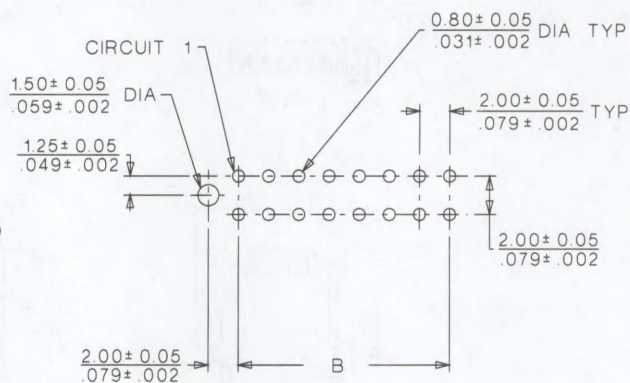
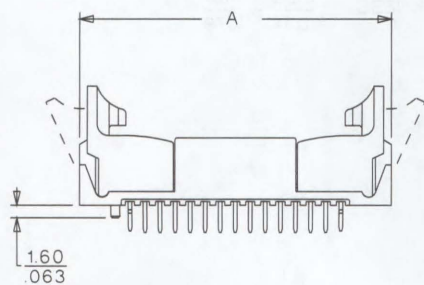
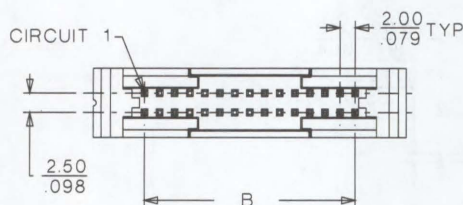
H=15.35mm W=9.0mm

2. 53314 • 52478

H=15.35mm W=9.0mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT : COMPONENT SIDE  
RECOMMENDED PCB THICKNESS :  $\frac{1.60 \pm 0.13}{.063 \pm .005}$

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 30       | 53314-3015 | 41.40 (1.618) | 28.00 (1.102) |
| 34       | 53314-3415 | 45.40 (1.787) | 32.00 (1.260) |
| 40       | 53314-4015 | 51.40 (2.024) | 38.00 (1.496) |
| 50       | 53314-5015 | 61.40 (2.417) | 48.00 (1.890) |
| 60       | 53314-6015 | 71.40 (2.811) | 58.00 (2.283) |

**B**

**2.00 to 2.50mm (.079 to .098") Pitch**

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Low insertion force
- Locking feature
- Low profile

### Reference Information

Packaging: Bag  
Mates With: 51090 and 52484  
Designed In: Millimeters

### Electrical

Voltage: 125V

Current:

| AWG     | 24  | 26  | 28  | 30  |
|---------|-----|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5 |

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: White PBT, UL 94V-0

Contact: Brass

Plating: Tin

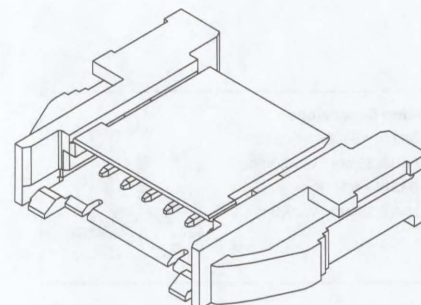
Operating Temperature: -40 to +105°C



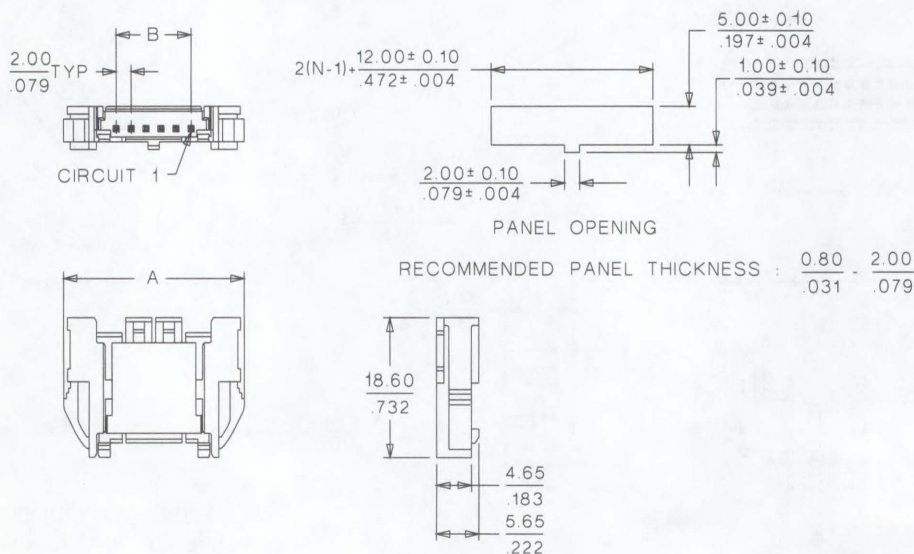
## 2.00mm (.079") Pitch Mi II System Wire-to-Wire Panel Adapter

**53358**

**Single Row**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 53358-0210 | 16.10 (.634)  | 2.00 (.079)   |
| 3        | 53358-0310 | 18.10 (.713)  | 4.00 (.157)   |
| 4        | 53358-0410 | 20.10 (.791)  | 6.00 (.236)   |
| 5        | 53358-0510 | 22.10 (.870)  | 8.00 (.315)   |
| 6        | 53358-0610 | 24.10 (.949)  | 10.00 (.394)  |
| 7        | 53358-0710 | 26.10 (1.028) | 12.00 (.472)  |
| 8        | 53358-0810 | 28.10 (1.106) | 14.00 (.551)  |
| 9        | 53358-0910 | 30.10 (1.185) | 16.00 (.630)  |
| 10       | 53358-1010 | 32.10 (1.264) | 18.00 (.709)  |
| 11       | 53358-1110 | 34.10 (1.343) | 20.00 (.787)  |
| 12       | 53358-1210 | 36.10 (1.421) | 22.00 (.866)  |
| 13       | 53358-1310 | 38.10 (1.500) | 24.00 (.945)  |
| 14       | 53358-1410 | 40.10 (1.579) | 26.00 (1.024) |
| 15       | 53358-1510 | 42.10 (1.657) | 28.00 (1.102) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Wire range: 26 to 28 AWG
- Strip length: 0.85 to 1.05mm

### Reference Information

Packaging: Tray  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current: 1.5A  
Contact Resistance: 10mΩ max.  
Dielectric Withstanding Voltage: 500V AC  
Insulation Resistance: 1000MΩ min.

### Physical

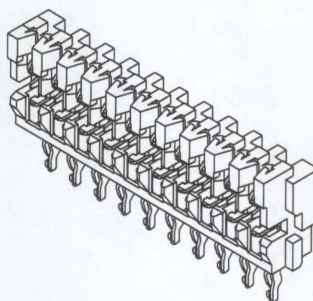
Housing: Blue glass-filled nylon 6/6, UL 94V-0  
Terminal: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C



## 2.00mm (.079") Pitch Mi II System Board-In Connector

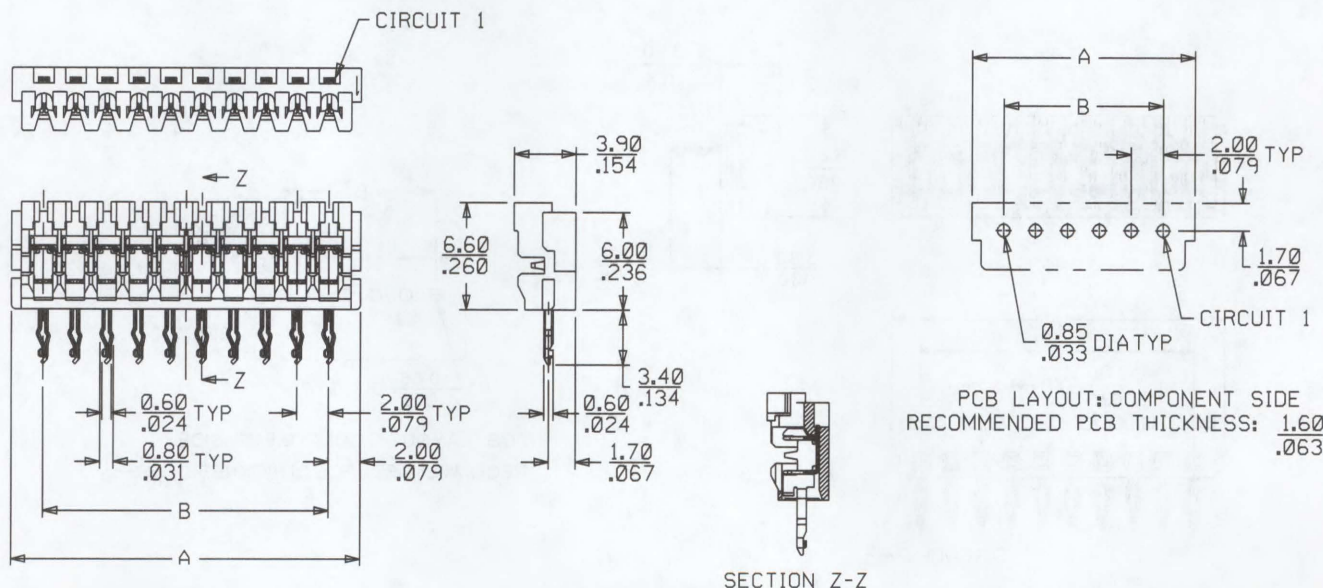
**52691**

**Vertical**



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 52691-0214 | 6.00 (.236)   | 2.00 (.079)   |
| 3        | 52691-0314 | 8.00 (.315)   | 4.00 (.157)   |
| 4        | 52691-0414 | 10.00 (.394)  | 6.00 (.236)   |
| 5        | 52691-0514 | 12.00 (.472)  | 8.00 (.315)   |
| 6        | 52691-0614 | 14.00 (.551)  | 10.00 (.394)  |
| 7        | 52691-0714 | 16.00 (.630)  | 12.00 (.472)  |
| 8        | 52691-0814 | 18.00 (.709)  | 14.00 (.551)  |
| 9        | 52691-0914 | 20.00 (.787)  | 16.00 (.630)  |
| 10       | 52691-1014 | 22.00 (.866)  | 18.00 (.709)  |
| 11       | 52691-1114 | 24.00 (.945)  | 20.00 (.787)  |
| 12       | 52691-1214 | 26.00 (1.024) | 22.00 (.866)  |
| 13       | 52691-1314 | 28.00 (1.102) | 24.00 (.945)  |
| 14       | 52691-1414 | 30.00 (1.181) | 26.00 (1.024) |
| 15       | 52691-1514 | 32.00 (1.260) | 28.00 (1.102) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Low profile height of 3.90mm
- 26 to 28 AWG
- Strip length: 0.85 to 1.05mm

### Reference Information

Packaging: Bag  
Designed In: Millimeters

### Electrical

Voltage: 125V

Current:

| AWG     | 26  | 28  |
|---------|-----|-----|
| Amperes | 1.5 | 1.0 |

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 500V

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: Blue glass-filled 6/6 nylon, UL 94V-0

Contact: Phosphor Bronze

Plating: Tin

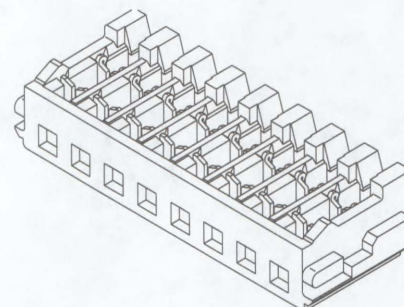
Operating Temperature: -40 to +105°C



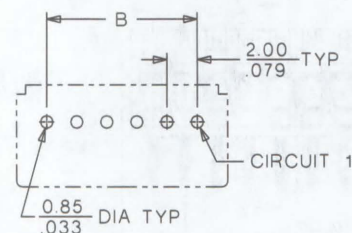
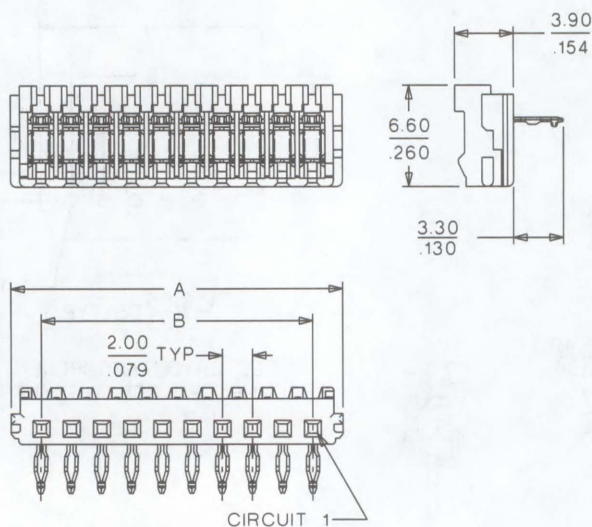
## 2.00mm (.079") Pitch Mi II System Board-In Connector

**52693**

**Single Row  
Right Angle**



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT : COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: 1.60 (063)

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 52693-0214 | 6.00 (.236)   | 2.00 (.079)   |
| 3        | 52693-0314 | 8.00 (.315)   | 4.00 (.157)   |
| 4        | 52693-0414 | 10.00 (.394)  | 6.00 (.236)   |
| 5        | 52693-0514 | 12.00 (.472)  | 8.00 (.315)   |
| 6        | 52693-0614 | 14.00 (.551)  | 10.00 (.394)  |
| 7        | 52693-0714 | 16.00 (.630)  | 12.00 (.472)  |
| 8        | 52693-0814 | 18.00 (.709)  | 14.00 (.551)  |
| 9        | 52693-0914 | 20.00 (.787)  | 16.00 (.630)  |
| 10       | 52693-1014 | 22.00 (.866)  | 18.00 (.709)  |
| 11       | 52693-1114 | 24.00 (.945)  | 20.00 (.787)  |
| 12       | 52693-1214 | 26.00 (1.024) | 22.00 (.866)  |
| 13       | 52693-1314 | 28.00 (1.102) | 24.00 (.945)  |
| 14       | 52693-1414 | 30.00 (1.181) | 26.00 (1.024) |
| 15       | 52693-1514 | 32.00 (1.260) | 28.00 (1.102) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Locking tang for secure housing retention

### Reference Information

Packaging: Reel or bag

Use With: 51006

Mates With: 50013

Designed In: Millimeters

### Electrical

Voltage: 125V

Current:

| AWG     | 24  | 26  | 28  |
|---------|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 |

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Contact: Phosphor Bronze

Plating: Tin

Wire Range: 24 to 28 AWG

Insulation Diameter: 1.15mm dia. max.

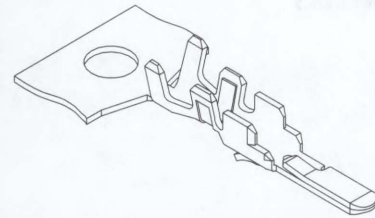
Strip Length: 1.70 to 2.30mm



## 2.00mm (.079") Pitch Wire-To-Wire Crimp Terminal

**50012**

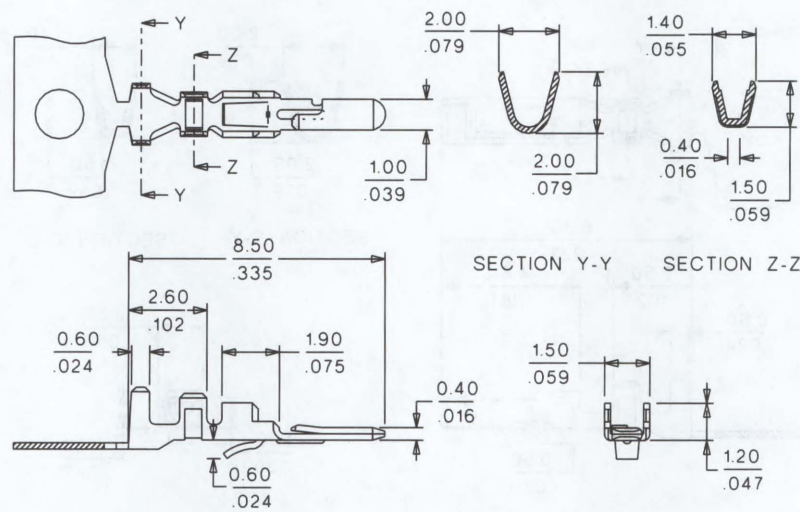
**Male**



**B**

2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Order No.  | Terminal |
|------------|----------|
| 50012-8000 | Reel     |
| 50012-8100 | Bag      |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Spring beam design provides high pressure and small deflection for high vibration applications
- Locking tang for secure housing retention

### Reference Information

Packaging: Reel or bag  
Use With: 51005  
Mates With: 50012  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current:

| AWG     | 24  | 26  | 28  |
|---------|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 |

Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

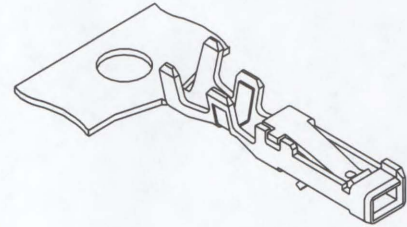
Contact: Phosphor Bronze  
Plating: Tin  
Wire Range: 24 to 28 AWG  
Insulation Diameter: 1.15mm dia. max.  
Strip Length: 1.70 to 2.30mm



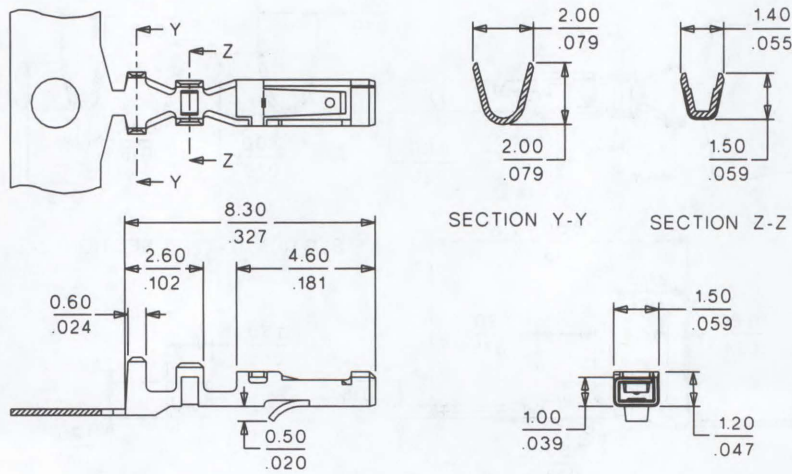
## 2.00mm (.079") Pitch Wire-to-Wire Crimp Terminal

**50013**

**Female**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Order No.  | Terminal |
|------------|----------|
| 50013-8000 | Reel     |
| 50013-8100 | Bag      |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 10 circuits
- Very thin design

### Reference Information

Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 51005  
 Use With: 50012  
 Designed In: Millimeters

### Electrical

Voltage: 125V  
 Current:

| AWG     | 24  | 26  | 28  |
|---------|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 |

Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 500V AC/1 min.  
 Insulation Resistance: 1000 MΩ min.

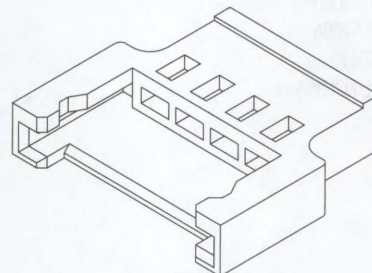
### Physical

Housing: PBTP, UL 94V-0  
 Operating Temperature: -40 to +105°C



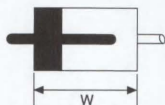
**2.00mm (.079") Pitch**  
**Wire-to-Wire**  
**Plug**

**51006**

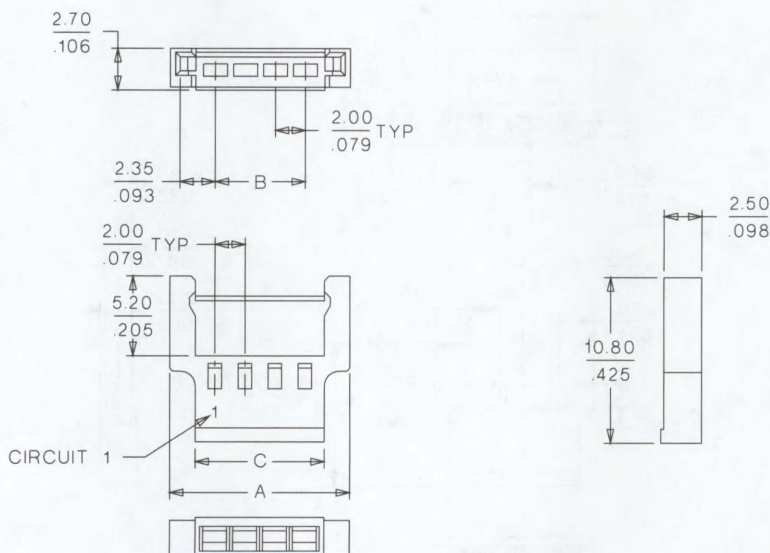


### Mating Dimensions

51006 • 50012 • 51005 • 50013  
 W=14.8mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |              |              |
|----------|------------|--------------|--------------|--------------|
|          |            | A            | B            | C            |
| 2        | 51006-0200 | 8.00 (.315)  | 2.00 (.079)  | 4.60 (.181)  |
| 3        | 51006-0300 | 10.00 (.394) | 4.00 (.157)  | 6.60 (.260)  |
| 4        | 51006-0400 | 12.00 (.472) | 6.00 (.236)  | 8.60 (.339)  |
| 5        | 51006-0500 | 14.00 (.551) | 8.00 (.314)  | 10.60 (.417) |
| 6        | 51006-0600 | 16.00 (.630) | 10.00 (.393) | 12.60 (.496) |
| 7        | 51006-0700 | 18.00 (.709) | 12.00 (.472) | 14.60 (.575) |
| 8        | 51006-0800 | 20.00 (.787) | 14.00 (.551) | 16.60 (.654) |
| 9        | 51006-0900 | 22.00 (.866) | 16.00 (.629) | 18.60 (.732) |
| 10       | 51006-1000 | 24.00 (.945) | 18.00 (.708) | 20.60 (.811) |

**B**

**2.00 to 2.50mm (.079 to .098") Pitch**

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 10 circuits
- Very thin design

### Reference Information

Packaging: Bag  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 51006  
Use With: 50013  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current:

| AWG     | 24  | 26  | 28  |
|---------|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 |

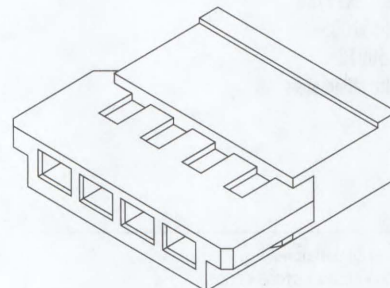
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

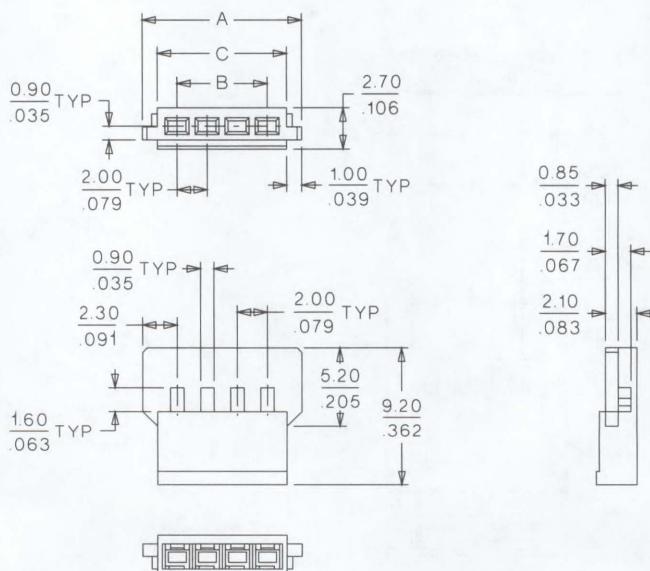
Housing: PBTP, UL 94V-0  
Operating Temperature: -40 to +105°C

## molex® 2.00mm (.079") Pitch Wire-to-Wire Receptacle

51005



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |              |              |
|----------|------------|--------------|--------------|--------------|
|          |            | A            | B            | C            |
| 2        | 51005-0200 | 6.60 (.260)  | 2.00 (.079)  | 4.60 (.181)  |
| 3        | 51005-0300 | 8.60 (.339)  | 4.00 (.157)  | 6.60 (.260)  |
| 4        | 51005-0400 | 10.60 (.417) | 6.00 (.236)  | 8.60 (.339)  |
| 5        | 51005-0500 | 12.60 (.496) | 8.00 (.314)  | 10.60 (.417) |
| 6        | 51005-0600 | 14.60 (.575) | 10.00 (.393) | 12.60 (.496) |
| 7        | 51005-0700 | 16.60 (.654) | 12.00 (.472) | 14.60 (.575) |
| 8        | 51005-0800 | 18.60 (.732) | 14.00 (.551) | 16.60 (.654) |
| 9        | 51005-0900 | 20.60 (.811) | 16.00 (.629) | 18.60 (.732) |
| 10       | 51005-1000 | 22.60 (.890) | 18.00 (.708) | 20.60 (.811) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Locking tang provides terminal retention to housing

### Reference Information

Packaging: Reel or bag

Use With: 35507, 51065, 51089, 51090 and 87369 housings

Designed In: Millimeters

### Electrical

Voltage: 125V

Current:

| AWG     | 24  | 26  | 28  | 30  |
|---------|-----|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5 |

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Contact: Phosphor Bronze

Plating: Tin

Wire Range: 24 to 30 AWG

Insulation Range: 1.40mm dia. max.

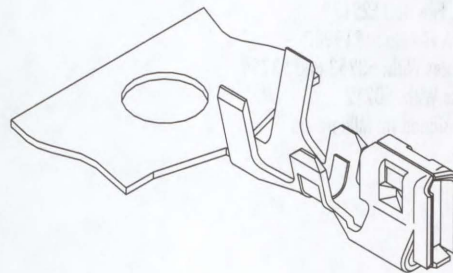
Strip Length: 1.3 to 1.8mm

Operating Temperature: -40 to +105°C



## 2.00mm (.079") Pitch Wire-to-Board Crimp Terminal

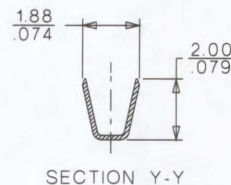
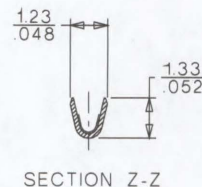
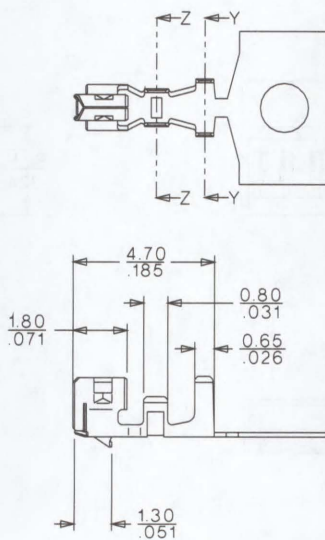
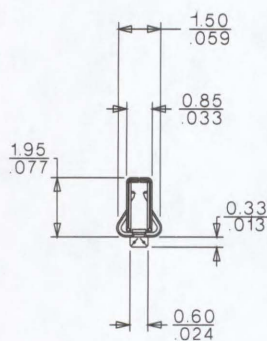
50212



2.00 to 2.50mm (.079 to .098") Pitch

B

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Order No.  | Terminal |
|------------|----------|
| 50212-8000 | Reel     |
| 50212-8100 | Bag      |

2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Housing lance provides extra terminal retention
- Friction lock provides secure mating

### Reference Information

Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 53253 and 53254  
 Use With: 50212  
 Designed In: Millimeters

### Electrical

Voltage: 125V  
 Current:

| AWG     | 24  | 26  | 28  | 30  |
|---------|-----|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5 |

Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 500V AC  
 Insulation Resistance: 1000 MΩ min.

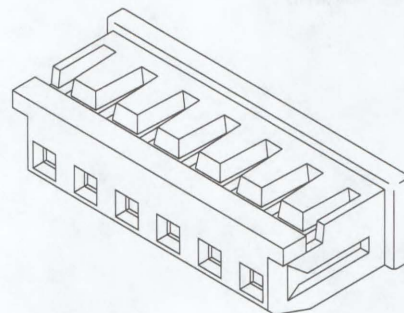
### Physical

Housing: PBTP, UL 94V-0  
 Operating Temperature: -40 to +85°C

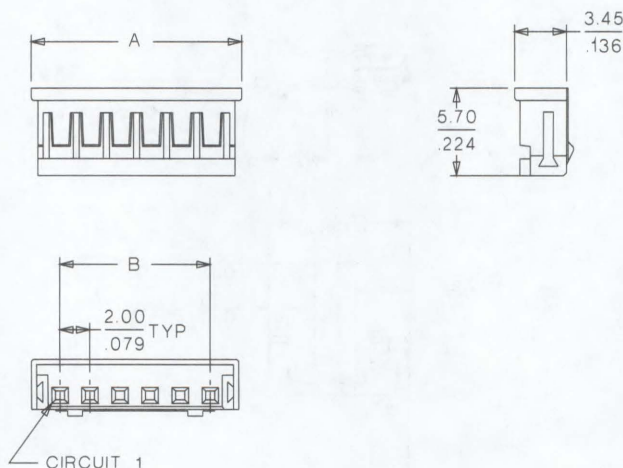


## 2.00mm (.079") Pitch Wire-to-Board Housing

51065



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 51065-0200 | 5.80 (.228)   | 2.00 (.079)   |
| 3        | 51065-0300 | 7.80 (.307)   | 4.00 (.157)   |
| 4        | 51065-0400 | 9.80 (.386)   | 6.00 (.236)   |
| 5        | 51065-0500 | 11.80 (.465)  | 8.00 (.314)   |
| 6        | 51065-0600 | 13.80 (.543)  | 10.00 (.393)  |
| 7        | 51065-0700 | 15.80 (.622)  | 12.00 (.472)  |
| 8        | 51065-0800 | 17.80 (.701)  | 14.00 (.551)  |
| 9        | 51065-0900 | 19.80 (.780)  | 16.00 (.629)  |
| 10       | 51065-1000 | 21.80 (.858)  | 18.00 (.708)  |
| 11       | 51065-1100 | 23.80 (.937)  | 20.00 (.787)  |
| 12       | 51065-1200 | 25.80 (1.016) | 22.00 (.866)  |
| 13       | 51065-1300 | 27.80 (1.094) | 24.00 (.944)  |
| 14       | 51065-1400 | 29.80 (1.173) | 26.00 (1.023) |
| 15       | 51065-1500 | 31.80 (1.252) | 28.00 (1.102) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Locking windows provide secure mating

### Reference Information

Packaging: Tray  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 51065  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current:

| AWG     | 24  | 26  | 28  | 30  |
|---------|-----|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5 |

Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

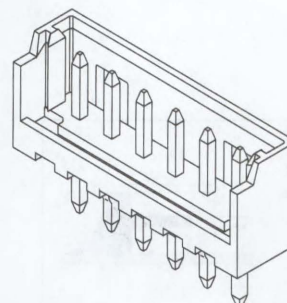
Housing: 6/6 nylon, UL 94V-0  
Contact: Brass  
Plating: Tin  
Operating Temperature: -20 to +85°C



## 2.00mm (.079") Pitch Wire-to-Board Header

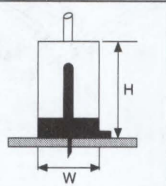
**53253**

**Vertical**

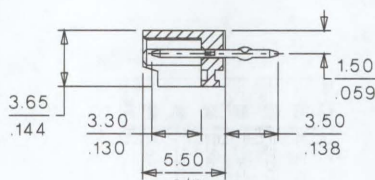
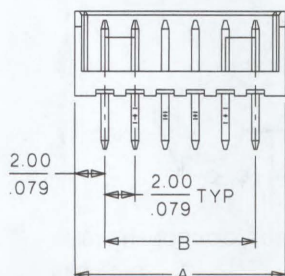
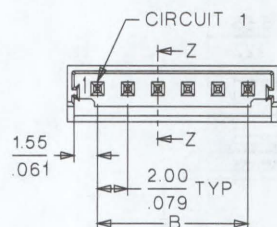


### Mating Dimensions

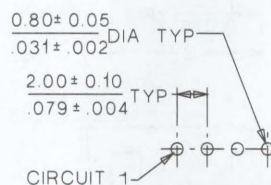
53253 • 51065 • 50212  
H=7.3mm W=4.0mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



SECTION Z-Z



PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: 1.60 ± 0.10  
.063 ± .004

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 53253-0210 | 6.00 (.236)   | 2.00 (.079)   |
| 3        | 53253-0310 | 8.00 (.315)   | 4.00 (.157)   |
| 4        | 53253-0410 | 10.00 (.394)  | 6.00 (.236)   |
| 5        | 53253-0510 | 12.00 (.472)  | 8.00 (.315)   |
| 6        | 53253-0610 | 14.00 (.551)  | 10.00 (.394)  |
| 7        | 53253-0710 | 16.00 (.630)  | 12.00 (.472)  |
| 8        | 53253-0810 | 18.00 (.709)  | 14.00 (.551)  |
| 9        | 53253-0910 | 20.00 (.787)  | 16.00 (.630)  |
| 10       | 53253-1010 | 22.00 (.866)  | 18.00 (.709)  |
| 11       | 53253-1110 | 24.00 (.945)  | 20.00 (.787)  |
| 12       | 53253-1210 | 26.00 (1.024) | 22.00 (.866)  |
| 13       | 53253-1310 | 28.00 (1.102) | 24.00 (.945)  |
| 14       | 53253-1410 | 30.00 (1.181) | 26.00 (1.024) |
| 15       | 53253-1510 | 32.00 (1.260) | 28.00 (1.102) |

| Circuits    | Kink Position |   |   |   |   |     |     |   |
|-------------|---------------|---|---|---|---|-----|-----|---|
|             | 1             | 2 | 3 | 4 | 5 | N-2 | N-1 | N |
| 3           | x             | x | x |   |   |     |     |   |
| 4           | x             | x | x | x |   |     |     |   |
| 5           | x             | x |   | x | x |     |     |   |
| more than 6 |               | x | x |   |   | x   | x   |   |

2.00 to 2.50mm (.079 to .098") Pitch

B

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Locking windows provide secure mating

### Reference Information

Packaging: Tray  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 51065  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current

| AWG     | 24  | 26  | 28  | 30  |
|---------|-----|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5 |

Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

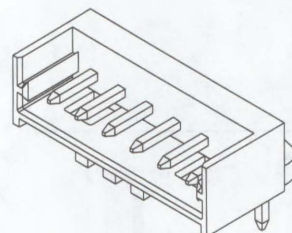
Housing: 6/6 nylon, UL 94V-0  
Contact: Brass  
Plating: Tin  
Operating Temperature: -20 to +85°C



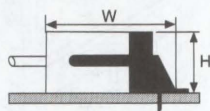
## 2.00mm (.079") Pitch Wire-to-Board Header

**53254**

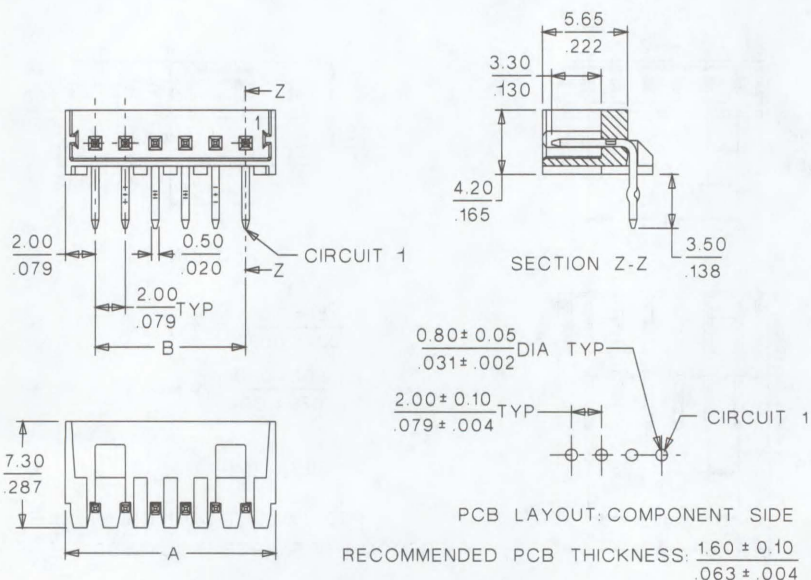
## Right Angle



Mating Dimensions  
53254 • 51065 • 50212  
H=4.55mm W=9.1mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 53254-0210 | 6.00 (.236)   | 2.00 (.079)   |
| 3        | 53254-0310 | 8.00 (.315)   | 4.00 (.157)   |
| 4        | 53254-0410 | 10.00 (.394)  | 6.00 (.236)   |
| 5        | 53254-0510 | 12.00 (.472)  | 8.00 (.315)   |
| 6        | 53254-0610 | 14.00 (.551)  | 10.00 (.394)  |
| 7        | 53254-0710 | 16.00 (.630)  | 12.00 (.472)  |
| 8        | 53254-0810 | 18.00 (.709)  | 14.00 (.551)  |
| 9        | 53254-0910 | 20.00 (.787)  | 16.00 (.630)  |
| 10       | 53254-1010 | 22.00 (.866)  | 18.00 (.709)  |
| 11       | 53254-1110 | 24.00 (.945)  | 20.00 (.787)  |
| 12       | 53254-1210 | 26.00 (1.024) | 22.00 (.866)  |
| 13       | 53254-1310 | 28.00 (1.102) | 24.00 (.945)  |
| 14       | 53254-1410 | 30.00 (1.181) | 26.00 (1.024) |
| 15       | 53254-1510 | 32.00 (1.260) | 28.00 (1.102) |

| Circuits    | Kink Position |   |   |   |   |     |     |   |
|-------------|---------------|---|---|---|---|-----|-----|---|
|             | 1             | 2 | 3 | 4 | 5 | N-2 | N-1 | N |
| 3           | x             | x | x |   |   |     |     |   |
| 4           | x             | x | x | x |   |     |     |   |
| 5           | x             | x |   | x | x |     |     |   |
| more than 6 |               | x | x |   |   | x   | x   |   |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 16 circuits
- Two friction locks
- Positive polarization
- Pull tab for easy insertion/extraction

### Reference Information

Product Specification: PS-87369  
Packaging: Tube or tape and reel  
Accepts: 50212 crimp terminal  
Mates With: 89400 and 89401 single row headers  
Designed In: Millimeters

### Electrical

Voltage: 250V AC  
Current: 2.0A max.  
Contact Resistance: 40mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 1kg max.  
Contact Retention to Housing: 1kg min.  
Wire Pull-Out Force: 3kg max.  
Durability: 30 cycles

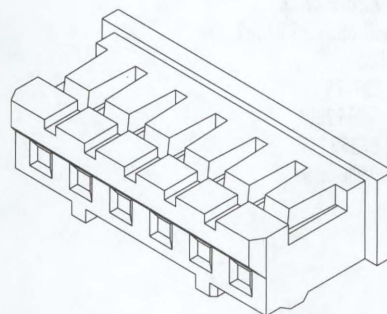
### Physical

Housing: 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Operating Temperature: -25 to +85°C

# molex® 2.00mm (.079") Pitch Wire-to-Board Crimp Housing

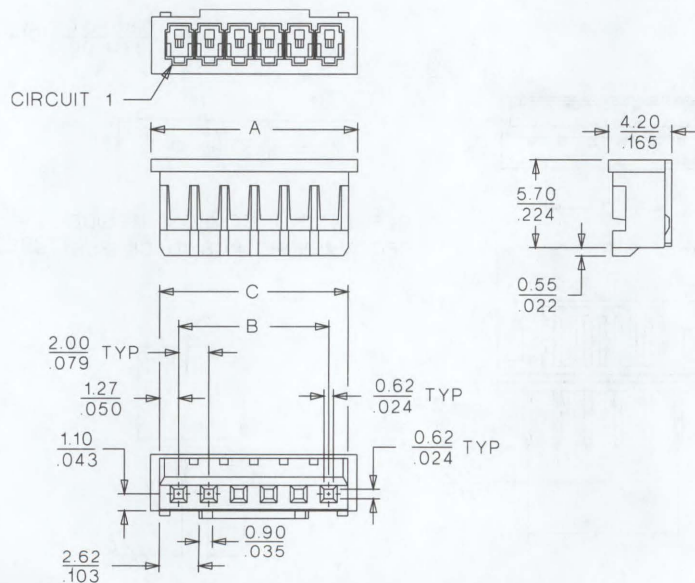
**87369**

**Single Row**



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 2        | 87369-020X | 5.74 (.226)   | 2.00 (.079)   | 4.54 (.179)   |
| 3        | 87369-030X | 7.74 (.305)   | 4.00 (.157)   | 6.54 (.257)   |
| 4        | 87369-040X | 9.74 (.383)   | 6.00 (.236)   | 8.54 (.336)   |
| 5        | 87369-050X | 11.74 (.462)  | 8.00 (.315)   | 10.54 (.415)  |
| 6        | 87369-060X | 13.74 (.541)  | 10.00 (.394)  | 12.54 (.494)  |
| 7        | 87369-070X | 15.74 (.620)  | 12.00 (.472)  | 14.54 (.572)  |
| 8        | 87369-080X | 17.74 (.698)  | 14.00 (.551)  | 16.54 (.651)  |
| 9        | 87369-090X | 19.74 (.777)  | 16.00 (.630)  | 18.54 (.730)  |
| 10       | 87369-100X | 21.74 (.856)  | 18.00 (.709)  | 20.54 (.809)  |
| 11       | 87369-110X | 23.74 (.935)  | 20.00 (.787)  | 22.54 (.887)  |
| 12       | 87369-120X | 25.74 (1.013) | 22.00 (.866)  | 24.54 (.966)  |
| 13       | 87369-130X | 27.74 (1.092) | 24.00 (.945)  | 26.54 (1.045) |
| 14       | 87369-140X | 29.74 (1.171) | 26.00 (1.024) | 28.54 (1.124) |
| 15       | 87369-150X | 31.74 (1.250) | 28.00 (1.102) | 30.54 (1.202) |
| 16       | 87369-160X | 33.74 (1.328) | 30.00 (1.181) | 32.54 (1.281) |

### Replace X with color option (0 to 5)

|   |         |
|---|---------|
| 0 | Natural |
| 1 | Black   |
| 2 | Red     |
| 3 | Yellow  |
| 4 | Blue    |
| 5 | Green   |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits for standard version; sizes 2 to 15 circuits for coined version
- Latch windows retain positive locks after mating
- Standoffs minimize flux retention
- Coined version available for positive pin retention to header
- For other color options, contact Molex

### Reference Information

Product Specification: PS-87369  
 Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LR19980A  
 Mates With: 87369  
 Designed In: Millimeters

### Electrical

Voltage: 250V  
 Current: 4.0A  
 Contact Resistance: 40mΩ max.  
 Dielectric Withstanding Voltage: 500V AC/1 min.  
 Insulation Resistance: 1000 MΩ min.

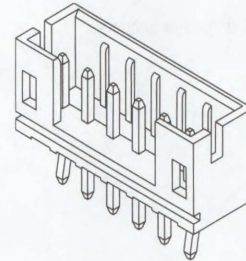
### Physical

Housing: Thermoplastic, UL 94V-0  
 Contact: Brass  
 Plating: Tin  
 Operating Temperature: -25 to +85°C

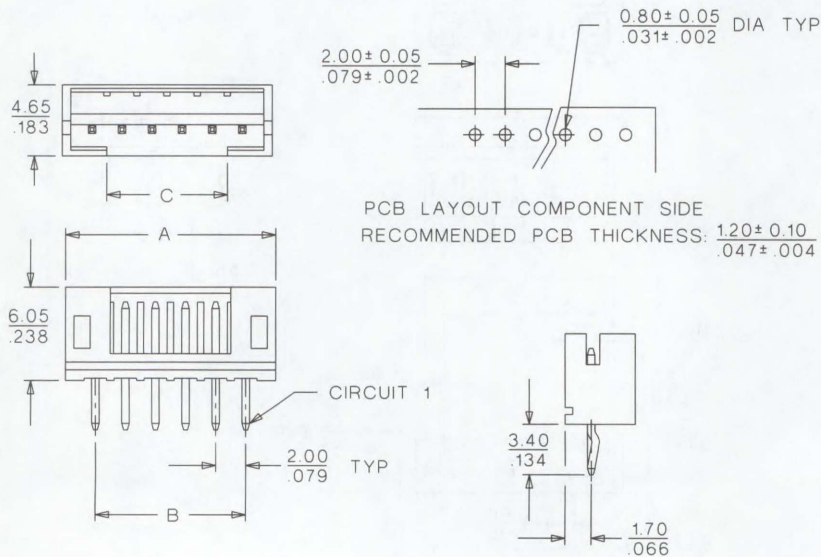
# molex® 2.00mm (.079") Pitch Wire-to-Board Header

**89400**

**Vertical**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  |            | Dimension     |               |               |
|----------|------------|------------|---------------|---------------|---------------|
|          | Standard   | Coined     | A             | B             | C             |
| 2        | 89400-021X | 89400-022X | 6.00 (.236)   | 2.00 (.079)   | 0.75 (.029)   |
| 3        | 89400-031X | 89400-032X | 8.00 (.314)   | 4.00 (.157)   | 2.00 (.079)   |
| 4        | 89400-041X | 89400-042X | 10.00 (.393)  | 6.00 (.236)   | 4.00 (.157)   |
| 5        | 89400-051X | 89400-052X | 12.00 (.472)  | 8.00 (.314)   | 6.00 (.236)   |
| 6        | 89400-061X | 89400-062X | 14.00 (.551)  | 10.00 (.393)  | 8.00 (.314)   |
| 7        | 89400-071X | 89400-072X | 16.00 (.629)  | 12.00 (.472)  | 10.00 (.393)  |
| 8        | 89400-081X | 89400-082X | 18.00 (.708)  | 14.00 (.551)  | 12.00 (.472)  |
| 9        | 89400-091X | 89400-092X | 20.00 (.787)  | 16.00 (.629)  | 14.00 (.551)  |
| 10       | 89400-101X | 89400-102X | 22.00 (.866)  | 18.00 (.708)  | 16.00 (.629)  |
| 11       | 89400-111X | 89400-112X | 24.00 (.944)  | 20.00 (.787)  | 18.00 (.708)  |
| 12       | 89400-121X | 89400-122X | 26.00 (1.023) | 22.00 (.866)  | 20.00 (.787)  |
| 13       | 89400-131X | 89400-132X | 28.00 (1.102) | 24.00 (.944)  | 22.00 (.866)  |
| 14       | 89400-141X | 89400-142X | 30.00 (1.181) | 26.00 (1.023) | 24.00 (.944)  |
| 15       | 89400-151X | 89400-152X | 32.00 (1.259) | 28.00 (1.102) | 26.00 (1.023) |
| 16       | 89400-161X | 89400-162X | 34.00 (1.339) | 30.00 (1.181) | 28.00 (1.102) |

| Replace X with color option (0 to 6) |         |
|--------------------------------------|---------|
| 0                                    | Natural |
| 1                                    | Black   |
| 2                                    | Red     |
| 3                                    | Yellow  |
| 4                                    | Blue    |
| 6                                    | Green   |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 16 circuits
- Latch windows retain positive locks after mating
- Standoffs minimize flux retention
- Coined version for positive pin retention to header

### Reference Information

Product Specification: PS-89369  
 Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LR19980A  
 Mates With: 87369  
 Designed In: Millimeters

### Electrical

Voltage: 250V  
 Current: 4.0A  
 Contact Resistance: 40mΩ max.  
 Dielectric Withstanding Voltage: 500V AC/1 min.  
 Insulation Resistance: 1000 MΩ min.

### Physical

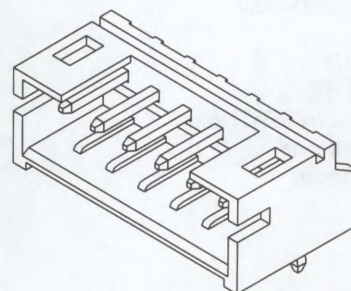
Housing: Natural 6/6 nylon, UL 94V-0  
 Contact: Brass  
 Plating: Tin  
 Operating Temperature: -25 to +85°C



## 2.00mm (.079") Pitch Wire-to-Board Header

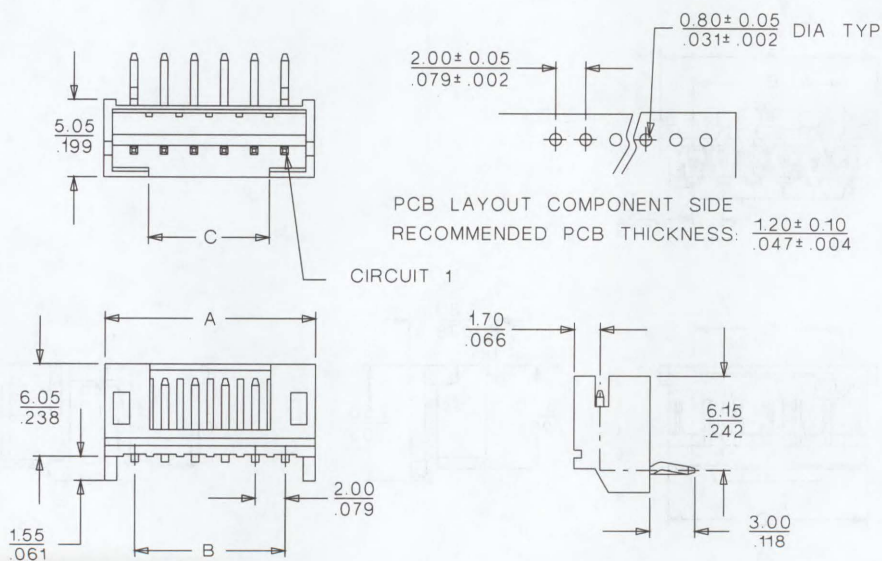
**89401**

## Right Angle



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.<br>Coined Version | Dimension     |               |               |
|----------|-----------------------------|---------------|---------------|---------------|
|          |                             | A             | B             | C             |
| 2        | 89401-021X                  | 6.00 (.236)   | 2.00 (.079)   | 0.75 (.029)   |
| 3        | 89401-031X                  | 8.00 (.314)   | 4.00 (.157)   | 2.00 (.079)   |
| 4        | 89401-041X                  | 10.00 (.393)  | 6.00 (.236)   | 4.00 (.157)   |
| 5        | 89401-051X                  | 12.00 (.472)  | 8.00 (.314)   | 6.00 (.236)   |
| 6        | 89401-061X                  | 14.00 (.551)  | 10.00 (.393)  | 8.00 (.314)   |
| 7        | 89401-071X                  | 16.00 (.629)  | 12.00 (.472)  | 10.00 (.393)  |
| 8        | 89401-081X                  | 18.00 (.708)  | 14.00 (.551)  | 12.00 (.472)  |
| 9        | 89401-091X                  | 20.00 (.787)  | 16.00 (.629)  | 14.00 (.551)  |
| 10       | 89401-101X                  | 22.00 (.866)  | 18.00 (.708)  | 16.00 (.629)  |
| 11       | 89401-111X                  | 24.00 (.944)  | 20.00 (.787)  | 18.00 (.708)  |
| 12       | 89401-121X                  | 26.00 (1.023) | 22.00 (.866)  | 20.00 (.787)  |
| 13       | 89401-131X                  | 28.00 (1.102) | 24.00 (.944)  | 22.00 (.866)  |
| 14       | 89401-141X                  | 30.00 (1.181) | 26.00 (1.023) | 24.00 (.944)  |
| 15       | 89401-151X                  | 32.00 (1.259) | 28.00 (1.102) | 26.00 (1.023) |
| 16       | 89401-161X                  | 34.00 (1.339) | 30.00 (1.181) | 28.00 (1.102) |

| Replace X with color option (0 to 7) |         |
|--------------------------------------|---------|
| 0                                    | Natural |
| 2                                    | Red     |
| 3                                    | Yellow  |
| 4                                    | Blue    |
| 6                                    | Green   |
| 7                                    | Black   |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 and 20 circuits
- Positive lock latch provides secure mating retention
- Housing lance ensures good terminal retention
- Compact low-profile design for space savings
- Polarizing end walls prevent mismatching
- Five color choices for circuit identification

### Reference Information

Product Specification: PS-35507  
 Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 35362 and 35363 headers  
 Use With: 50212 terminal  
 Designed In: Millimeters

### Electrical

Voltage: 125V  
 Current: 2.0A max.  
 Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 500V  
 Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 9.8N (2.2 lb) max.  
 Contact Retention to Housing: 14.7N (3.3 lb) min.  
 Mating Force: 5 circuits—58.8N (13.2 lb)  
 Unmating Force: 5 circuits—3.3N (0.7 lb)  
 Durability: 30 cycles

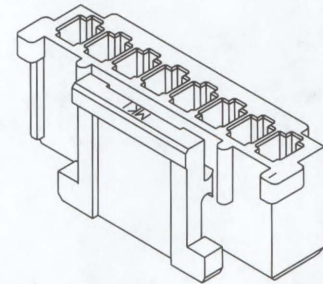
### Physical

Housing: Polyester, UL 94V-0  
 Operating Temperature: -40 to +105°C

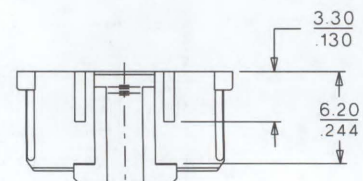
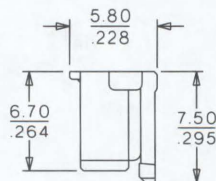
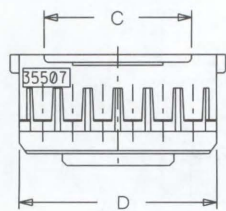
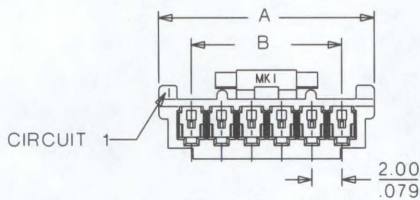


## 2.00mm (.079") Pitch Sherlock™ Wire-to-Board Housing

35507



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |               |
|----------|------------|---------------|---------------|---------------|---------------|
|          |            | A             | B             | C             | D             |
| 2        | 35507-0200 | 7.20 (.283)   | 2.00 (.079)   | 1.70 (.067)   | 5.10 (.201)   |
| 3        | 35507-0300 | 9.20 (.362)   | 4.00 (.157)   | 2.50 (.098)   | 7.10 (.280)   |
| 4        | 35507-0400 | 10.30 (.406)  | 6.00 (.236)   | 5.80 (.228)   | 9.10 (.358)   |
| 5        | 35507-0500 | 12.30 (.484)  | 8.00 (.315)   | 7.80 (.307)   | 11.10 (.437)  |
| 6        | 35507-0600 | 14.30 (.563)  | 10.00 (.394)  | 9.80 (.386)   | 13.10 (.516)  |
| 7        | 35507-0700 | 16.30 (.642)  | 12.00 (.472)  | 11.80 (.465)  | 15.10 (.594)  |
| 8        | 35507-0800 | 18.30 (.720)  | 14.00 (.551)  | 13.80 (.543)  | 17.10 (.673)  |
| 9        | 35507-0900 | 20.30 (.799)  | 16.00 (.630)  | 15.80 (.622)  | 19.10 (.752)  |
| 10       | 35507-1000 | 22.30 (.878)  | 18.00 (.709)  | 17.80 (.701)  | 21.10 (.831)  |
| 11       | 35507-1100 | 24.30 (.957)  | 20.00 (.787)  | 19.80 (.780)  | 23.10 (.909)  |
| 12       | 35507-1200 | 26.30 (1.035) | 22.00 (.866)  | 21.80 (.858)  | 25.10 (.988)  |
| 13       | 35507-1300 | 28.30 (1.114) | 24.00 (.945)  | 23.80 (.937)  | 27.10 (1.067) |
| 14       | 35507-1400 | 30.30 (1.193) | 26.00 (1.024) | 25.80 (1.016) | 29.10 (1.146) |
| 15       | 35507-1500 | 32.30 (1.272) | 28.00 (1.102) | 27.80 (1.094) | 31.10 (1.232) |
| 20       | 35507-2000 | 42.30 (1.665) | 38.00 (1.496) | 37.80 (1.488) | 41.10 (1.618) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 and 20 circuits
- Positive locking ribs provide secure mating retention
- Four-wall shroud with guide plate protects pins and facilitates mating
- Compact low-profile design for space savings
- Polarizing end walls prevent mismatching
- Five color choices for circuit identification

### Reference Information

Product Specification: PS-35507  
 Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 35507 housing  
 Designed In: Millimeters

### Electrical

Voltage: 125V  
 Current: 2.0A  
 Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 500V  
 Insulation Resistance: 1000 MΩ min.

### Mechanical

Mating Force: 5 circuits—58.8N (13.2 lb)  
 Unmating Force: 5 circuits—3.3N (0.7 lb)  
 Durability: 30 cycles

### Physical

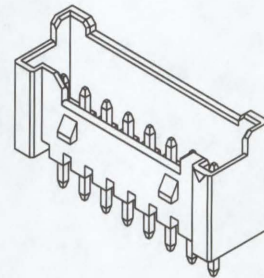
Housing: Polyamide, UL 94V-0  
 Contact: Brass  
 Plating: Tin/Lead  
 Operating Temperature: -40 to +105°C  
 Mated Height: 7.2mm (.283")  
 Mated Width: 5.8mm (.228")



## 2.00mm (.079") Pitch Sherlock™ Wire-to-Board Header

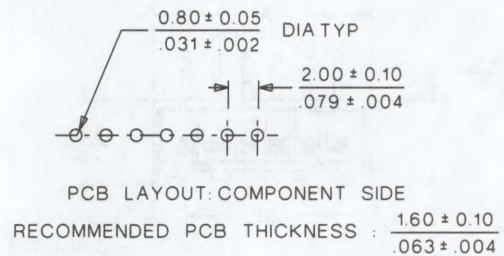
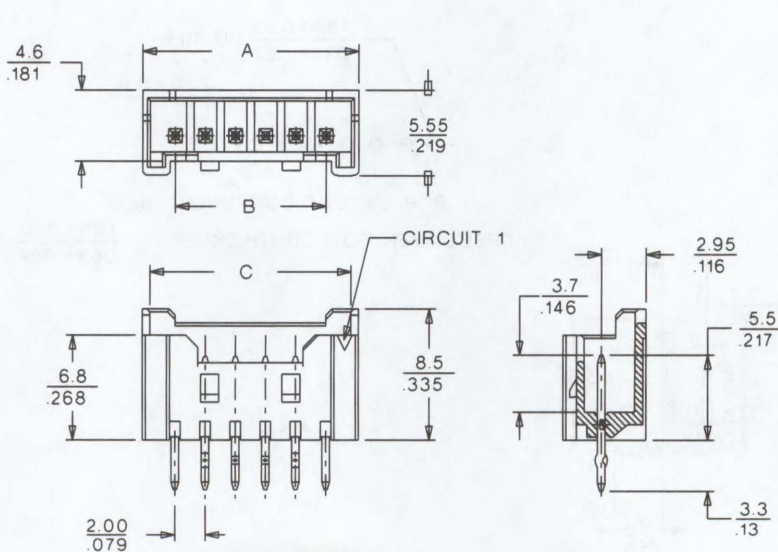
**35362**

**Vertical**



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 2        | 35362-0210 | 7.70 (.303)   | 2.00 (.079)   | 5.30 (.209)   |
| 3        | 35362-0310 | 9.70 (.382)   | 4.00 (.157)   | 7.30 (.287)   |
| 4        | 35362-0410 | 10.30 (.406)  | 6.00 (.236)   | 9.30 (.366)   |
| 5        | 35362-0510 | 12.30 (.484)  | 8.00 (.315)   | 11.30 (.445)  |
| 6        | 35362-0610 | 14.30 (.563)  | 10.00 (.394)  | 13.30 (.524)  |
| 7        | 35362-0710 | 16.30 (.642)  | 12.00 (.472)  | 15.30 (.602)  |
| 8        | 35362-0810 | 18.30 (.720)  | 14.00 (.551)  | 17.30 (.681)  |
| 9        | 35362-0910 | 20.30 (.799)  | 16.00 (.630)  | 19.30 (.760)  |
| 10       | 35362-1010 | 22.30 (.878)  | 18.00 (.709)  | 21.30 (.839)  |
| 11       | 35362-1110 | 24.30 (.957)  | 20.00 (.787)  | 23.30 (.917)  |
| 12       | 35362-1210 | 26.30 (1.035) | 22.00 (.866)  | 25.30 (.996)  |
| 13       | 35362-1310 | 28.30 (1.114) | 24.00 (.945)  | 27.30 (1.075) |
| 14       | 35362-1410 | 30.30 (1.193) | 26.00 (1.024) | 29.30 (1.154) |
| 15       | 35362-1510 | 32.30 (1.272) | 28.00 (1.102) | 31.30 (1.232) |
| 20       | 35362-2010 | 42.30 (1.665) | 38.00 (1.496) | 41.30 (1.626) |

B

2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 and 20 circuits
- Positive locking ribs provide secure mating retention
- Four-wall shroud with guide plate protects pins and facilitates mating
- Compact low-profile design for space savings
- Polarizing end walls prevent mismating
- Five color choices for circuit identification

### Reference Information

Product Specification: PS-35507

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: 35507 housing

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 2.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V

Insulation Resistance: 1000 MΩ min.

### Mechanical

Mating Force: 5 circuits—58.8N (13.2 lb)

Unmating Force: 5 circuits—3.3N (0.7 lb)

Durability: 30 cycles

### Physical

Housing: Polyamide, UL 94V-0

Contact: Brass

Plating: Tin/Lead

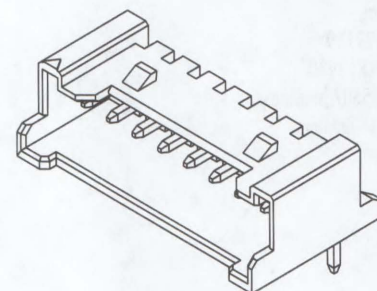
Operating Temperature: -40 to +105°C



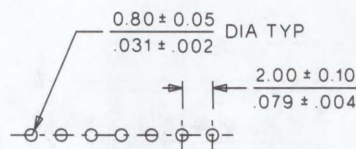
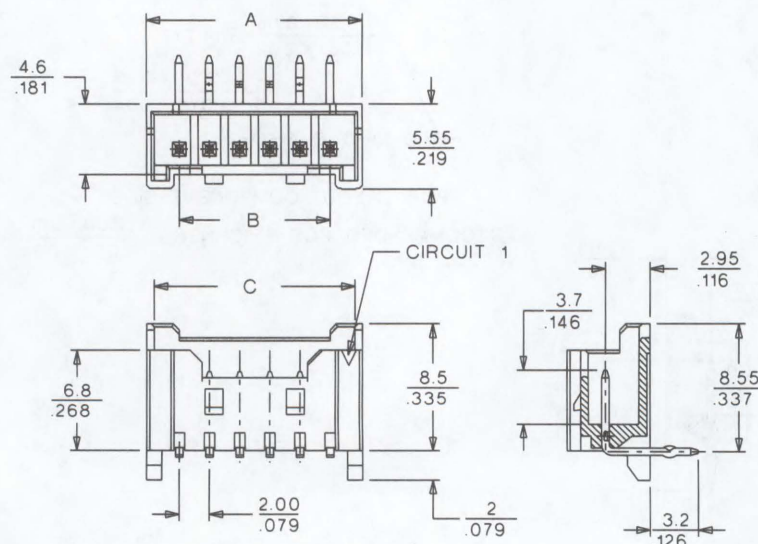
## 2.00mm (.079") Pitch Sherlock™ Wire-to-Board Header

35363

Right Angle



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 2        | 35363-0210 | 7.70 (.303)   | 2.00 (.079)   | 5.30 (.209)   |
| 3        | 35363-0310 | 9.70 (.382)   | 4.00 (.157)   | 7.30 (.287)   |
| 4        | 35363-0410 | 10.30 (.406)  | 6.00 (.236)   | 9.30 (.366)   |
| 5        | 35363-0510 | 12.30 (.484)  | 8.00 (.315)   | 11.30 (.445)  |
| 6        | 35363-0610 | 14.30 (.563)  | 10.00 (.394)  | 13.30 (.524)  |
| 7        | 35363-0710 | 16.30 (.642)  | 12.00 (.472)  | 15.30 (.602)  |
| 8        | 35363-0810 | 18.30 (.720)  | 14.00 (.551)  | 17.30 (.681)  |
| 9        | 35363-0910 | 20.30 (.799)  | 16.00 (.630)  | 19.30 (.760)  |
| 10       | 35363-1010 | 22.30 (.878)  | 18.00 (.709)  | 21.30 (.839)  |
| 11       | 35363-1110 | 24.30 (.957)  | 20.00 (.787)  | 23.30 (.917)  |
| 12       | 35363-1210 | 26.30 (1.035) | 22.00 (.866)  | 25.30 (.996)  |
| 13       | 35363-1310 | 28.30 (1.114) | 24.00 (.945)  | 27.30 (1.075) |
| 14       | 35363-1410 | 30.30 (1.193) | 26.00 (1.024) | 29.30 (1.154) |
| 15       | 35363-1510 | 32.30 (1.271) | 28.00 (1.102) | 31.30 (1.232) |
| 20       | 35363-2010 | 42.30 (1.665) | 38.00 (1.496) | 41.30 (1.626) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Box design provides two points of contact and terminal protection
- Locking tang for secure housing retention

### Reference Information

Packaging: Reel or bag  
Use With: 51004  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current:

| AWG     | 24  | 26  | 28  | 30-40 |
|---------|-----|-----|-----|-------|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5   |

Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

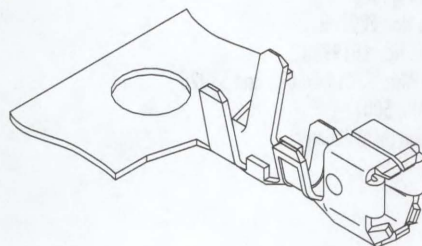
### Physical

Contact: Phosphor Bronze  
Plating: Tin  
Wire Range: 24 to 34 AWG  
Insulation Range: 1.40mm dia. max.  
Strip Length: 1.60 to 2.10mm



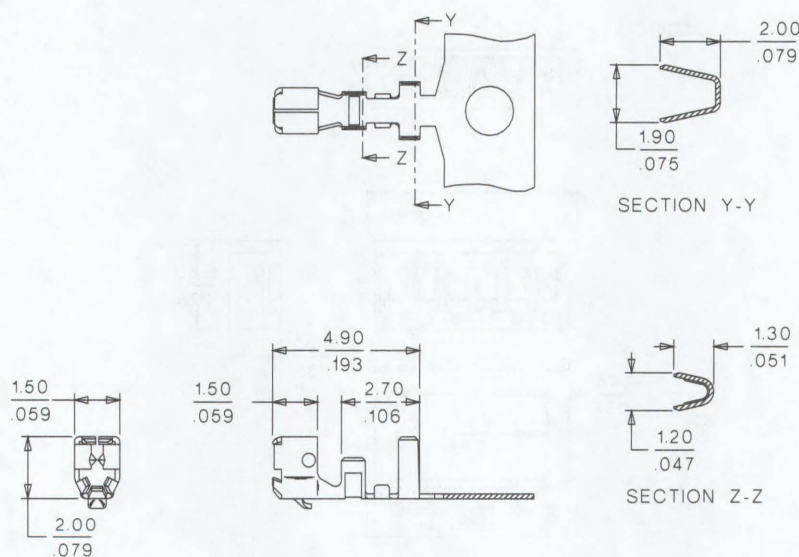
## 2.00mm (.079") Pitch Wire-to-Board Crimp Terminal

50011



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Order No.  | Wire Range<br>AWG | Terminal |
|------------|-------------------|----------|
| 50011-8000 | 24-30             | Reel     |
| 50011-8100 |                   | Bag      |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Housing lance provides extra terminal retention
- Friction lock provides secure mating

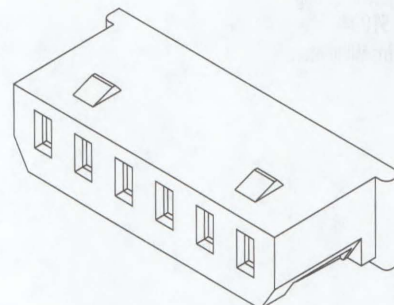
### Physical

Housing: PBTP, UL 94V-0  
Operating Temperature: -20 to +85°C



## 2.00mm (.079") Pitch Wire-to-Board Housing

**51004**

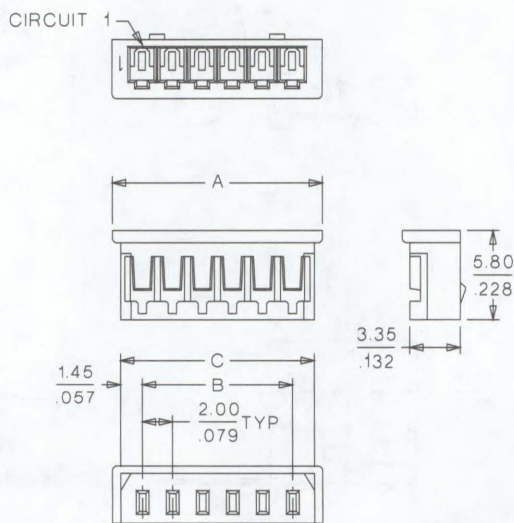


### Reference Information

Packaging: Bag  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 53014, 53015 and 53025  
Use With: 50011  
Designed In: Millimeters

2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 2        | 51004-0200 | 6.00 (.236)   | 2.00 (.079)   | 4.90 (.193)   |
| 3        | 51004-0300 | 8.00 (.315)   | 4.00 (.157)   | 6.90 (.272)   |
| 4        | 51004-0400 | 10.00 (.394)  | 6.00 (.236)   | 8.90 (.350)   |
| 5        | 51004-0500 | 12.00 (.472)  | 8.00 (.314)   | 10.90 (.429)  |
| 6        | 51004-0600 | 14.00 (.551)  | 10.00 (.394)  | 12.90 (.508)  |
| 7        | 51004-0700 | 16.00 (.630)  | 12.00 (.472)  | 14.90 (.587)  |
| 8        | 51004-0800 | 18.00 (.709)  | 14.00 (.551)  | 16.90 (.665)  |
| 9        | 51004-0900 | 20.00 (.787)  | 16.00 (.630)  | 18.90 (.744)  |
| 10       | 51004-1000 | 22.00 (.866)  | 18.00 (.709)  | 20.90 (.823)  |
| 11       | 51004-1100 | 24.00 (.945)  | 20.00 (.787)  | 22.90 (.902)  |
| 12       | 51004-1200 | 26.00 (1.024) | 22.00 (.866)  | 24.90 (.980)  |
| 13       | 51004-1300 | 28.00 (1.102) | 24.00 (.945)  | 26.90 (1.059) |
| 14       | 51004-1400 | 30.00 (1.181) | 26.00 (1.024) | 28.90 (1.138) |
| 15       | 51004-1500 | 32.00 (1.260) | 28.00 (1.102) | 30.90 (1.217) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Locking windows provide secure mating

### Reference Information

Packaging: Bag  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 51004  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current:

| AWG     | 24  | 26  | 28  | 30-34 |
|---------|-----|-----|-----|-------|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5   |

Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

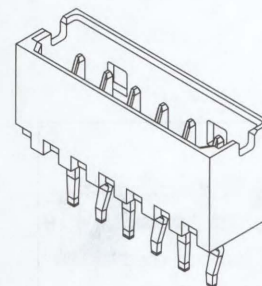
Housing: Glass-filled 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -20 to +85°C



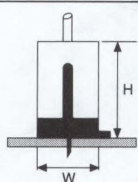
## 2.00mm (.079") Pitch Wire-to-Board Header

**53014**

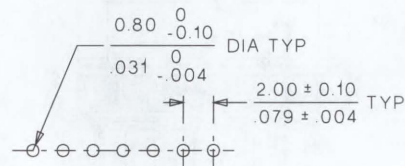
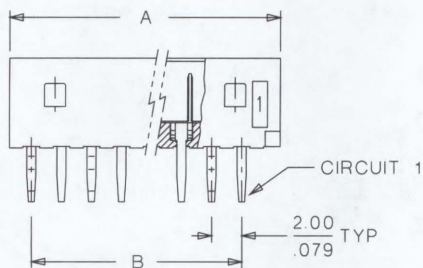
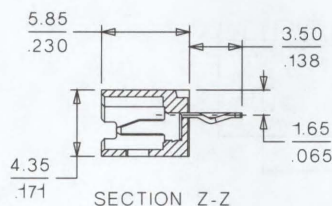
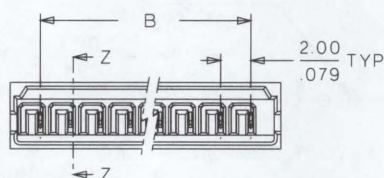
**Vertical**



**Mating Dimensions**  
53014 • 51004 • 50011  
H=7.6mm W=4.4mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS : 1.60 ± 0.10  
.063 ± .004

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 53014-0210 | 6.00 (.236)   | 2.00 (.079)   |
| 3        | 53014-0310 | 8.00 (.315)   | 4.00 (.157)   |
| 4        | 53014-0410 | 10.00 (.394)  | 6.00 (.236)   |
| 5        | 53014-0510 | 12.00 (.472)  | 8.00 (.315)   |
| 6        | 53014-0610 | 14.00 (.551)  | 10.00 (.394)  |
| 7        | 53014-0710 | 16.00 (.630)  | 12.00 (.472)  |
| 8        | 53014-0810 | 18.00 (.709)  | 14.00 (.551)  |
| 9        | 53014-0910 | 20.00 (.787)  | 16.00 (.630)  |
| 10       | 53014-1010 | 22.00 (.866)  | 18.00 (.709)  |
| 11       | 53014-1110 | 24.00 (.945)  | 20.00 (.787)  |
| 12       | 53014-1210 | 26.00 (1.024) | 22.00 (.866)  |
| 13       | 53014-1310 | 28.00 (1.102) | 24.00 (.945)  |
| 14       | 53014-1410 | 30.00 (1.181) | 26.00 (1.024) |
| 15       | 53014-1510 | 32.00 (1.260) | 28.00 (1.102) |

2.00 to 2.50mm (.079 to .098") Pitch

**B**

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Locking windows provides secure mating

### Reference Information

Packaging: Bag  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 51004  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current:

| AWG     | 24  | 26  | 28  | 30-34 |
|---------|-----|-----|-----|-------|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5   |

Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

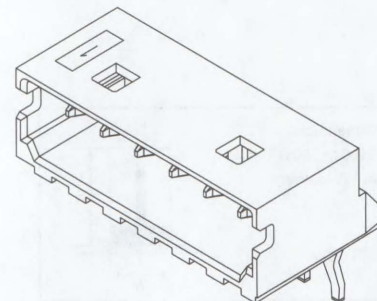
Housing: Glass-filled 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -20 to +85°C



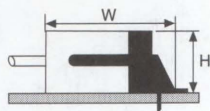
**2.00mm (.079") Pitch**  
**Wire-to-Board**  
**Header**

**53015**

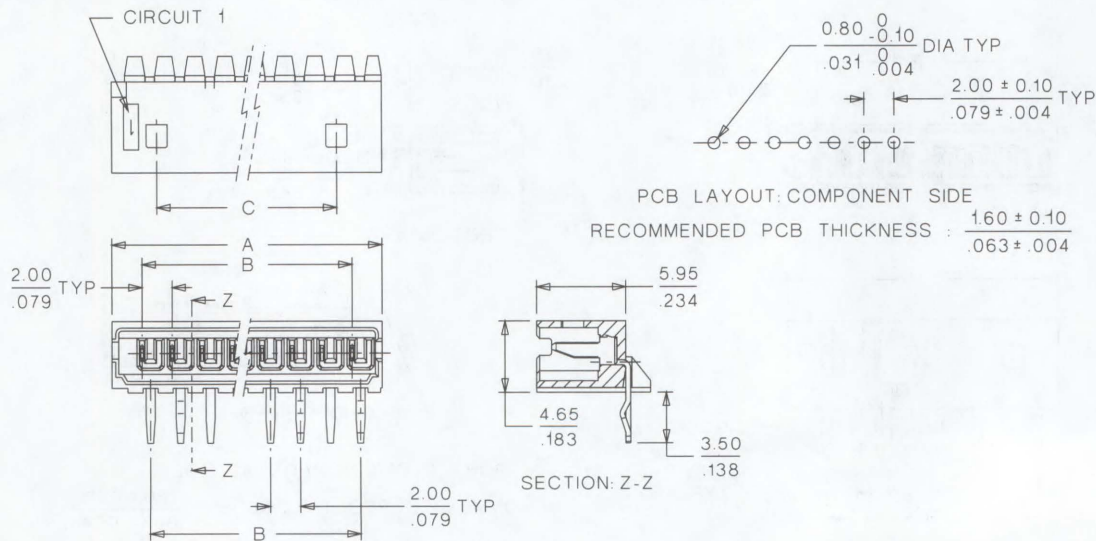
**Right Angle**



Mating Dimensions  
53015 • 51004 • 50011  
H=4.7mm W=9.3mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 2        | 53015-0210 | 6.00 (.236)   | 2.00 (.079)   | —             |
| 3        | 53015-0310 | 8.00 (.315)   | 4.00 (.157)   | —             |
| 4        | 53015-0410 | 10.00 (.394)  | 6.00 (.236)   | 4.00 (.157)   |
| 5        | 53015-0510 | 12.00 (.472)  | 8.00 (.314)   | 6.00 (.236)   |
| 6        | 53015-0610 | 14.00 (.551)  | 10.00 (.393)  | 8.00 (.314)   |
| 7        | 53015-0710 | 16.00 (.630)  | 12.00 (.472)  | 10.00 (.393)  |
| 8        | 53015-0810 | 18.00 (.709)  | 14.00 (.551)  | 12.00 (.472)  |
| 9        | 53015-0910 | 20.00 (.787)  | 16.00 (.629)  | 14.00 (.551)  |
| 10       | 53015-1010 | 22.00 (.866)  | 18.00 (.708)  | 16.00 (.629)  |
| 11       | 53015-1110 | 24.00 (.945)  | 20.00 (.787)  | 18.00 (.708)  |
| 12       | 53015-1210 | 26.00 (1.024) | 22.00 (.866)  | 20.00 (.787)  |
| 13       | 53015-1310 | 28.00 (1.102) | 24.00 (.944)  | 22.00 (.866)  |
| 14       | 53015-1410 | 30.00 (1.181) | 26.00 (1.023) | 24.00 (.944)  |
| 15       | 53015-1510 | 32.00 (1.260) | 28.00 (1.102) | 26.00 (1.023) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 10 circuits
- Locking windows provide secure mating

### Reference Information

Packaging: Tray  
Mates With: 51004  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current:

| AWG     | 24  | 26  | 28  | 30-34 |
|---------|-----|-----|-----|-------|
| Amperes | 2.0 | 1.5 | 1.0 | 0.5   |

Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

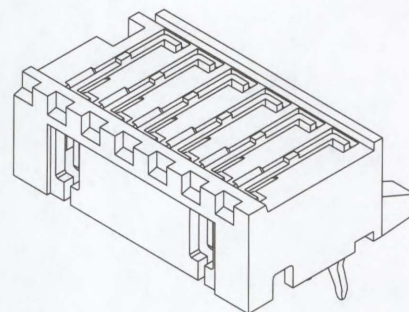
Housing: Glass-filled 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -20 to +85°C  
Mated Height: 7.40mm (.291")  
Mated Width: 10.00mm (.394")



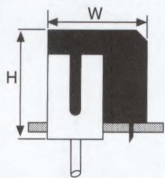
## 2.00mm (.079") Pitch Wire-to-Board Header

**53025**

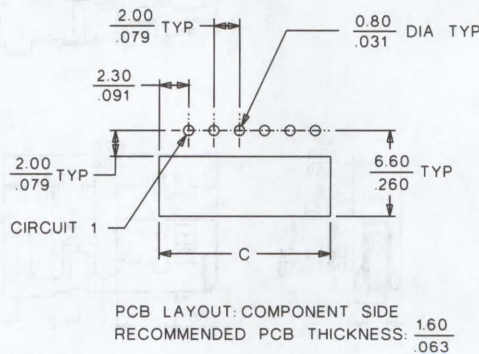
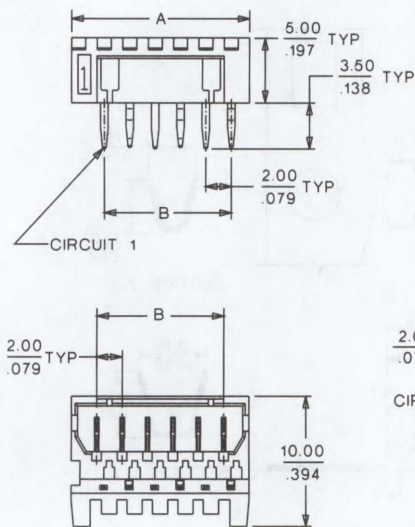
## Bottom Entry



Mating Dimensions  
53025 • 51004 • 50011  
H=7.4mm W=10.0mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |              |              |
|----------|------------|--------------|--------------|--------------|
|          |            | A            | B            | C            |
| 2        | 53025-0210 | 6.00 (.236)  | 2.00 (.079)  | 5.50 (.216)  |
| 3        | 53025-0310 | 8.00 (.315)  | 4.00 (.157)  | 7.50 (.295)  |
| 4        | 53025-0410 | 10.00 (.394) | 6.00 (.236)  | 9.50 (.374)  |
| 5        | 53025-0510 | 12.00 (.472) | 8.00 (.314)  | 11.50 (.452) |
| 6        | 53025-0610 | 14.00 (.551) | 10.00 (.393) | 13.50 (.531) |
| 7        | 53025-0710 | 16.00 (.630) | 12.00 (.472) | 15.50 (.610) |
| 8        | 53025-0810 | 18.00 (.709) | 14.00 (.551) | 17.50 (.688) |
| 9        | 53025-0910 | 20.00 (.787) | 16.00 (.629) | 19.50 (.767) |
| 10       | 53025-1010 | 22.00 (.866) | 18.00 (.708) | 21.50 (.846) |

2.00 to 2.50mm (.079 to .098") Pitch

**B**

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Two points of contact for good electrical reliability
- Double-box design for retainer support

### Reference Information

Product Specification: PS-51216-005

Packaging: Reel or bag

Use With: 51216

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 2.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Contact: Phosphor Bronze

Plating: Tin

Wire Range: 22 to 28 AWG

Insulation Diameter: 1.50mm (.059") max.

Strip Length: 1.60 to 2.00mm (.063 to .079")

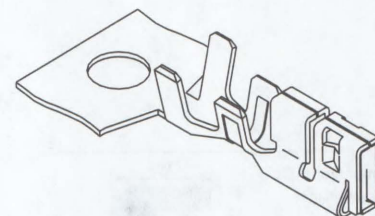
Operating Temperature: -25 to +85°C



## 2.00mm (.079") Pitch Wire-to-Board Crimp Terminal

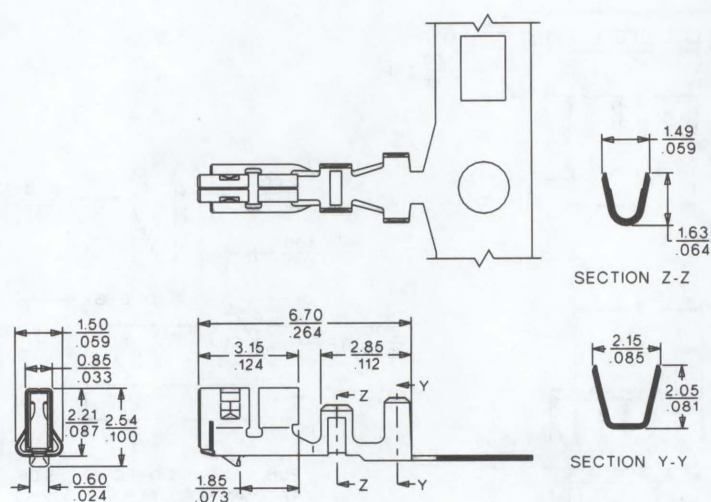
**59370**

**Female**



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Order No.  | Packaging |
|------------|-----------|
| 59370-8000 | Reel      |
| 59370-8100 | Bag       |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 15 circuits
- Internal push-type positive lock provides secure retention, easy mating, and latch protection during harness assembly
- Side ribs for latch protection and polarization
- Housing lance provides secure terminal retention

### Reference Information

Product Specification: PS-51216-005

Packaging: Bag

Mates With: 55487

Use With: 59370 terminal and 51217 retainer

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 2.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: Natural PBTP, UL 94V-0

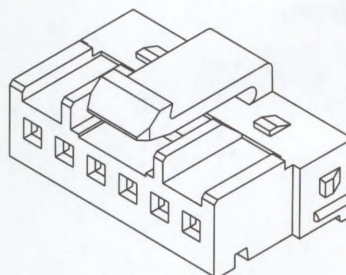
Operating Temperature: -25 to +85°C



## 2.00mm (.079") Pitch Wire-to-Board Housing

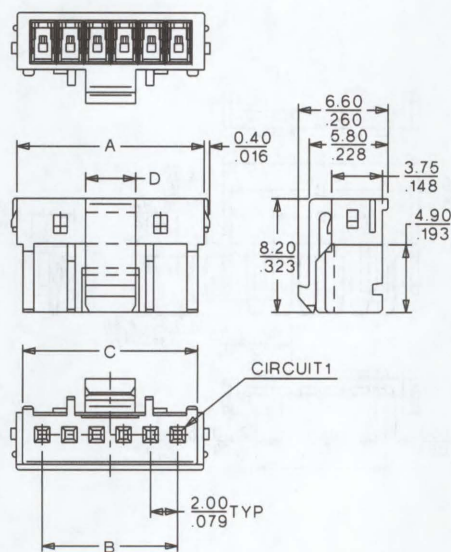
### 51216

### Positive Lock



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |             |
|----------|------------|---------------|---------------|---------------|-------------|
|          |            | A             | B             | C             | D           |
| 4        | 51216-0400 | 9.80 (.386)   | 6.00 (.236)   | 8.90 (.350)   | 3.70 (.146) |
| 5        | 51216-0500 | 11.80 (.465)  | 8.00 (.315)   | 10.90 (.429)  | 3.70 (.146) |
| 6        | 51216-0600 | 13.80 (.543)  | 10.00 (.394)  | 12.90 (.508)  | 3.70 (.146) |
| 7        | 51216-0700 | 15.80 (.622)  | 12.00 (.472)  | 14.90 (.587)  | 3.70 (.146) |
| 8        | 51216-0800 | 17.80 (.701)  | 14.00 (.551)  | 16.90 (.665)  | 3.70 (.146) |
| 9        | 51216-0900 | 19.80 (.780)  | 16.00 (.630)  | 18.90 (.744)  | 3.70 (.146) |
| 10       | 51216-1000 | 21.80 (.858)  | 18.00 (.709)  | 20.90 (.823)  | 3.70 (.146) |
| 11       | 51216-1100 | 23.80 (.937)  | 20.00 (.787)  | 22.90 (.902)  | 3.70 (.146) |
| 12       | 51216-1200 | 25.80 (1.016) | 22.00 (.866)  | 24.90 (.980)  | 3.70 (.146) |
| 13       | 51216-1300 | 27.80 (1.094) | 24.00 (.945)  | 26.90 (1.059) | 3.70 (.146) |
| 14       | 51216-1400 | 29.80 (1.173) | 26.00 (1.024) | 28.90 (1.138) | 3.70 (.146) |
| 15       | 51216-1500 | 31.80 (1.252) | 28.00 (1.102) | 30.90 (1.217) | 3.70 (.146) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 15 circuits
- Provides additional terminal retention
- Space-saving design snaps easily onto housing

### Reference Information

Product Specification: PS-51216-005

Packaging: Bag

Use With: 51216

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 2.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

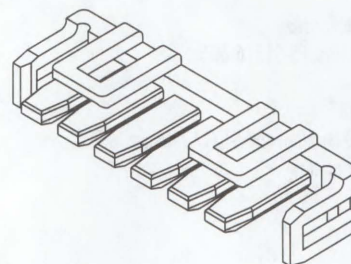
Housing: Gray PBTP, UL 94V-0

Operating Temperature: -25 to +85°C

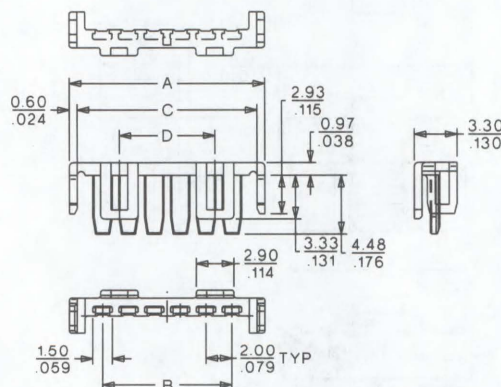


## 2.00mm (.079") Pitch Wire-to-Board Retainer

51217



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |             |
|----------|------------|---------------|---------------|---------------|-------------|
|          |            | A             | B             | C             | D           |
| 4        | 51217-0405 | 11.10 (.437)  | 6.00 (.236)   | 9.90 (.390)   |             |
| 5        | 51217-0505 | 13.10 (.516)  | 8.00 (.315)   | 11.90 (.469)  | 7.40 (.291) |
| 6        | 51217-0605 | 15.10 (.594)  | 10.00 (.394)  | 13.90 (.547)  | 7.40 (.291) |
| 7        | 51217-0705 | 17.10 (.673)  | 12.00 (.472)  | 15.90 (.626)  | 7.40 (.291) |
| 8        | 51217-0805 | 19.10 (.752)  | 14.00 (.551)  | 17.90 (.705)  | 7.40 (.291) |
| 9        | 51217-0905 | 21.10 (.831)  | 16.00 (.630)  | 19.90 (.783)  | 7.40 (.291) |
| 10       | 51217-1005 | 23.10 (.909)  | 18.00 (.709)  | 21.90 (.862)  | 7.40 (.291) |
| 11       | 51217-1105 | 25.10 (.988)  | 20.00 (.787)  | 23.90 (.941)  | 7.40 (.291) |
| 12       | 51217-1205 | 27.10 (1.067) | 22.00 (.866)  | 25.90 (1.020) | 7.40 (.291) |
| 13       | 51217-1305 | 29.10 (1.146) | 24.00 (.945)  | 27.90 (1.098) | 7.40 (.291) |
| 14       | 51217-1405 | 31.10 (1.224) | 26.00 (1.024) | 29.90 (1.177) | 7.40 (.291) |
| 15       | 51217-1505 | 33.10 (1.303) | 28.00 (1.102) | 31.90 (1.256) | 7.40 (.291) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 15 circuits
- Internal push-type positive lock provides secure retention, polarization and easy mating/unmating
- Potting type used for sealing components in white goods applications
- Polarization pegs assist placement

### Reference Information

Product Specification: PS-51216-005

Packaging: Tray

Mates With: 51216

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 2.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: Glass-filled 6/6 nylon, UL 94V-0

Contact: Brass

Plating: Contact Area—Tin/Lead

Underplating—Copper

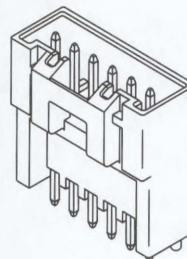
Operating Temperature: -25 to +85°C



## 2.00mm (.079") Pitch Wire-to-Board Header

**55487**

## Vertical Fully Shrouded

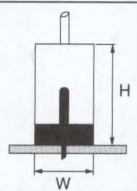


### Mating Dimensions

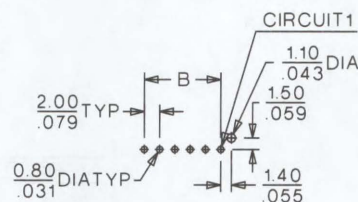
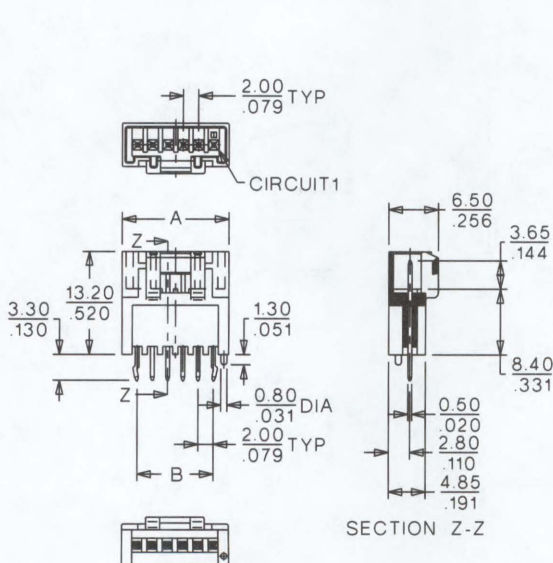
55487/51216/59370

H=16.60mm (.654") W=6.50mm (.256")

(With retainer: H=17.70mm (.697"))



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT : COMPONENT SIDE  
RECOMMENDED PCB THICKNESS : 1.60 (.063)

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 4        | 55487-0410 | 10.00 (.394)  | 6.00 (.236)   |
| 5        | 55487-0510 | 12.00 (.472)  | 8.00 (.315)   |
| 6        | 55487-0610 | 14.00 (.551)  | 10.00 (.394)  |
| 7        | 55487-0710 | 16.00 (.630)  | 12.00 (.472)  |
| 8        | 55487-0810 | 18.00 (.709)  | 14.00 (.551)  |
| 9        | 55487-0910 | 20.00 (.787)  | 16.00 (.630)  |
| 10       | 55487-1010 | 22.00 (.866)  | 18.00 (.709)  |
| 11       | 55487-1110 | 24.00 (.945)  | 20.00 (.787)  |
| 12       | 55487-1210 | 26.00 (1.024) | 22.00 (.866)  |
| 13       | 55487-1310 | 28.00 (1.102) | 24.00 (.945)  |
| 14       | 55487-1410 | 30.00 (1.181) | 26.00 (1.024) |
| 15       | 55487-1510 | 32.00 (1.260) | 28.00 (1.102) |

2.00 to 2.50mm (.079 to .098") Pitch

B

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Locking tang secures terminal to housing

### Reference Information

Packaging: Reel or bag

Use With: 51015

Designed In: Millimeters

### Electrical

Voltage: 125V

Current:

| AWG     | 26  | 28  | 30  |
|---------|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 |

Contact Resistance: 5mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Contact: Phosphor Bronze

Plating: Tin

Operating Temperature: -40 to +105°C

Wire Range: 26 to 30 AWG

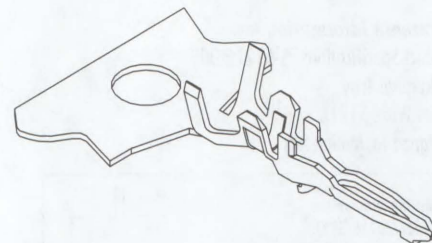
Insulation Range: 1.40mm dia. max.

Strip Length: 1.40 to 1.90mm

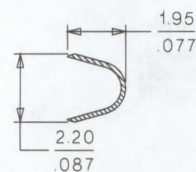
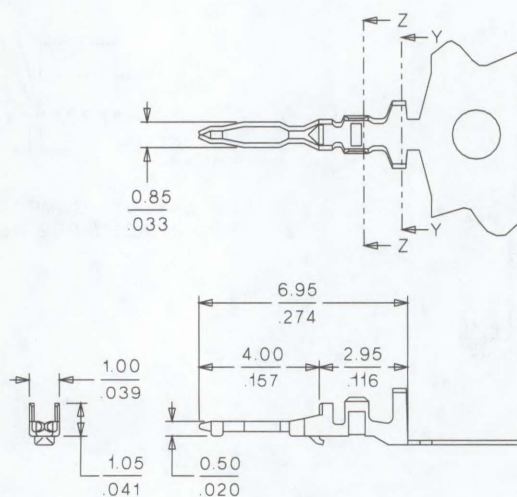


## 2.00mm (.079") Pitch Board-In Connector Crimp Terminal

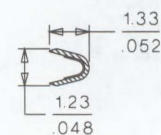
**50034**



## CATALOG DRAWING (FOR REFERENCE ONLY)



SECTION Y-Y



SECTION Z-Z

## ORDERING INFORMATION

| Order No.  | Terminal |
|------------|----------|
| 50034-8000 | Reel     |
| 50034-8100 | Bag      |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Low profile of 3.8mm
- Locking windows secure terminal to housing

### Reference Information

Packaging: Bag  
Use With: 50034  
Designed In: Millimeters

### Electrical

Voltage: 125V

Current:

| AWG     | 26  | 28  | 30  |
|---------|-----|-----|-----|
| Amperes | 2.0 | 1.5 | 1.0 |

Dielectric Withstanding Voltage: 500V AC  
Insulation Resistance: 1000 MΩ min.

### Physical

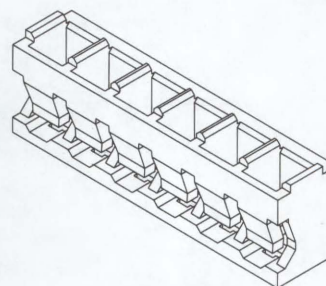
Housing: PBTP, UL 94V-0

Operating Temperature: -40 to +105°C



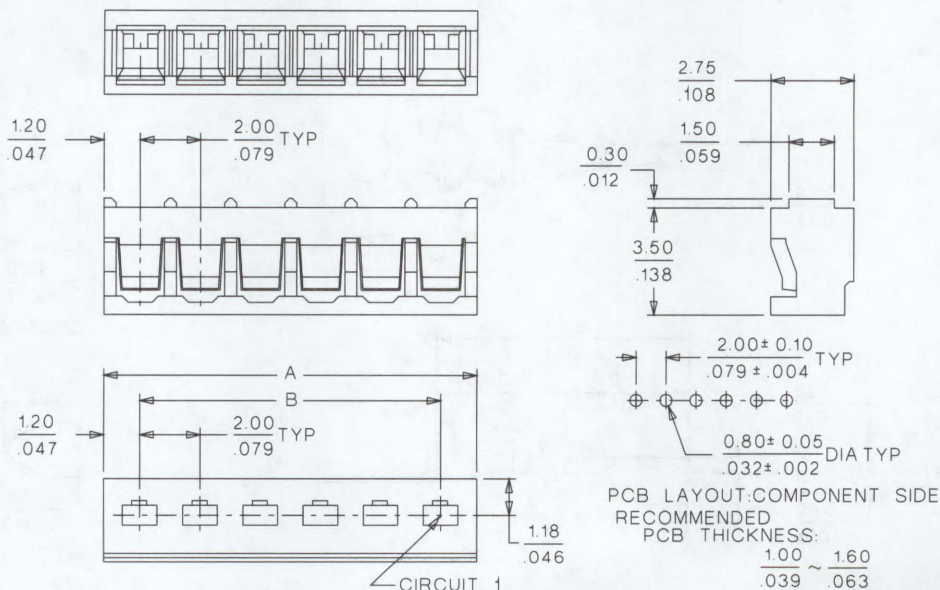
## 2.00mm (.079") Pitch Board-In Connector Housing

51015



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 51015-0200 | 4.40 (.173)   | 2.00 (.079)   |
| 3        | 51015-0300 | 6.40 (.252)   | 4.00 (.157)   |
| 4        | 51015-0400 | 8.40 (.331)   | 6.00 (.236)   |
| 5        | 51015-0500 | 10.40 (.409)  | 8.00 (.314)   |
| 6        | 51015-0600 | 12.40 (.488)  | 10.00 (.393)  |
| 7        | 51015-0700 | 14.40 (.567)  | 12.00 (.472)  |
| 8        | 51015-0800 | 16.40 (.646)  | 14.00 (.551)  |
| 9        | 51015-0900 | 18.40 (.724)  | 16.00 (.629)  |
| 10       | 51015-1000 | 20.40 (.803)  | 18.00 (.708)  |
| 11       | 51015-1100 | 22.40 (.882)  | 20.00 (.787)  |
| 12       | 51015-1200 | 24.40 (.961)  | 22.00 (.866)  |
| 13       | 51015-1300 | 26.40 (1.039) | 24.00 (.944)  |
| 14       | 51015-1400 | 28.40 (1.118) | 26.00 (1.023) |
| 15       | 51015-1500 | 30.40 (1.197) | 28.00 (1.102) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Locking tang secures terminal to housing

### Reference Information

Packaging: Reel or bag

Use With: 5379

Designed In: Millimeters

### Electrical

Voltage: 125V

Current:

| AWG     | 24  | 26  | 28  |
|---------|-----|-----|-----|
| Amperes | 2.0 | 2.0 | 1.5 |

Contact Resistance on Crimped Portion: 5mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Contact: Brass

Plating: Tin

Wire Range: 24 to 28 AWG

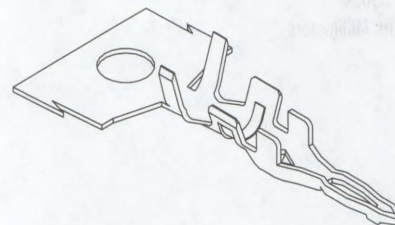
Insulation Range: 1.50mm dia. max.

Strip Length: 1.70 to 2.30mm

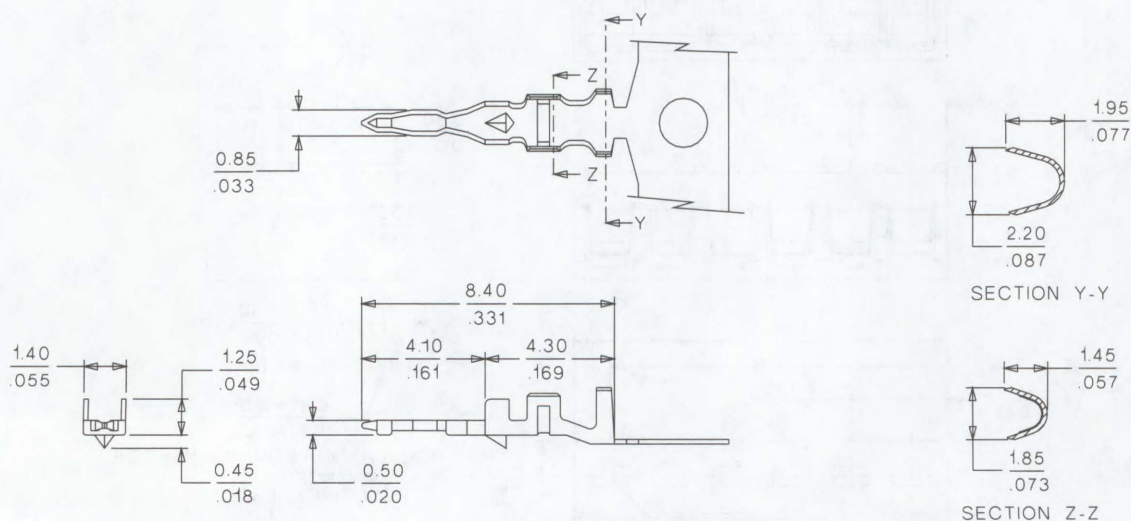


## 2.00mm (.079") Pitch Board-In Connector Terminal

5378



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Order No.  | Terminal |
|------------|----------|
| 39-00-0029 | Reel     |
| 39-00-0030 | Bag      |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Locking windows secure terminal to housing

### Reference Information

Packaging: Bag  
UL File No.: E29179  
Use With: 5378  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current:

| AWG     | 24  | 26  | 28  |
|---------|-----|-----|-----|
| Amperes | 2.0 | 2.0 | 1.5 |

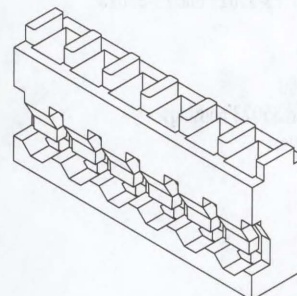
Dielectric Withstanding Voltage: 500V AC  
Insulation Resistance: 1000 MΩ min.

### Physical

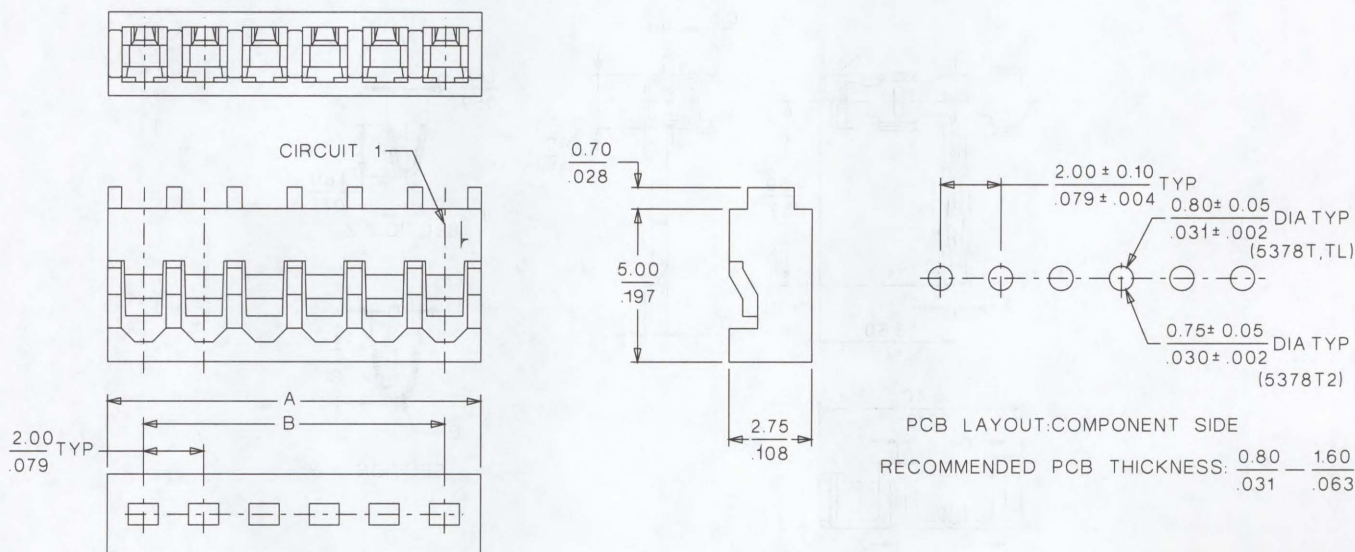
Housing: 6/6 nylon, UL 94V-0  
Operating Temperature: -40 to +105°C

## molex® 2.00mm (.079") Pitch Board-In Connector Housing

5379



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 39-01-0029 | 4.40 (.173)   | 2.00 (.079)   |
| 3        | 39-01-0039 | 6.40 (.252)   | 4.00 (.157)   |
| 4        | 39-01-0049 | 8.40 (.331)   | 6.00 (.236)   |
| 5        | 39-01-0059 | 10.40 (.409)  | 8.00 (.314)   |
| 6        | 39-01-0069 | 12.40 (.488)  | 10.00 (.393)  |
| 7        | 39-01-0079 | 14.40 (.567)  | 12.00 (.472)  |
| 8        | 39-01-0089 | 16.40 (.646)  | 14.00 (.551)  |
| 9        | 39-01-0099 | 18.40 (.724)  | 16.00 (.629)  |
| 10       | 39-01-0109 | 20.40 (.803)  | 18.00 (.708)  |
| 11       | 39-01-0119 | 22.40 (.882)  | 20.00 (.787)  |
| 12       | 39-01-0129 | 24.40 (.961)  | 22.00 (.866)  |
| 13       | 39-01-0139 | 26.40 (1.039) | 24.00 (.944)  |
| 14       | 39-01-0149 | 28.40 (1.118) | 26.00 (1.023) |
| 15       | 39-01-0159 | 30.40 (1.197) | 28.00 (1.102) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Very low profile
- Wide wire range (22 to 30 AWG)
- Locking tab secures terminal to housing
- Diamond-shaped PC tail ensures secure PCB retention

### Reference Information

Product Specification: PS-35022 and PS-35023  
 Packaging: Reel  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Use With: 35022 and 35023 housings  
 Designed In: Millimeters

### Electrical

Voltage: 125V  
 Current:

| AWG     | 22* | 24  | 26  | 28  | 30  |
|---------|-----|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 1.5 | 1.0 | 0.5 |

\*22 AWG available for 35022 housings only

Contact Resistance: 5mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 9.8N (2.2 lb) max.

Contact Retention to Housing: 9.8N (2.2 lb) min.

Wire Pull-Out Force: 22 AWG—34.3N (7.7 lb) min.

Insertion Force to PCB: 9.8N (2.2 lb) max.

### Physical

Contact: See Table

Plating: See Table

Wire Range: 22 to 30 AWG

Insulation Range: 35022—1.90mm dia. max. (22 AWG)

35023—1.50mm dia. max. (24 AWG)



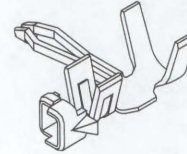
**2.00/2.50mm (.079/.098")**

**Board-In Connector**

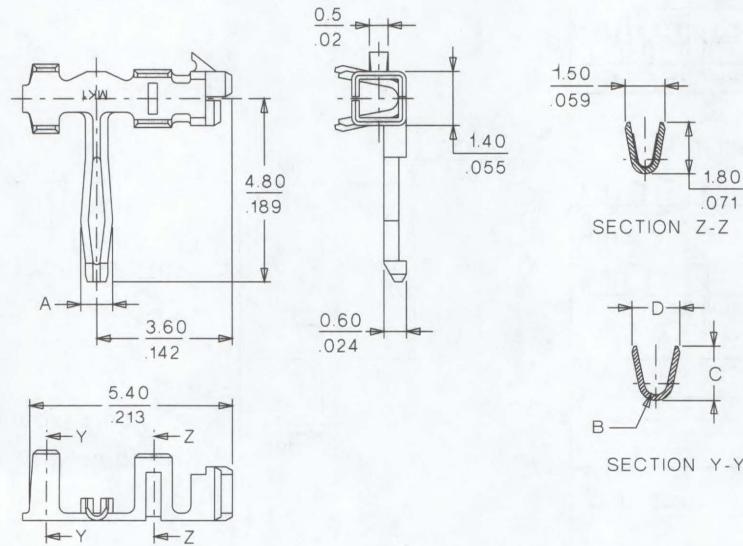
**Crimp Terminal**

**35021**

**Right Angle**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Order No.  | Contact Material | Plating  | Use With Housing | Dimension   |              |             |             |
|------------|------------------|----------|------------------|-------------|--------------|-------------|-------------|
|            |                  |          |                  | A           | B            | C           | D           |
| 35021-1201 | Brass            | Pre-Tin  | 35023            | 0.85 (.033) | R0.40 (.016) | 1.90 (.075) | 1.80 (.071) |
| 35021-1301 | Phosphor Bronze  | Pre-Tin  |                  | 0.85 (.033) | R0.40 (.016) | 1.90 (.075) | 1.80 (.071) |
| 35021-1310 | Phosphor Bronze  | Post-Tin |                  | 0.85 (.033) | R0.40 (.016) | 1.90 (.075) | 1.80 (.071) |
| 35021-1001 | Brass            | Pre-Tin  | 35022            | 1.05 (.041) | R0.70 (.028) | 2.50 (.098) | 2.50 (.098) |
| 35021-1101 | Phosphor Bronze  | Pre-Tin  |                  | 1.05 (.041) | R0.70 (.028) | 2.50 (.098) | 2.50 (.098) |
| 35021-1110 | Phosphor Bronze  | Post-Tin |                  | 1.05 (.041) | R0.70 (.028) | 2.50 (.098) | 2.50 (.098) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Locking tab secures terminal to housing

### Reference Information

Product Specification: PS-35022 and PS-35023

Packaging: Reel

Use With: 35022 and 35023

Designed In: Millimeters

### Electrical

Voltage: 125V

Current:

| AWG     | 22* | 24  | 26  | 28  | 30  |
|---------|-----|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 1.5 | 1.0 | 0.5 |

\* 22 AWG available for 35022 housing only

Contact Resistance: 5mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 9.8N (2.2 lb) max.

Contact Retention to Housing: 9.8N (2.2 lb) min.

Wire Pull-Out Force: 24 AWG—29.4N (6.6 lb) min.

Insertion Force to PCB: 9.8N (2.2 lb) max.

### Physical

Contact: Brass

Plating: Contact Area—Tin

Solder Tail Area—Tin

Underplating—Copper

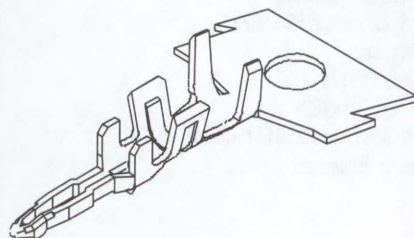
Insulation Diameter: 1.90 and 1.50mm (.075 and .059")

Wire Gauge: 22 to 30 AWG

PCB Thickness: 1.60mm (.063")

**molex®** 2.00/2.50mm (.079/.098")  
**Board-In  
Terminal**

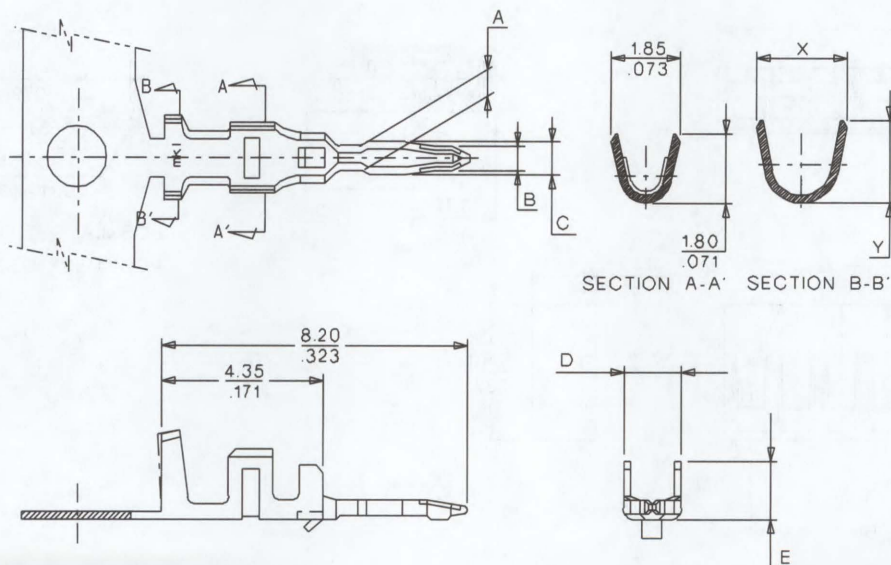
**35044**



**B**

2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

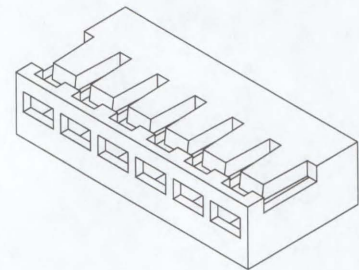
| Order No.  | Use With Housing     | Dimension   |             |             |             |             |             |             |
|------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|            |                      | A           | B           | C           | D           | E           | X           | Y           |
| 35044-9101 | 35023                | 0.65 (.026) | 0.65 (.026) | 0.85 (.033) | 1.40 (.055) | 1.40 (.055) | 2.20 (.087) | 2.30 (.091) |
| 35044-9102 | 2.00mm (.079") pitch |             |             |             |             |             | 2.40 (.094) | 2.15 (.085) |
| 35044-9103 | 35022                | 0.70 (.028) | 0.68 (.027) | 1.05 (.041) | 1.55 (.061) | 1.50 (.059) | 2.20 (.087) | 2.30 (.091) |
| 35044-9104 | 2.50mm (.098") pitch |             |             |             |             |             | 2.40 (.094) | 2.15 (.085) |



## 2.00mm (.079") Pitch Board-In Connector Housing

### 35023

### Right Angle



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 16 circuits
- Low profile (2.85mm)
- Terminal locking window
- Solders directly to PCB

### Reference Information

Product Specification: PS-35023

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Use With: 35021 and 35044 terminal

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 2.5A

Contact Resistance: 5mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 9.8N (2.2 lb) max.

Contact Retention to Housing: 9.8N (2.2 lb) min.

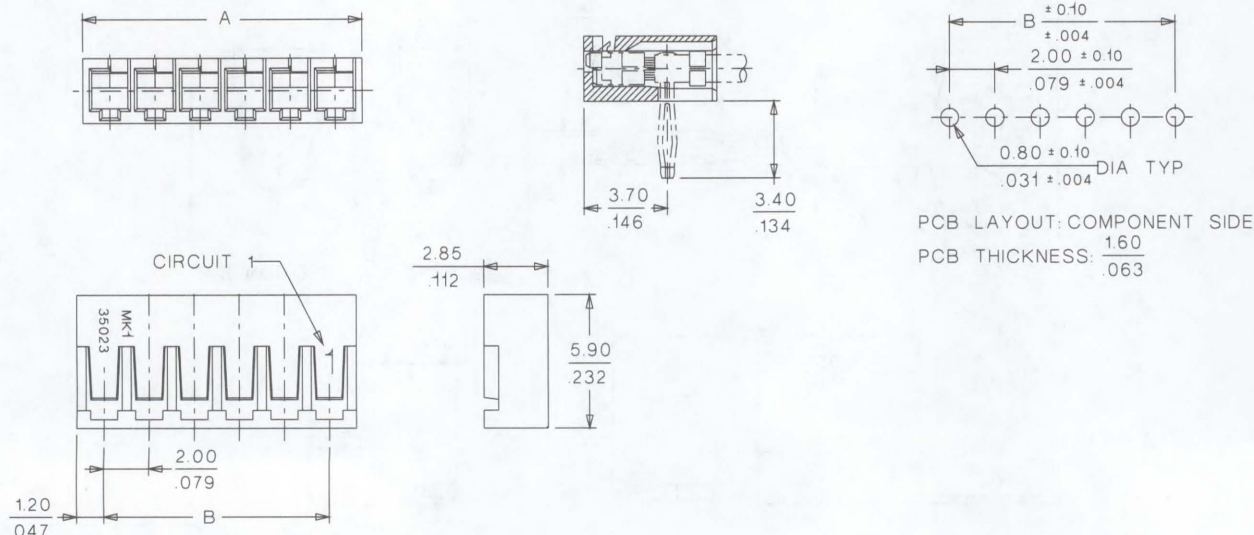
Insertion Force to PCB: 9.81N (2.2 lb)

### Physical

Housing: 6/6 nylon, UL 94V-0

Operating Temperature: -40 to +105°C

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 35023-0002 | 4.40 (.173)   | 2.00 (.079)   |
| 3        | 35023-0003 | 6.40 (.252)   | 4.00 (.157)   |
| 4        | 35023-0004 | 8.40 (.331)   | 6.00 (.236)   |
| 5        | 35023-0005 | 10.40 (.409)  | 8.00 (.315)   |
| 6        | 35023-0006 | 12.40 (.488)  | 10.00 (.394)  |
| 7        | 35023-0007 | 14.40 (.567)  | 12.00 (.472)  |
| 8        | 35023-0008 | 16.40 (.646)  | 14.00 (.551)  |
| 9        | 35023-0009 | 18.40 (.724)  | 16.00 (.630)  |
| 10       | 35023-0010 | 20.40 (.803)  | 18.00 (.709)  |
| 11       | 35023-0011 | 22.40 (.882)  | 20.00 (.787)  |
| 12       | 35023-0012 | 24.40 (.961)  | 22.00 (.866)  |
| 13       | 35023-0013 | 26.40 (1.039) | 24.00 (.945)  |
| 14       | 35023-0014 | 28.40 (1.118) | 26.00 (1.024) |
| 15       | 35023-0015 | 30.40 (1.197) | 28.00 (1.102) |
| 16       | 35023-0016 | 32.40 (1.276) | 30.00 (1.181) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 20 circuits

### Reference Information

Packaging: Tray  
UL File No.: E29179  
Mates With: 5512-NA  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current: 1.5A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

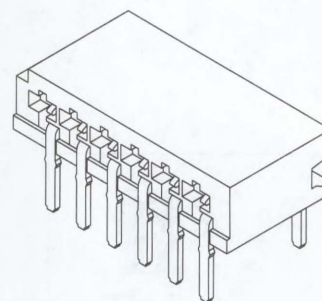
Housing: 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C



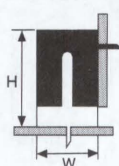
## 2.00mm (.079") Pitch Board-to-Board Receptacle

**5513-NAPB**

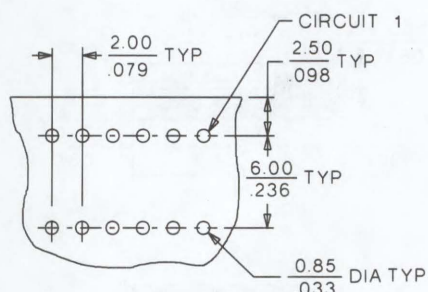
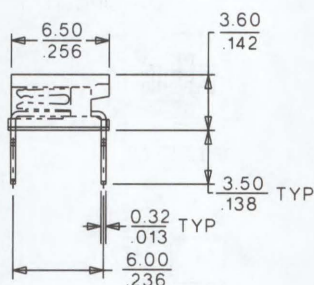
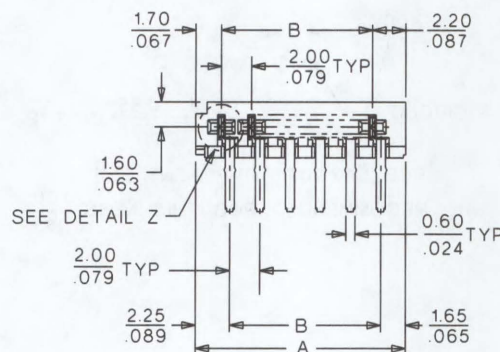
**Right Angle**



**Mating Dimensions**  
5513-NAPB • 5512-NA  
H=8.9mm W=4.4mm

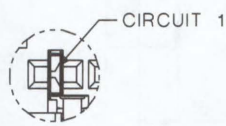


## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS: 1.60 (.063)



DETAIL Z

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 4        | 39-51-3040 | 9.90 (.389)   | 6.00 (.236)   |
| 5        | 39-51-3050 | 11.90 (.468)  | 8.00 (.314)   |
| 6        | 39-51-3060 | 13.90 (.547)  | 10.00 (.393)  |
| 7        | 39-51-3070 | 15.90 (.625)  | 12.00 (.472)  |
| 8        | 39-51-3080 | 17.90 (.704)  | 14.00 (.551)  |
| 9        | 39-51-3090 | 19.90 (.783)  | 16.00 (.629)  |
| 10       | 39-51-3100 | 21.90 (.862)  | 18.00 (.708)  |
| 11       | 39-51-3110 | 23.90 (.940)  | 20.00 (.787)  |
| 12       | 39-51-3120 | 25.90 (1.019) | 22.00 (.866)  |
| 13       | 39-51-3130 | 27.90 (1.098) | 24.00 (.944)  |
| 14       | 39-51-3140 | 29.90 (1.177) | 26.00 (1.023) |
| 15       | 39-51-3150 | 31.90 (1.255) | 28.00 (1.102) |
| 16       | 39-51-3160 | 33.90 (1.334) | 30.00 (1.181) |
| 17       | 39-51-3170 | 35.90 (1.413) | 32.00 (1.259) |
| 18       | 39-51-3180 | 37.90 (1.492) | 34.00 (1.338) |
| 19       | 39-51-3190 | 39.90 (1.570) | 36.00 (1.417) |
| 20       | 39-51-3200 | 41.90 (1.649) | 38.00 (1.496) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 20 circuits

### Reference Information

Packaging: Tray  
UL File No.: E29179  
Mates With: 5512-NA  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current: 1.5A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

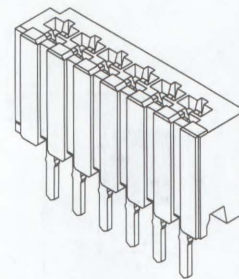
### Physical

Housing: 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C

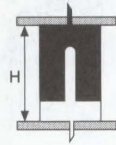
# molex® 2.00mm (.079") Pitch Board-to-Board Receptacle

**5513-NCPB**

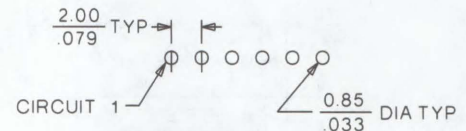
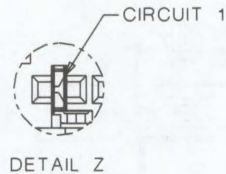
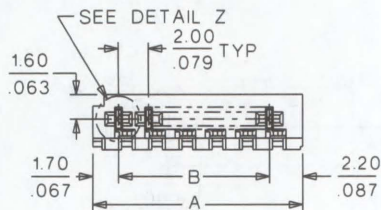
**Straight  
Vertical Stacking**



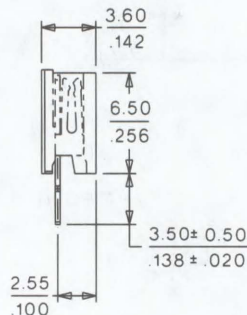
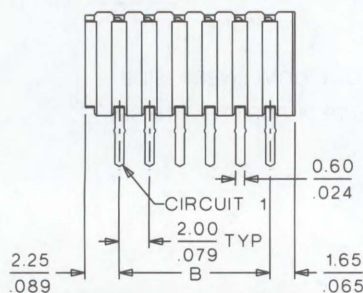
**Mating Dimensions**  
5513-NCPB • 5512-NA  
H=8.9mm W=4.4mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: 1.60 (.063)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 4        | 39-51-3041 | 9.90 (.389)   | 6.00 (.236)   |
| 5        | 39-51-3051 | 11.90 (.468)  | 8.00 (.314)   |
| 6        | 39-51-3061 | 13.90 (.547)  | 10.00 (.393)  |
| 7        | 39-51-3071 | 15.90 (.625)  | 12.00 (.472)  |
| 8        | 39-51-3081 | 17.90 (.704)  | 14.00 (.551)  |
| 9        | 39-51-3091 | 19.90 (.783)  | 16.00 (.629)  |
| 10       | 39-51-3101 | 21.90 (.862)  | 18.00 (.708)  |
| 11       | 39-51-3111 | 23.90 (.940)  | 20.00 (.787)  |
| 12       | 39-51-3121 | 25.90 (1.019) | 22.00 (.866)  |
| 13       | 39-51-3131 | 27.90 (1.098) | 24.00 (.944)  |
| 14       | 39-51-3141 | 29.90 (1.177) | 26.00 (1.023) |
| 15       | 39-51-3151 | 31.90 (1.255) | 28.00 (1.102) |
| 16       | 39-51-3161 | 33.90 (1.334) | 30.00 (1.181) |
| 17       | 39-51-3171 | 35.90 (1.413) | 32.00 (1.259) |
| 18       | 39-51-3181 | 37.90 (1.492) | 34.00 (1.338) |
| 19       | 39-51-3191 | 39.90 (1.570) | 36.00 (1.417) |
| 20       | 39-51-3201 | 41.90 (1.649) | 38.00 (1.496) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 20 circuits

### Reference Information

Packaging: Tray

UL File No.: E29179

Mates With: 5513-NAPB and 5513-NCPB

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0

Contact: Brass

Plating: Tin

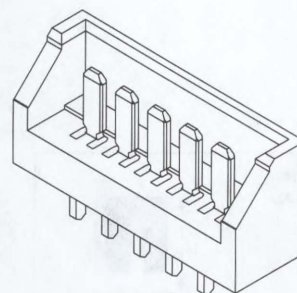
Operating Temperature: -40 to +105°C



## 2.00mm (.079") Pitch Board-to-Board Header

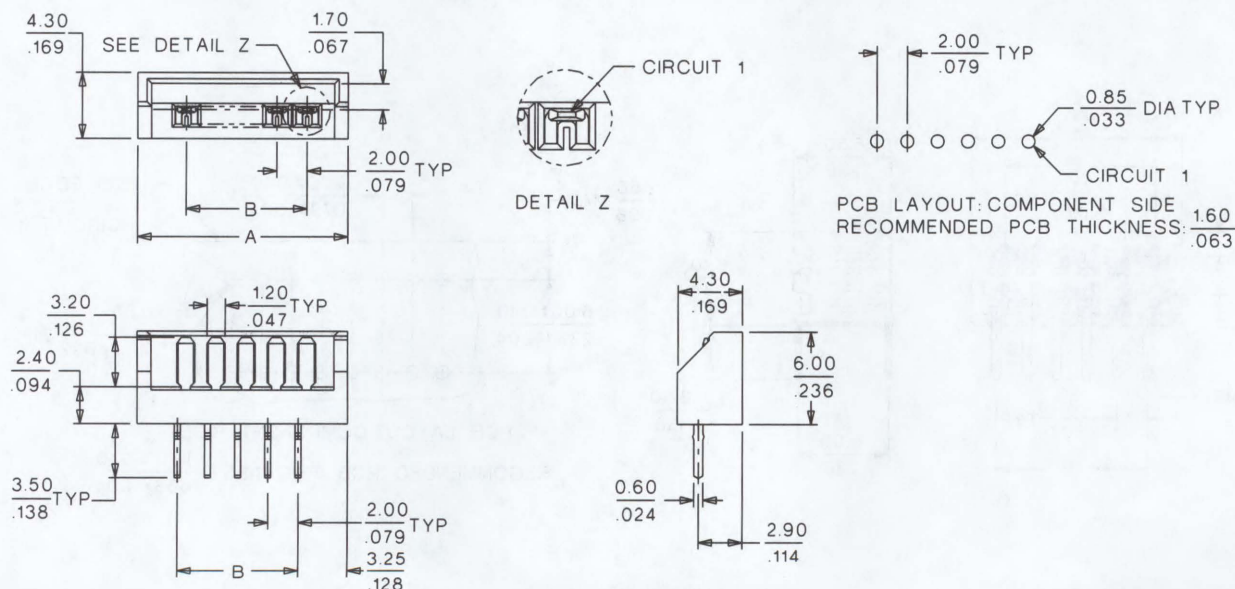
**5512-NA**

**Vertical**



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 4        | 39-26-9046 | 11.90 (.468)  | 6.00 (.236)   |
| 5        | 39-26-9056 | 13.90 (.547)  | 8.00 (.314)   |
| 6        | 39-26-9066 | 15.90 (.625)  | 10.00 (.393)  |
| 7        | 39-26-9076 | 17.90 (.704)  | 12.00 (.472)  |
| 8        | 39-26-9086 | 19.90 (.783)  | 14.00 (.551)  |
| 9        | 39-26-9096 | 21.90 (.862)  | 16.00 (.629)  |
| 10       | 39-26-9106 | 23.90 (.940)  | 18.00 (.708)  |
| 11       | 39-26-9116 | 25.90 (1.019) | 20.00 (.787)  |
| 12       | 39-26-9126 | 27.90 (1.098) | 22.00 (.866)  |
| 13       | 39-26-9136 | 29.90 (1.177) | 24.00 (.944)  |
| 14       | 39-26-9146 | 31.90 (1.255) | 26.00 (1.023) |
| 15       | 39-26-9156 | 33.90 (1.334) | 28.00 (1.102) |
| 16       | 39-26-9166 | 35.90 (1.413) | 30.00 (1.181) |
| 17       | 39-26-9176 | 37.90 (1.492) | 32.00 (1.259) |
| 18       | 39-26-9186 | 39.90 (1.570) | 34.00 (1.338) |
| 19       | 39-26-9196 | 41.90 (1.649) | 36.00 (1.417) |
| 20       | 39-26-9206 | 43.90 (1.728) | 38.00 (1.496) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 6 to 30 circuits

### Reference Information

Packaging: Tray  
UL File No.: E29179  
Mates With: 5532-NA  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current: 1.5A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

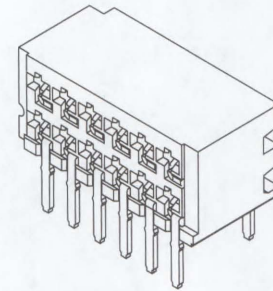
Housing: 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C



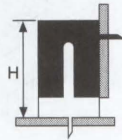
## 2.00mm (.079") Pitch Board-to-Board Receptacle

**5533-NAPB**

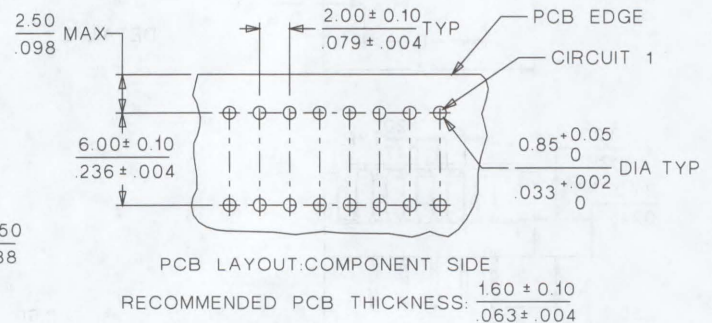
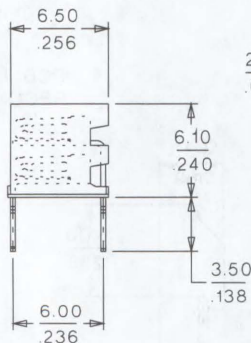
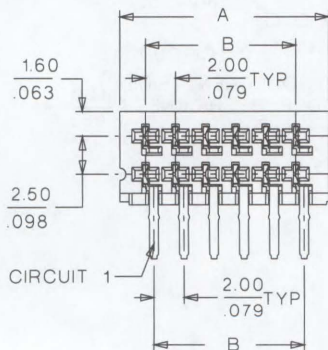
## Dual Row Right Angle



Mating Dimensions  
5533-NAPB • 5532-NA  
H=8.9mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 6        | 39-51-2069 | 7.90 (.311)   | 4.00 (.157)   |
| 8        | 39-51-2089 | 9.90 (.390)   | 6.00 (.236)   |
| 10       | 39-51-2109 | 11.90 (.469)  | 8.00 (.315)   |
| 12       | 39-51-2129 | 13.90 (.547)  | 10.00 (.394)  |
| 14       | 39-51-2149 | 15.90 (.626)  | 12.00 (.472)  |
| 16       | 39-51-2169 | 17.90 (.705)  | 14.00 (.551)  |
| 18       | 39-51-2189 | 19.90 (.783)  | 16.00 (.630)  |
| 20       | 39-51-2209 | 21.90 (.862)  | 18.00 (.709)  |
| 22       | 39-51-2229 | 23.90 (.941)  | 20.00 (.787)  |
| 24       | 39-51-2249 | 25.90 (1.020) | 22.00 (.866)  |
| 26       | 39-51-2269 | 27.90 (1.098) | 24.00 (.945)  |
| 28       | 39-51-2289 | 29.90 (1.177) | 26.00 (1.024) |
| 30       | 39-51-2309 | 31.90 (1.256) | 28.00 (1.102) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 6 to 30 circuits

### Reference Information

Packaging: Tray

UL File No.: E29179

Mates With: 5532-NA

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0

Contact: Phosphor Bronze

Plating: Tin

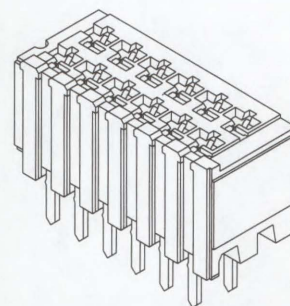
Operating Temperature: -40 to +105°C



## 2.00mm (.079") Pitch Board-to-Board Receptacle

### 5533-NCPB

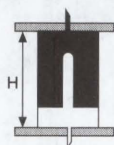
## Dual Row, Straight Vertical Stacking



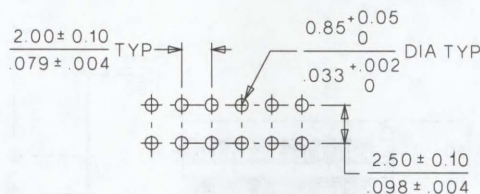
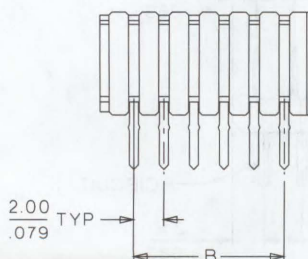
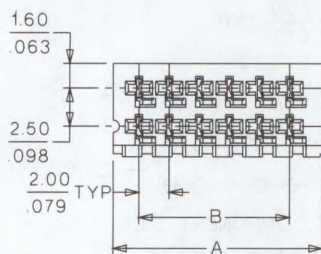
### Mating Dimensions

5533-NCPB • 5532-NA

H=8.9mm

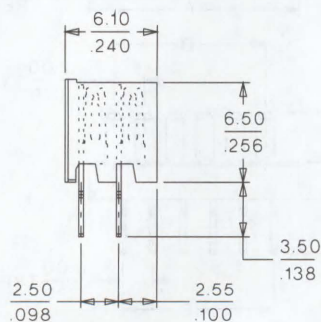


## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS: 1.60 ± 0.10  
.063 ± .004



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 6        | 39-51-3062 | 7.90 (.311)   | 4.00 (.157)   |
| 8        | 39-51-3082 | 9.90 (.390)   | 6.00 (.236)   |
| 10       | 39-51-3102 | 11.90 (.469)  | 8.00 (.315)   |
| 12       | 39-51-3122 | 13.90 (.547)  | 10.00 (.394)  |
| 14       | 39-51-3142 | 15.90 (.626)  | 12.00 (.472)  |
| 16       | 39-51-3162 | 17.90 (.705)  | 14.00 (.551)  |
| 18       | 39-51-3182 | 19.90 (.783)  | 16.00 (.630)  |
| 20       | 39-51-3202 | 21.90 (.862)  | 18.00 (.709)  |
| 22       | 39-51-3222 | 23.90 (.941)  | 20.00 (.787)  |
| 24       | 39-51-3242 | 25.90 (1.020) | 22.00 (.866)  |
| 26       | 39-51-3262 | 27.90 (1.098) | 24.00 (.945)  |
| 28       | 39-51-3282 | 29.90 (1.177) | 26.00 (1.024) |
| 30       | 39-51-3302 | 31.90 (1.256) | 28.00 (1.102) |

2.00 to 2.50mm (.079 to .098") Pitch

B

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 6 to 30 circuits

### Reference Information

Packaging: Tray

UL File No.: E29179

Mates With: 5533-NAPB and 5533-NCPB

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0

Contact: Brass

Plating: Tin

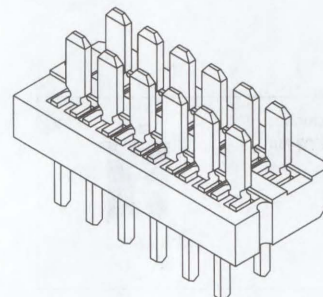
Operating Temperature: -40 to +105°C



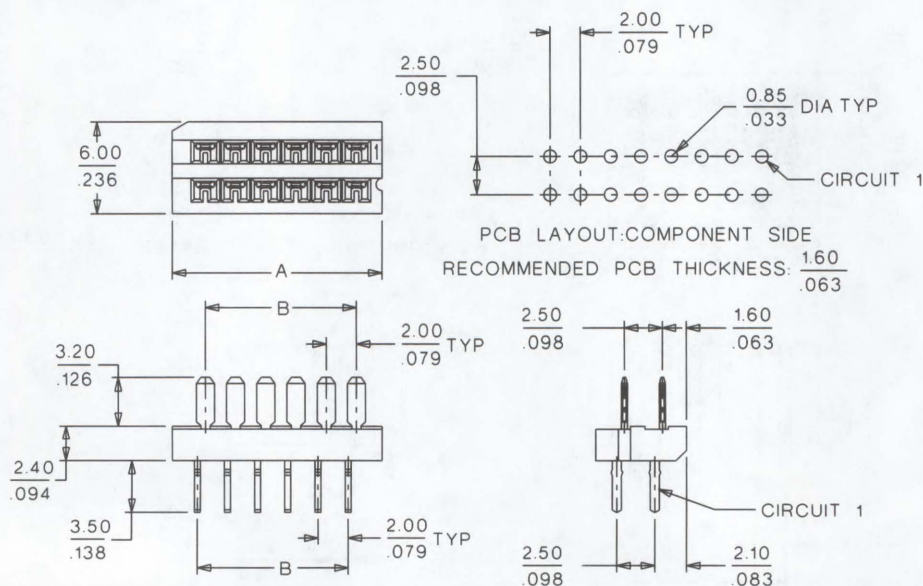
## 2.00mm (.079") Pitch Board-to-Board Header

**5532-NA**

## Dual Row, Straight Vertical Stacking



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 6        | 39-26-9067 | 7.90 (.311)   | 4.00 (.157)   |
| 8        | 39-26-9087 | 9.90 (.390)   | 6.00 (.236)   |
| 10       | 39-26-9107 | 11.90 (.469)  | 8.00 (.314)   |
| 12       | 39-26-9127 | 13.90 (.547)  | 10.00 (.393)  |
| 14       | 39-26-9147 | 15.90 (.626)  | 12.00 (.472)  |
| 16       | 39-26-9167 | 17.90 (.705)  | 14.00 (.551)  |
| 18       | 39-26-9187 | 19.90 (.783)  | 16.00 (.629)  |
| 20       | 39-26-9207 | 21.90 (.862)  | 18.00 (.708)  |
| 22       | 39-26-9227 | 23.90 (.941)  | 20.00 (.787)  |
| 24       | 39-26-9247 | 25.90 (1.020) | 22.00 (.866)  |
| 26       | 39-26-9267 | 27.90 (1.098) | 24.00 (.944)  |
| 28       | 39-26-9287 | 29.90 (1.177) | 26.00 (1.023) |
| 30       | 39-26-9307 | 31.90 (1.256) | 28.00 (1.102) |





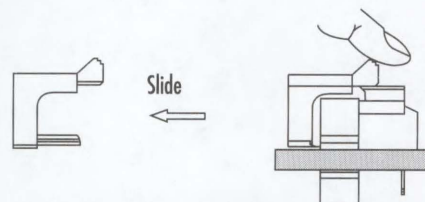
## 2.00mm (.079") Pitch Board-to-Board Floating Bottom Entry System Introduction

Molex's "floating" board-to-board system is designed to make PCB assembly easier, faster and more economical.

With traditional board-to-board systems it is often difficult to achieve proper alignment in situations using several connectors. Molex's floating system combines specially-tapered lead-ins and strong blade pins with up to 1.00mm (.039") of tolerance in 3 areas (X, Y and Z axis) to help guide connectors and headers together.

The system is ideally suited for robotic assembly, but also makes manual assembly easier.

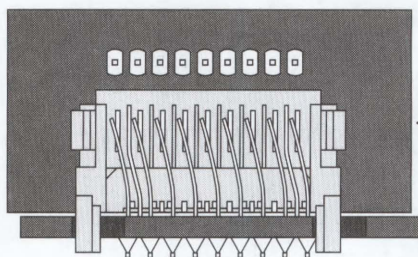
FLUX COVER



The bottom-entry housing is provided with a plastic cover to protect the contact area from flux during soldering.

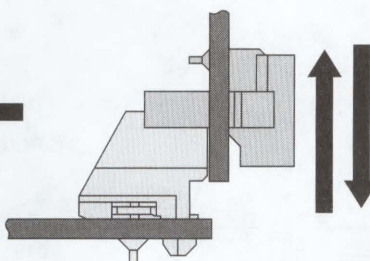
**B**  
2.00 to 2.50mm (.079 to .098") Pitch

**X-Axis (Side-to-Side)**



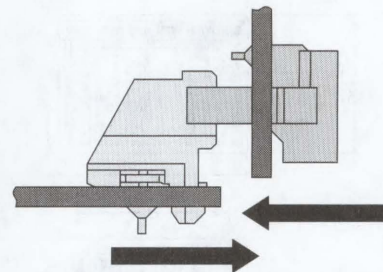
Plastic cut away from the back of the header enables the pins to move from side-to-side without affecting the solder joints. Mounting pegs in expanded slots enable the header itself to move back and forth as well.

**Y-Axis (Up-Down)**



Insertion is made easier by terminal slots that are longer than the blade-like pins. After assembly, the connector can be moved up and down 1.00mm (.039").

**Z-Axis (In-Out)**



The 0.60mm pins allow for secure contact with the connector either fully mated or up to 1.00mm (.039") apart.

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 20 circuits

### Reference Information

Packaging: Tray  
Mates With: 53244  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current: 1.0A  
Contact Resistance: 40mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

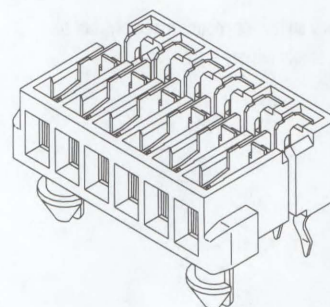
Housing: 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C



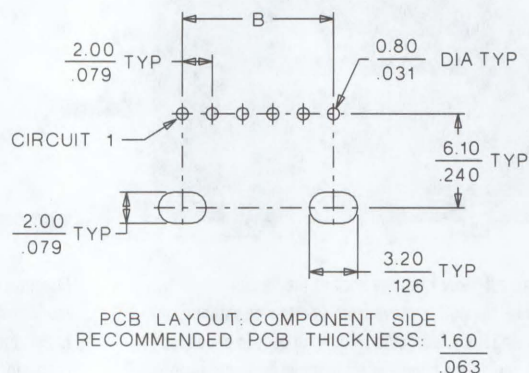
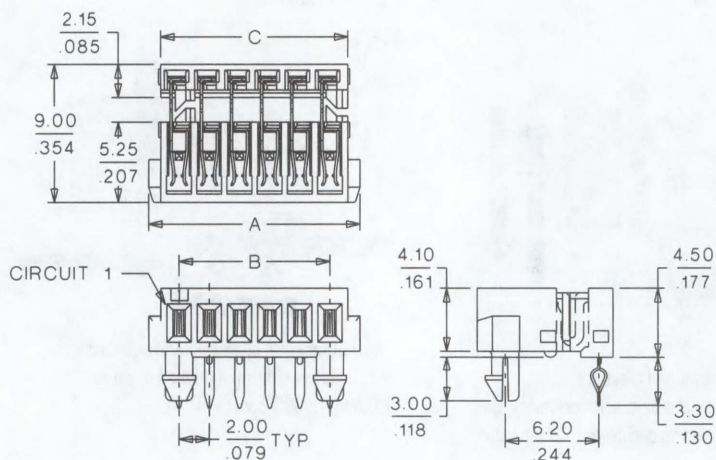
## 2.00mm (.079") Pitch Board-to-Board Receptacle

**52330**

### Floating-Type Right Angle



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 4        | 52330-0417 | 10.00 (.394)  | 6.00 (.236)   | 8.40 (.331)   |
| 5        | 52330-0517 | 12.00 (.472)  | 8.00 (.314)   | 10.40 (.409)  |
| 6        | 52330-0617 | 14.00 (.551)  | 10.00 (.393)  | 12.40 (.488)  |
| 7        | 52330-0717 | 16.00 (.629)  | 12.00 (.472)  | 14.40 (.566)  |
| 8        | 52330-0817 | 18.00 (.709)  | 14.00 (.551)  | 16.40 (.646)  |
| 9        | 52330-0917 | 20.00 (.787)  | 16.00 (.630)  | 18.40 (.724)  |
| 10       | 52330-1017 | 22.00 (.866)  | 18.00 (.708)  | 20.40 (.803)  |
| 11       | 52330-1117 | 24.00 (.944)  | 20.00 (.787)  | 22.40 (.881)  |
| 12       | 52330-1217 | 26.00 (1.024) | 22.00 (.866)  | 24.40 (.961)  |
| 13       | 52330-1317 | 28.00 (1.102) | 24.00 (.945)  | 26.40 (1.039) |
| 14       | 52330-1417 | 30.00 (1.181) | 26.00 (1.023) | 28.40 (1.118) |
| 15       | 52330-1517 | 32.00 (1.259) | 28.00 (1.102) | 30.40 (1.196) |
| 16       | 52330-1617 | 34.00 (1.339) | 30.00 (1.181) | 32.40 (1.276) |
| 17       | 52330-1717 | 36.00 (1.417) | 32.00 (1.260) | 34.40 (1.354) |
| 18       | 52330-1817 | 38.00 (1.496) | 34.00 (1.338) | 36.40 (1.433) |
| 19       | 52330-1917 | 40.00 (1.574) | 36.00 (1.417) | 38.40 (1.511) |
| 20       | 52330-2017 | 42.00 (1.654) | 38.00 (1.496) | 40.40 (1.591) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 4 to 20 circuits
- Polarized
- Chamfered end walls for ease of assembly

### Reference Information

Packaging: Tray

Mates With: 52330

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.0A

Contact Resistance: 40mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0

Contact: Brass

Plating: Tin

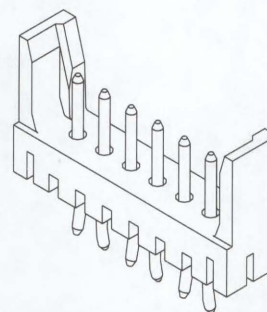
Operating Temperature: -40 to +105°C



## 2.00mm (.079") Pitch Board-to-Board Header

**53244**

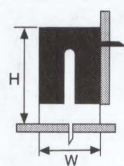
## Floating-Type Vertical



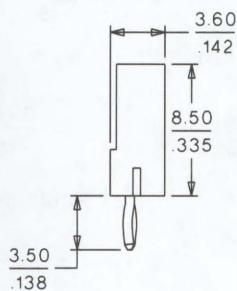
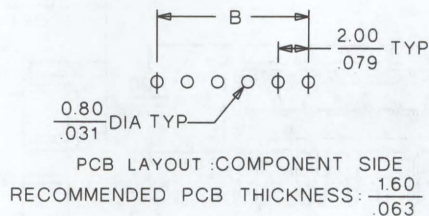
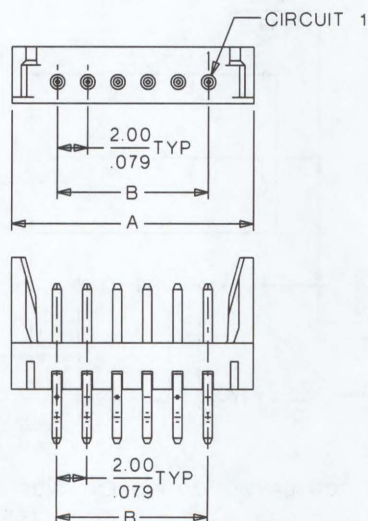
### Mating Dimensions

53244 • 52330

H=4.55mm W=12.55mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 4        | 53244-0417 | 12.00 (.472)  | 6.00 (.236)   |
| 5        | 53244-0517 | 14.00 (.551)  | 8.00 (.314)   |
| 6        | 53244-0617 | 16.00 (.630)  | 10.00 (.393)  |
| 7        | 53244-0717 | 18.00 (.708)  | 12.00 (.472)  |
| 8        | 53244-0817 | 20.00 (.787)  | 14.00 (.551)  |
| 9        | 53244-0917 | 22.00 (.866)  | 16.00 (.630)  |
| 10       | 53244-1017 | 24.00 (.945)  | 18.00 (.708)  |
| 11       | 53244-1117 | 26.00 (1.023) | 20.00 (.787)  |
| 12       | 53244-1217 | 28.00 (1.102) | 22.00 (.866)  |
| 13       | 53244-1317 | 30.00 (1.181) | 24.00 (.945)  |
| 14       | 53244-1417 | 32.00 (1.260) | 26.00 (1.023) |
| 15       | 53244-1517 | 34.00 (1.338) | 28.00 (1.102) |
| 16       | 53244-1617 | 36.00 (1.417) | 30.00 (1.181) |
| 17       | 53244-1717 | 38.00 (1.496) | 32.00 (1.260) |
| 18       | 53244-1817 | 40.00 (1.575) | 34.00 (1.338) |
| 19       | 53244-1917 | 42.00 (1.653) | 36.00 (1.417) |
| 20       | 53244-2017 | 44.00 (1.732) | 38.00 (1.496) |

2.00 to 2.50mm (.079 to .098") Pitch

B

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 6 to 15 circuits

### Reference Information

Packaging: Tray

Mates With: 53114

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0

Cover: 6/6 nylon, UL 94V-2

Contact: Phosphor Bronze

Plating: Tin

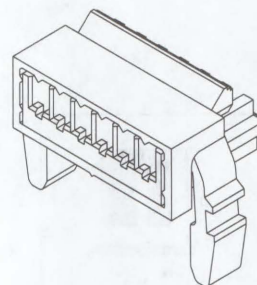
Operating Temperature: -40 to +105°C



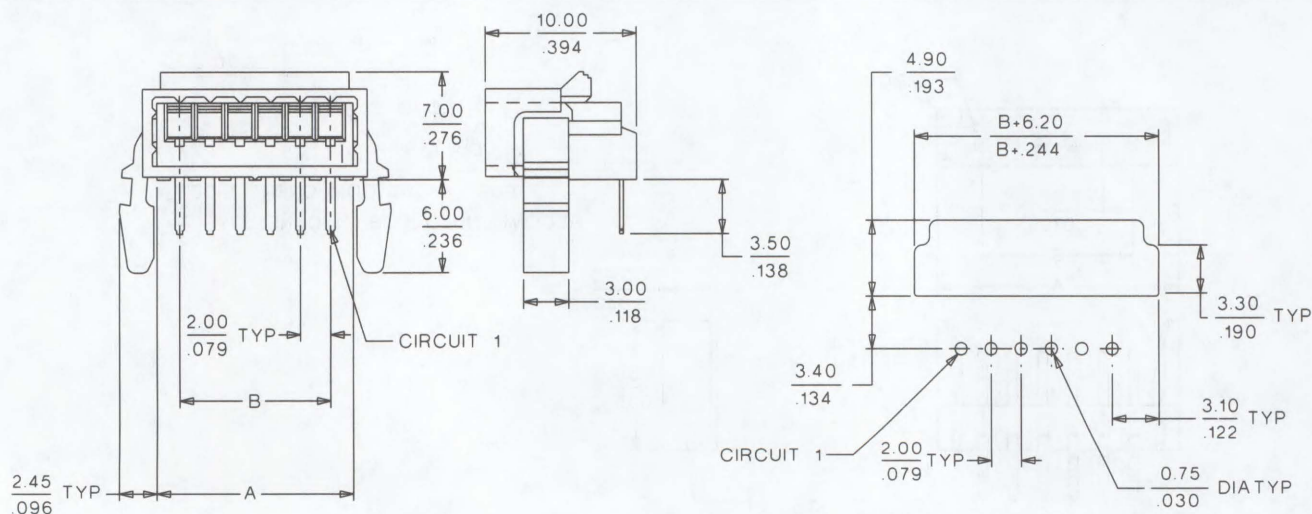
## 2.00mm (.079") Pitch Board-to-Board Receptacle

52170

Floating-Type



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS: 1.60  
0.063

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 6        | 52170-0610 | 13.00 (.512)  | 10.00 (.394)  |
| 7        | 52170-0710 | 15.00 (.590)  | 12.00 (.472)  |
| 8        | 52170-0810 | 17.00 (.669)  | 14.00 (.551)  |
| 9        | 52170-0910 | 19.00 (.748)  | 16.00 (.630)  |
| 10       | 52170-1010 | 21.00 (.826)  | 18.00 (.709)  |
| 11       | 52170-1110 | 23.00 (.905)  | 20.00 (.787)  |
| 12       | 52170-1210 | 25.00 (.984)  | 22.00 (.866)  |
| 13       | 52170-1310 | 27.00 (1.062) | 24.00 (.944)  |
| 14       | 52170-1410 | 29.00 (1.141) | 26.00 (1.023) |
| 15       | 52170-1510 | 31.00 (1.220) | 28.00 (1.102) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 6 to 15 circuits
- Strong blade pins provide long contact area and protection during mating

### Reference Information

Packaging: Tray  
Mates With: 52170  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current: 1.5A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

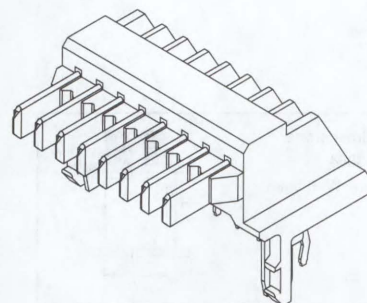
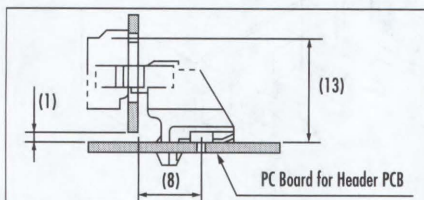
Housing: 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C



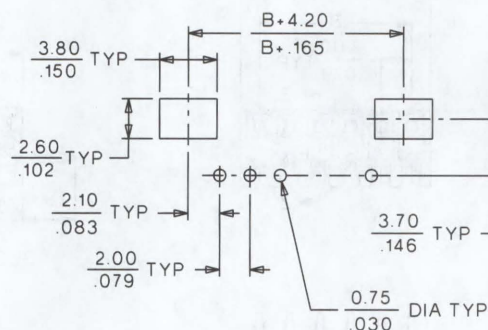
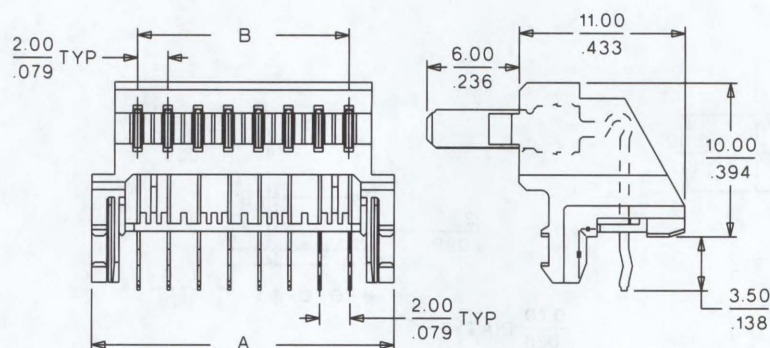
## 2.00mm (.079") Pitch Board-to-Board Header

**53114**

**Floating-Type**



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS :  $\frac{1.60}{.063}$

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 6        | 53114-0610 | 16.00 (.629)  | 10.00 (.394)  |
| 7        | 53114-0710 | 18.00 (.708)  | 12.00 (.472)  |
| 8        | 53114-0810 | 20.00 (.787)  | 14.00 (.551)  |
| 9        | 53114-0910 | 22.00 (.866)  | 16.00 (.630)  |
| 10       | 53114-1010 | 24.00 (.944)  | 18.00 (.709)  |
| 11       | 53114-1110 | 26.00 (1.023) | 20.00 (.787)  |
| 12       | 53114-1210 | 28.00 (1.102) | 22.00 (.866)  |
| 13       | 53114-1310 | 30.00 (1.181) | 24.00 (.944)  |
| 14       | 53114-1410 | 32.00 (1.259) | 26.00 (1.023) |
| 15       | 53114-1510 | 34.00 (1.338) | 28.00 (1.102) |

**B**  
2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 5 to 15 circuits

### Reference Information

Packaging: Tray  
Mates With: 53064 and 53095  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current: 1.5A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

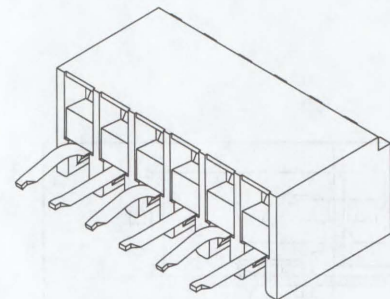
Housing: 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C



## 2.00mm (.079") Pitch Board-to-Board Receptacle

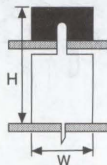
**52084**

### Bottom Entry

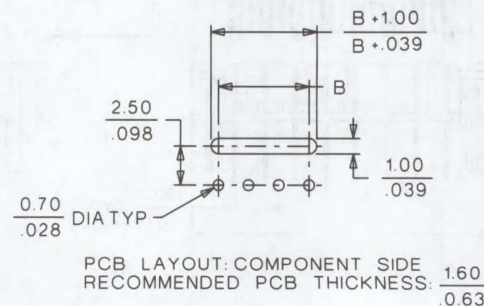
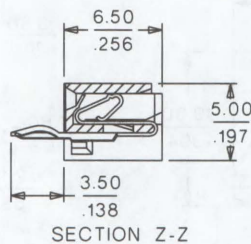
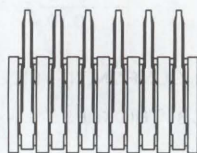
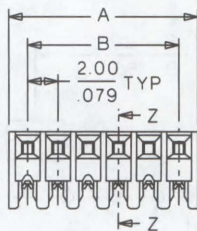


#### Mating Dimensions

52084 • 53064  
H=27.1mm W=6.6mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 5        | 52084-0510 | 10.50 (.413)  | 8.00 (.315)   |
| 6        | 52084-0610 | 12.50 (.492)  | 10.00 (.394)  |
| 7        | 52084-0710 | 14.50 (.571)  | 12.00 (.472)  |
| 8        | 52084-0810 | 16.50 (.650)  | 14.00 (.551)  |
| 9        | 52084-0910 | 18.50 (.728)  | 16.00 (.630)  |
| 10       | 52084-1010 | 20.50 (.807)  | 18.00 (.709)  |
| 11       | 52084-1110 | 22.50 (.886)  | 20.00 (.787)  |
| 12       | 52084-1210 | 24.50 (.965)  | 22.00 (.866)  |
| 13       | 52084-1310 | 26.50 (1.043) | 24.00 (.949)  |
| 14       | 52084-1410 | 28.50 (1.122) | 26.00 (1.024) |
| 15       | 52084-1510 | 30.50 (1.201) | 28.00 (1.102) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 5 to 15 circuits

### Reference Information

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

Mates With: 53064

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0

Contact: Phosphor Bronze

Plating: Tin

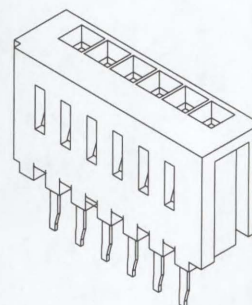
Operating Temperature: -40 to +105°C



## 2.00mm (.079") Pitch Board-to-Board Receptacle

**52075**

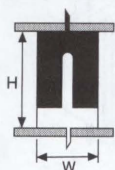
## Vertical Stacking



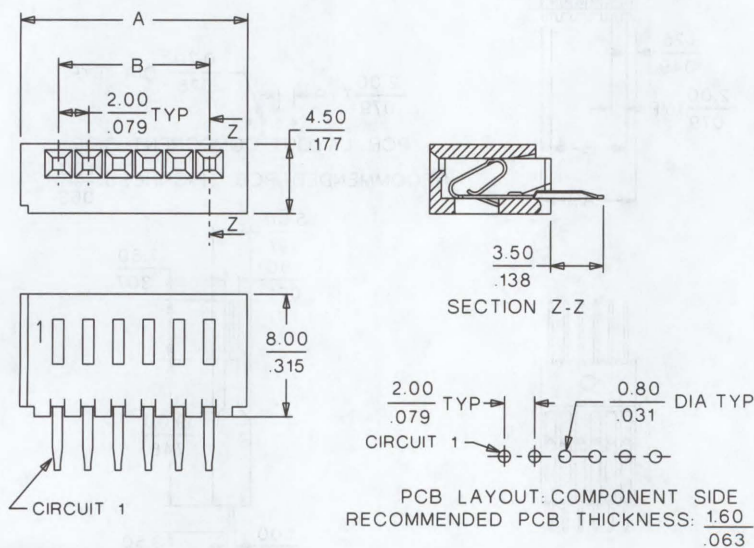
### Mating Dimensions

52075 • 53064

H=27.0mm W=5.7mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 5        | 52075-0510 | 13.00 (.511)  | 8.00 (.314)   |
| 6        | 52075-0610 | 15.00 (.590)  | 10.00 (.393)  |
| 7        | 52075-0710 | 17.00 (.669)  | 12.00 (.472)  |
| 8        | 52075-0810 | 19.00 (.748)  | 14.00 (.551)  |
| 9        | 52075-0910 | 21.00 (.826)  | 16.00 (.629)  |
| 10       | 52075-1010 | 23.00 (.905)  | 18.00 (.708)  |
| 11       | 52075-1110 | 25.00 (.984)  | 20.00 (.787)  |
| 12       | 52075-1210 | 27.00 (1.062) | 22.00 (.866)  |
| 13       | 52075-1310 | 29.00 (1.141) | 24.00 (.944)  |
| 14       | 52075-1410 | 31.00 (1.220) | 26.00 (1.023) |
| 15       | 52075-1510 | 33.00 (1.299) | 28.00 (1.102) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 5 to 10 circuits

### Reference Information

Packaging: Bag  
Mates With: 52075 and 52084  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current: 1.5A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

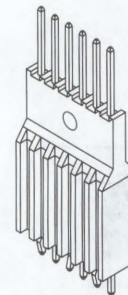
Housing: 6/6 nylon, UL 94V-0  
Contact: Brass  
Plating: Tin  
Operating Temperature: -40 to +105°C



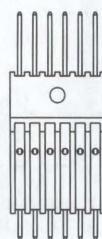
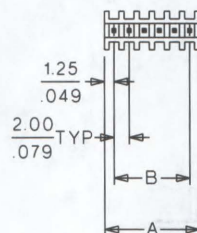
## 2.00mm (.079") Pitch Board-to-Board Header

**53064**

**Vertical**



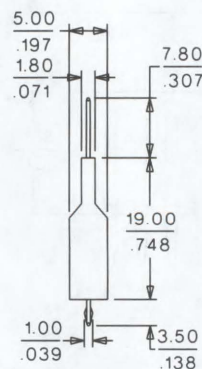
## CATALOG DRAWING (FOR REFERENCE ONLY)



2.00  
.079 TYP

0.70  
.028 DIA TYP

PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: 1.60  
.063



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |              |
|----------|------------|--------------|--------------|
|          |            | A            | B            |
| 5        | 53064-0510 | 10.50 (.413) | 8.00 (.315)  |
| 6        | 53064-0610 | 12.50 (.492) | 10.00 (.394) |
| 7        | 53064-0710 | 14.50 (.571) | 12.00 (.472) |
| 8        | 53064-0810 | 16.50 (.650) | 14.00 (.551) |
| 9        | 53064-0910 | 18.50 (.728) | 16.00 (.630) |
| 10       | 53064-1010 | 20.50 (.807) | 18.00 (.709) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 5 to 15 circuits

### Reference Information

Packaging: Bag

Mates With: 52084

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0

Contact: Brass

Plating: Tin

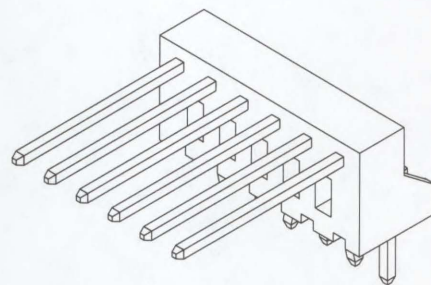
Operating Temperature: -40 to +105°C



## 2.00mm (.079") Pitch Board-to-Board Header

**53095**

**Right Angle**

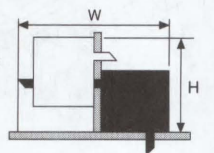


2.00 to 2.50mm (.079 to .098") Pitch

### Mating Dimensions 1

53095 • 52084

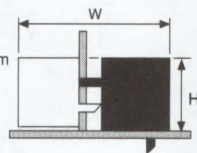
H=8.8mm W=15.05mm



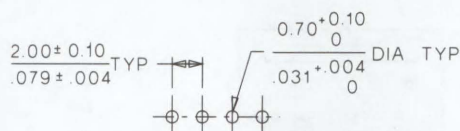
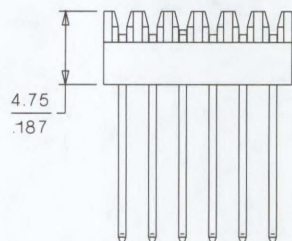
### Mating Dimensions 2

53095 • 52084

H=5.55mm W=15.05mm

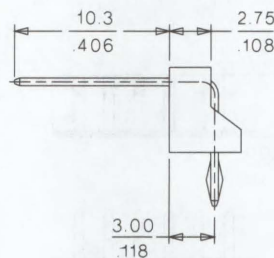
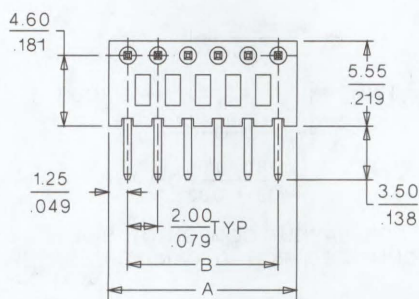


## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS: 1.60 ± 0.10 / .063 ± .004



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 5        | 53095-0510 | 10.50 (.413)  | 8.00 (.315)   |
| 6        | 53095-0610 | 12.50 (.492)  | 10.00 (.394)  |
| 7        | 53095-0710 | 14.50 (.571)  | 12.00 (.472)  |
| 8        | 53095-0810 | 16.50 (.650)  | 14.00 (.551)  |
| 9        | 53095-0910 | 18.50 (.728)  | 16.00 (.630)  |
| 10       | 53095-1010 | 20.50 (.807)  | 18.00 (.709)  |
| 11       | 53095-1110 | 22.50 (.886)  | 20.00 (.787)  |
| 12       | 53095-1210 | 24.50 (.965)  | 22.00 (.866)  |
| 13       | 53095-1310 | 26.50 (1.043) | 24.00 (.945)  |
| 14       | 53095-1410 | 28.50 (1.122) | 26.00 (1.024) |
| 15       | 53095-1510 | 30.50 (1.201) | 28.00 (1.102) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 3 to 20 circuits

### Reference Information

Packaging: Tray  
Mates With: 53290  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current: 1.5A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

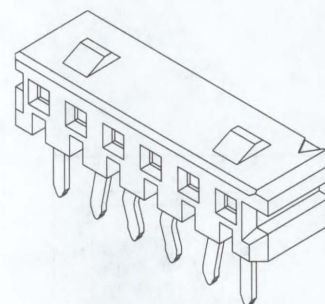
Housing: Glass-filled PBTP, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C



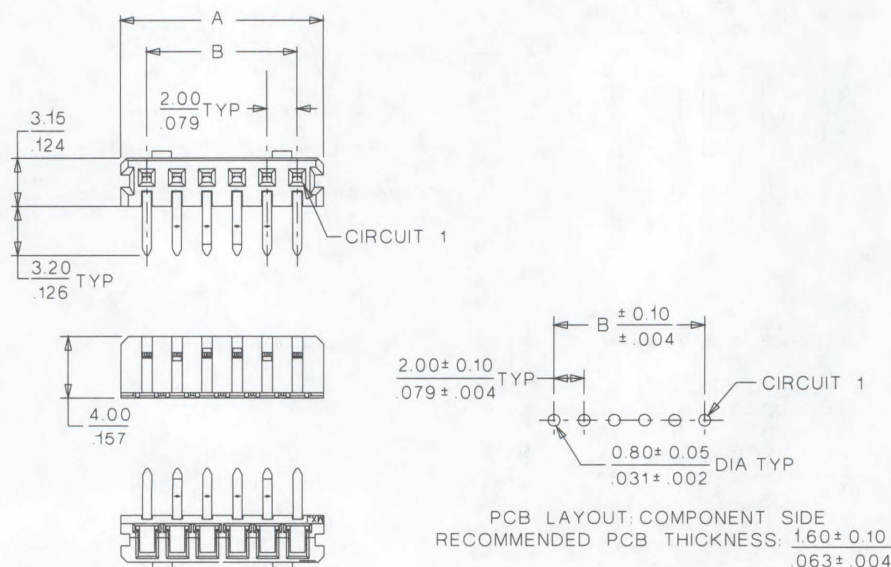
## 2.00mm (.079") Pitch Board-to-Board Receptacle

**52418**

**Right Angle**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 3        | 52418-0310 | 7.50 (.295)   | 4.00 (.157)   |
| 4        | 52418-0410 | 9.50 (.374)   | 6.00 (.236)   |
| 5        | 52418-0510 | 11.50 (.453)  | 8.00 (.315)   |
| 6        | 52418-0610 | 13.50 (.531)  | 10.00 (.394)  |
| 7        | 52418-0710 | 15.50 (.610)  | 12.00 (.472)  |
| 8        | 52418-0810 | 17.50 (.689)  | 14.00 (.551)  |
| 9        | 52418-0910 | 19.50 (.768)  | 16.00 (.630)  |
| 10       | 52418-1010 | 21.50 (.846)  | 18.00 (.709)  |
| 11       | 52418-1110 | 23.50 (.925)  | 20.00 (.787)  |
| 12       | 52418-1210 | 25.50 (1.004) | 22.00 (.866)  |
| 13       | 52418-1310 | 27.50 (1.083) | 24.00 (.945)  |
| 14       | 52418-1410 | 29.50 (1.161) | 26.00 (1.024) |
| 15       | 52418-1510 | 31.50 (1.240) | 28.00 (1.102) |
| 16       | 52418-1610 | 33.50 (1.319) | 30.00 (1.181) |
| 17       | 52418-1710 | 35.50 (1.398) | 32.00 (1.260) |
| 18       | 52418-1810 | 37.50 (1.476) | 34.00 (1.339) |
| 19       | 52418-1910 | 39.50 (1.555) | 36.00 (1.417) |
| 20       | 52418-2010 | 41.50 (1.634) | 38.00 (1.496) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 3 to 20 circuits
- Friction lock and kinked tails provide additional mating and PCB retention
- Non-kinked tails available; contact Molex

### Reference Information

Packaging: Tray

Mates With: 52418

Designed In: Millimeters

### Electrical

Voltage: 125V

Current: 1.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: Glass-filled PBTP, UL 94V-0

Contact: Brass

Plating: Tin

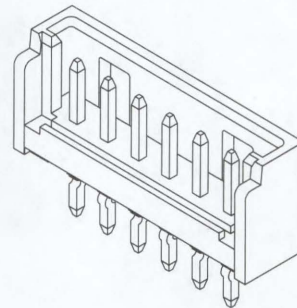
Operating Temperature: -40 to +105°C



## 2.00mm (.079") Pitch Board-to-Board Header

**53290**

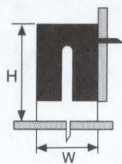
**Vertical**



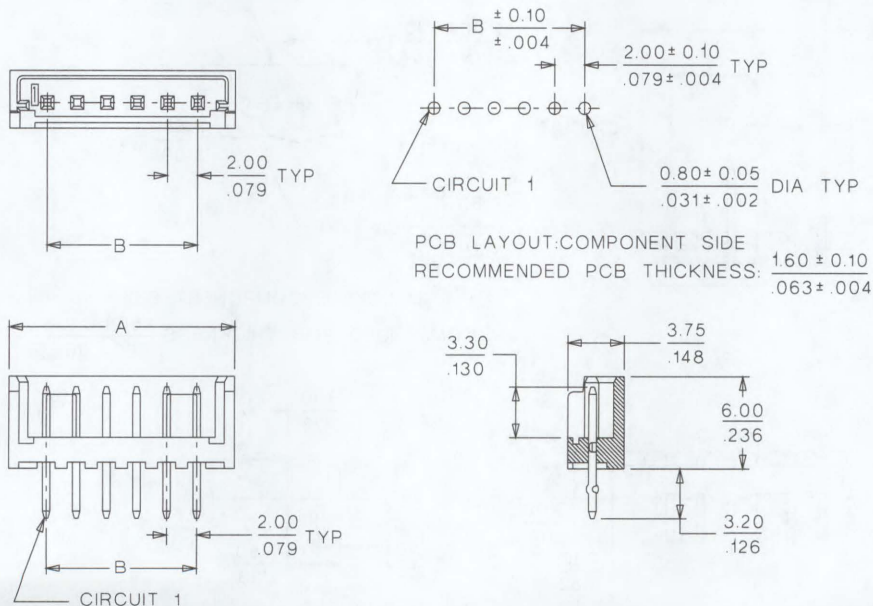
### Mating Dimensions

53290 • 52418

H=6.0mm W=3.95mm



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 3        | 53290-0310 | 9.00 (.354)   | 4.00 (.157)   |
| 4        | 53290-0410 | 11.00 (.433)  | 6.00 (.236)   |
| 5        | 53290-0510 | 13.00 (.512)  | 8.00 (.315)   |
| 6        | 53290-0610 | 15.00 (.591)  | 10.00 (.394)  |
| 7        | 53290-0710 | 17.00 (.669)  | 12.00 (.472)  |
| 8        | 53290-0810 | 19.00 (.748)  | 14.00 (.551)  |
| 9        | 53290-0910 | 21.00 (.827)  | 16.00 (.630)  |
| 10       | 53290-1010 | 23.00 (.906)  | 18.00 (.709)  |
| 11       | 53290-1110 | 25.00 (.984)  | 20.00 (.787)  |
| 12       | 53290-1210 | 27.00 (1.063) | 22.00 (.866)  |
| 13       | 53290-1310 | 29.00 (1.142) | 24.00 (.945)  |
| 14       | 53290-1410 | 31.00 (1.220) | 26.00 (1.024) |
| 15       | 53290-1510 | 33.00 (1.299) | 28.00 (1.102) |
| 16       | 53290-1610 | 35.00 (1.378) | 30.00 (1.181) |
| 17       | 53290-1710 | 37.00 (1.457) | 32.00 (1.260) |
| 18       | 53290-1810 | 39.00 (1.535) | 34.00 (1.339) |
| 19       | 53290-1910 | 41.00 (1.614) | 36.00 (1.417) |
| 20       | 53290-2010 | 43.00 (1.693) | 38.00 (1.496) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 3 to 20 circuits

### Reference Information

Packaging: Bag  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current: 1.0A  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 M $\Omega$  min.

### Physical

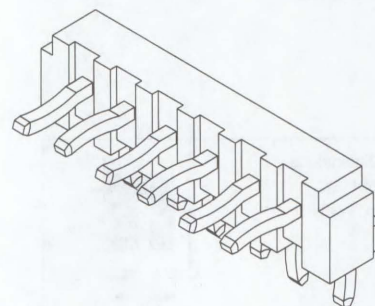
Housing: 6/6 nylon, UL 94V-0  
Contact: Brass  
Plating: Tin  
Operating Temperature: -40 to +85°C



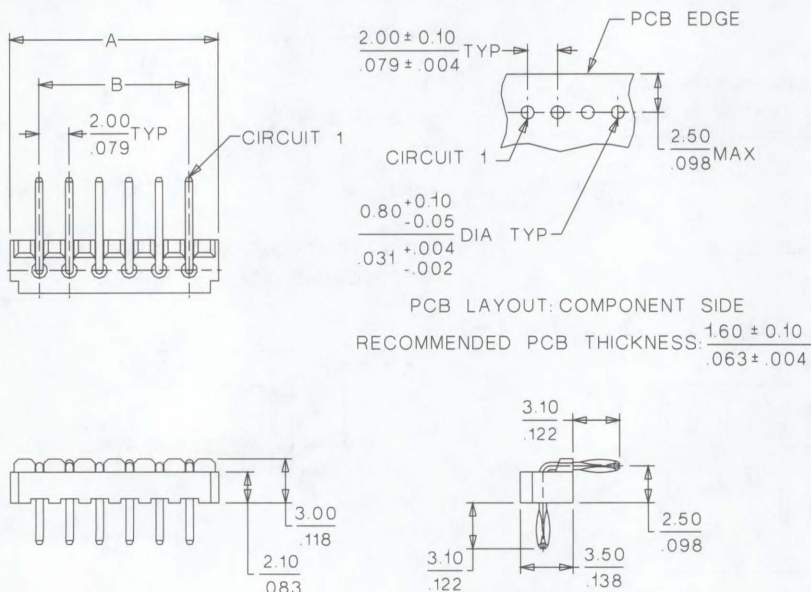
## 2.00mm (.079") Pitch Board-to-Board One-piece Header

**5550-NA**

**Right Angle**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 3        | 39-27-0034 | 7.90 (.311)   | 4.00 (.157)   |
| 4        | 39-27-0044 | 9.90 (.389)   | 6.00 (.236)   |
| 5        | 39-27-0054 | 11.90 (.468)  | 8.00 (.314)   |
| 6        | 39-27-0064 | 13.90 (.547)  | 10.00 (.393)  |
| 7        | 39-27-0074 | 15.90 (.625)  | 12.00 (.472)  |
| 8        | 39-27-0084 | 17.90 (.704)  | 14.00 (.551)  |
| 9        | 39-27-0094 | 19.90 (.783)  | 16.00 (.629)  |
| 10       | 39-27-0104 | 21.90 (.862)  | 18.00 (.708)  |
| 11       | 39-27-0114 | 23.90 (.940)  | 20.00 (.787)  |
| 12       | 39-27-0124 | 25.90 (1.019) | 22.00 (.866)  |
| 13       | 39-27-0134 | 27.90 (1.098) | 24.00 (.944)  |
| 14       | 39-27-0144 | 29.90 (1.177) | 26.00 (1.023) |
| 15       | 39-27-0154 | 31.90 (1.255) | 28.00 (1.102) |
| 16       | 39-27-0164 | 33.90 (1.334) | 30.00 (1.181) |
| 17       | 39-27-0174 | 35.90 (1.413) | 32.00 (1.259) |
| 18       | 39-27-0184 | 37.90 (1.492) | 34.00 (1.388) |
| 19       | 39-27-0194 | 39.90 (1.570) | 36.00 (1.417) |
| 20       | 39-27-0204 | 41.90 (1.649) | 38.00 (1.496) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 15 circuits
- 10,000 mating cycles for high durability
- Black-plated metal shell for ESD and anti-static protection
- Integral kinked metal PCB pegs provide grounding and PCB retention
- Gold-plating for reliable contact interface
- PCB pegs facilitate board placement

### Reference Information

Product Specification: Contact Molex  
Packaging: Tray  
Mates With: 53533  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current: 1.0A  
Contact Resistance: 40mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 500 MΩ min.

### Physical

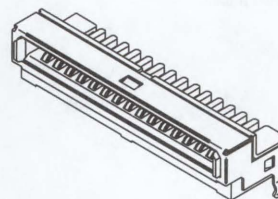
Housing: Black PBT, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Contact Area—Gold  
Solder Tail Area—Tin  
Metal Shell: Phosphor Bronze, Black Nickel plating  
Operating Temperature: -40 to +105°C



## 2.20mm (.086") Pitch Board-to-Board Receptacle

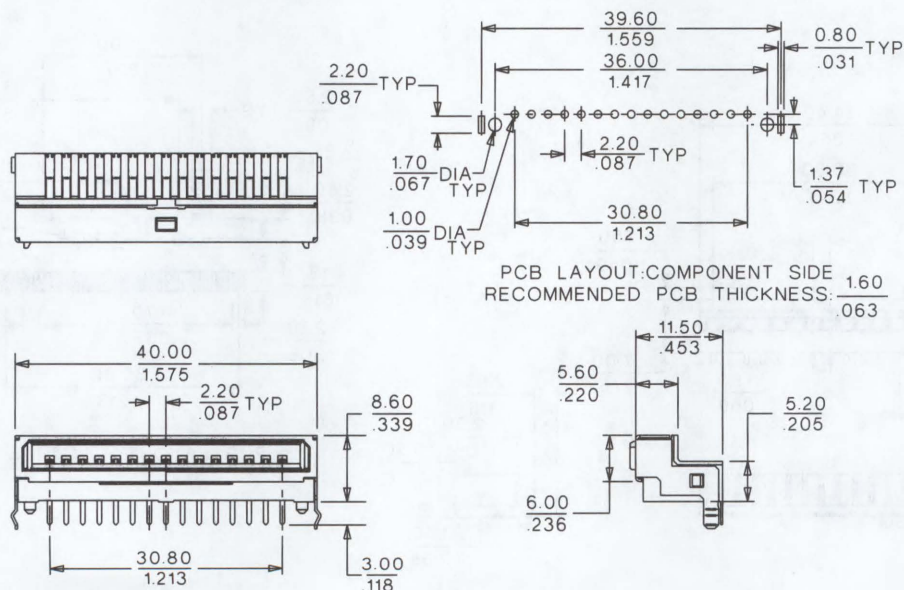
**52820**

### Panel Detachable Type



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  |
|----------|------------|
| 15       | 52820-1511 |

B

2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 15 circuits
- 10,000 mating cycles for high durability
- Protected contacts prevent damage during mating
- Solder tabs provide additional PCB retention
- Visible SMT tails provide easy solder checking
- Gold-plating for reliable contact interface

### Reference Information

Product Specification: Contact Molex  
Packaging: Tray  
Mates With: 52820  
Designed In: Millimeters

### Electrical

Voltage: 125V  
Current: 1.0A  
Contact Resistance: 40mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 500 MΩ min.

### Physical

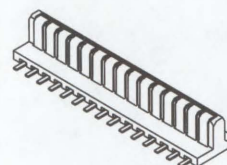
Housing: Black PBT, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Contact Area—Gold  
Solder Tail Area—Tin  
Solder Tab: Phosphor Bronze, Tin plating  
Operating Temperature: -40 to +105°C



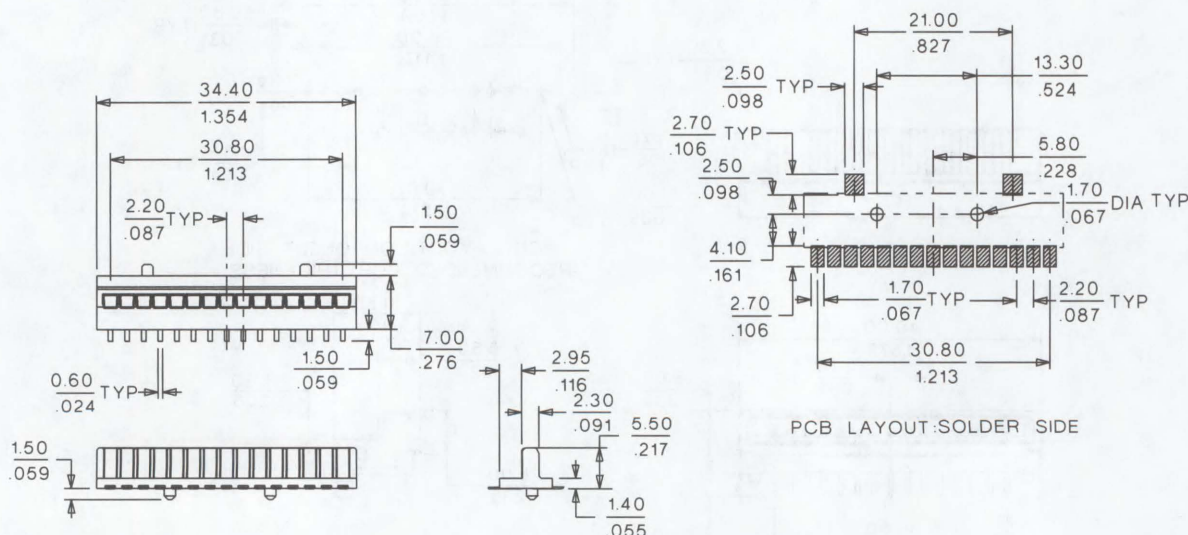
## 2.20mm (.086") Pitch Board-to-Board Header

53533

SMT, Panel Detachable Type



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  |
|----------|------------|
| 15       | 53533-1511 |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 20 circuits
- Accepts 24 AWG solid and 7 strands ribbon cable
- 4 IDT contact points to cable with "O" crimp on insulation
- Keyed and polarized
- Color stripe for visual check

### Reference Information

Product Specification: PS-99020-0018

Packaging: Ammo-Pak

Mates With: 90647 and 90649

Designed In: Millimeters

### Electrical

Voltage: 250V DC max.

Current: 3.0A

Contact Resistance: 8mΩ max.

Insulation Resistance: 500 MΩ min.

### Mechanical

Wire Pull-Out Force: 20N (horizontal)/20N (vertical)

Mating Force: 5N max.

Unmating Force: 3N min.

Durability: 15 cycles

### Physical

Housing: 7.5% glass-filled polyester, UL 94V-0

Contact: Phosphor Bronze

Plating: 1-3μm Tin/Lead

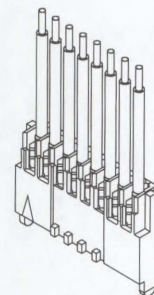
Operating Temperature: -25 to +85°C



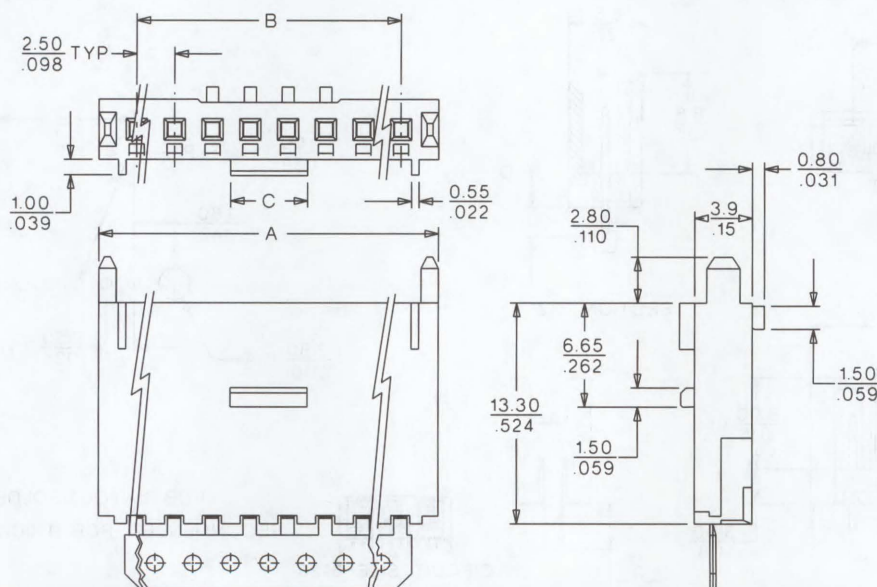
## 2.50mm (.098") Pitch User Friendly Wire-To-Board Receptacle

90650

IDT



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |              |             |
|----------|------------|---------------|--------------|-------------|
|          |            | A             | B            | C           |
| 2        | 90650-0001 | 7.50 (.295)   | 2.50 (.098)  | 1.20 (.047) |
| 3        | 90650-0005 | 10.00 (.394)  | 5.00 (.197)  | 3.15 (.124) |
| 4        | 90650-0009 | 12.50 (.492)  | 7.50 (.295)  | 5.00 (.197) |
| 5        | 90650-0013 | 15.00 (.591)  | 10.00 (.394) | 5.00 (.197) |
| 6        | 90650-0017 | 17.50 (.689)  | 12.50 (.492) | 5.00 (.197) |
| 7        | 90650-0021 | 20.00 (.787)  | 15.00 (.591) | 5.00 (.197) |
| 8        | 90650-0025 | 22.50 (.886)  | 17.50 (.689) | 5.00 (.197) |
| 9        | 90650-0029 | 25.00 (.984)  | 20.00 (.787) | 5.00 (.197) |
| 10       | 90650-0033 | 27.50 (1.083) | 22.50 (.886) | 5.00 (.197) |
| 11       | 90650-0036 | 30.00 (1.181) | 25.00 (.984) | 5.00 (.197) |

| Circuits | Order No.  | Dimension     |               |             |
|----------|------------|---------------|---------------|-------------|
|          |            | A             | B             | C           |
| 12       | 90650-0039 | 32.50 (1.280) | 27.50 (1.083) | 5.00 (.197) |
| 13       | 90650-0042 | 35.00 (1.378) | 30.00 (1.181) | 5.00 (.197) |
| 14       | 90650-0045 | 37.50 (1.476) | 32.50 (1.280) | 5.00 (.197) |
| 15       | 90650-0060 | 40.00 (1.575) | 35.00 (1.378) | 5.00 (.197) |
| 16       | 90650-0061 | 42.50 (1.673) | 37.50 (1.476) | 5.00 (.197) |
| 17       | 90650-0062 | 45.00 (1.772) | 40.00 (1.575) | 5.00 (.197) |
| 18       | 90650-0063 | 47.50 (1.878) | 42.50 (1.673) | 5.00 (.197) |
| 19       | 90650-0064 | 50.00 (1.969) | 45.00 (1.772) | 5.00 (.197) |
| 20       | 90650-0065 | 52.50 (2.067) | 47.50 (1.870) | 5.00 (.197) |

2.00 to 2.50mm (.079 to .098") Pitch

B

B

2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 20 circuits
- Straight in-line on 2.5mm
- Polarized board snap-in pegs
- Polarized with respect to mating part
- Color stripe for visual check
- Locking latch

### Reference Information

Product Specification: PS-99020-0018  
Packaging: Bag  
Mates With: 90650  
Designed In: Millimeters

### Electrical

Voltage: 250V DC max.  
Current: 3.0A  
Contact Resistance: 8mΩ max.  
Dielectrical Withstanding Voltage: 1000V AC  
Insulation Resistance: 500 MΩ min.

### Mechanical

Contact Retention to Housing: 35N per contact min.  
Mating Force: 5N max. per contact  
Unmating Force: 3N min. per contact  
Durability: 15 cycles

### Physical

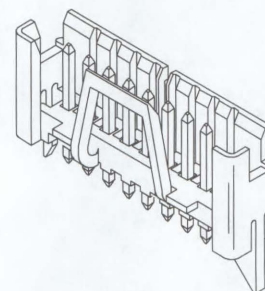
Housing: Polyester, UL 94V-0  
Contact: Brass  
Plating: 3μm Tin/Lead  
Operating Temperature: -25 to +85°C



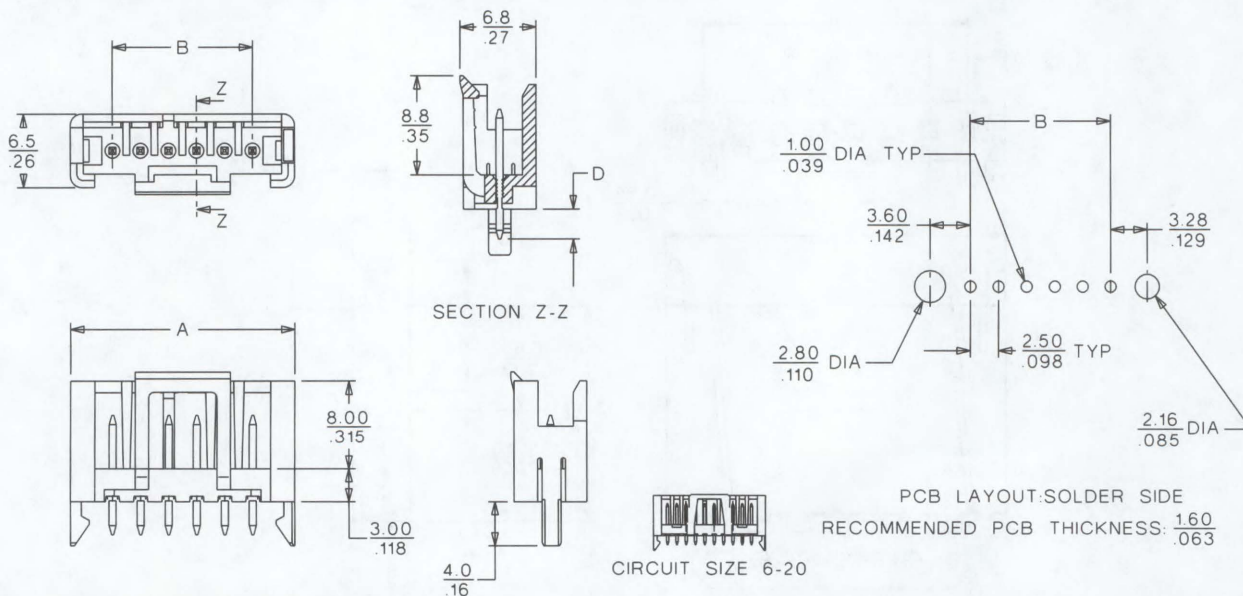
## 2.50mm (.098") Pitch User Friendly Wire-To-Board Header

90647

Vertical, Latched



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |              |
|----------|------------|---------------|--------------|
|          |            | A             | B            |
| 2        | 90647-1002 | 10.00 (.394)  | 2.50 (.098)  |
| 3        | 90647-1003 | 12.50 (.492)  | 5.00 (.197)  |
| 4        | 90647-1004 | 15.00 (.591)  | 7.50 (.295)  |
| 5        | 90647-1005 | 17.50 (.689)  | 10.00 (.394) |
| 6        | 90647-1006 | 20.00 (.787)  | 12.50 (.492) |
| 7        | 90647-1007 | 22.50 (.886)  | 15.00 (.591) |
| 8        | 90647-1008 | 25.00 (.984)  | 17.50 (.689) |
| 9        | 90647-1009 | 27.50 (1.083) | 20.00 (.787) |
| 10       | 90647-1010 | 30.00 (1.181) | 22.50 (.886) |
| 11       | 90647-1011 | 32.50 (1.280) | 25.00 (.984) |

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 12       | 90647-1012 | 35.00 (1.380) | 27.50 (1.083) |
| 13       | 90647-1013 | 37.50 (1.476) | 30.00 (1.181) |
| 14       | 90647-1014 | 40.00 (1.575) | 32.50 (1.280) |
| 15       | 90647-1415 | 42.50 (1.673) | 35.00 (1.378) |
| 16       | 90647-1416 | 45.00 (1.772) | 37.50 (1.476) |
| 17       | 90647-1417 | 47.50 (1.870) | 40.00 (1.575) |
| 18       | 90647-1418 | 50.00 (1.969) | 42.50 (1.673) |
| 19       | 90647-1419 | 52.50 (2.067) | 45.00 (1.772) |
| 20       | 90647-1420 | 55.00 (2.165) | 47.50 (1.870) |

Order Numbers reflect standard Dimension D 2.50 (.099)



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 20 circuits
- Right angle in-line on 2.5mm pitch
- Polarized board snap-in pegs
- Polarized with respect to mating part
- Color stripe for visual check
- Locking latch

### Reference Information

Product Specification: PS-99020-0018

Packaging: Bag

Mates With: 90650

Designed In: Millimeters

### Electrical

Voltage: 250V DC max.

Current: 3.0A

Contact Resistance: 8mΩ max.

Insulation Resistance: 500 MΩ min.

### Mechanical

Mating Force: 5N max.

Unmating Force: 3N min.

Durability: 15 cycles

### Physical

Housing: Polyester, UL 94V-0

Contact: Brass

Plating: 3μm Tin/Lead

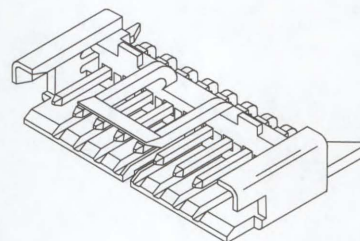
Operating Temperature: -25 to +85°C



## 2.50mm (.098") Pitch User Friendly Wire-to-Board Header

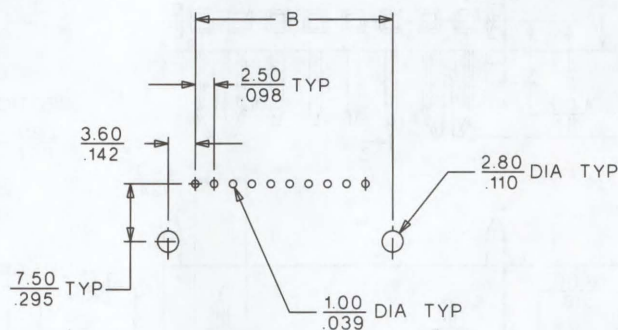
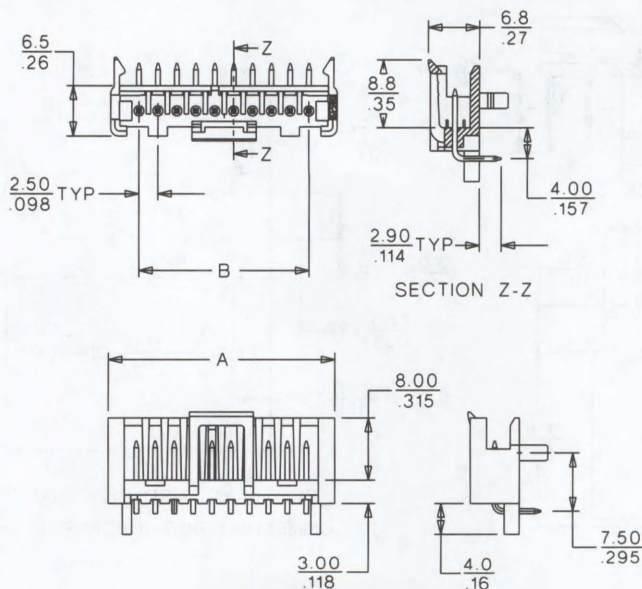
**90649**

**Right Angle, Latched**



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: SOLDER SIDE  
RECOMMENDED PCB THICKNESS: 1.60 (.063)

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |              |
|----------|------------|---------------|--------------|
|          |            | A             | B            |
| 2        | 90649-1002 | 10.00 (.394)  | 2.50 (.098)  |
| 3        | 90649-1003 | 12.50 (.492)  | 5.00 (.197)  |
| 4        | 90649-1004 | 15.00 (.591)  | 7.50 (.295)  |
| 5        | 90649-1005 | 17.50 (.689)  | 10.00 (.394) |
| 6        | 90649-1006 | 20.00 (.787)  | 12.50 (.492) |
| 7        | 90649-1007 | 22.00 (.886)  | 15.00 (.591) |
| 8        | 90649-1008 | 25.00 (.984)  | 17.50 (.689) |
| 9        | 90649-1009 | 27.50 (1.083) | 20.00 (.787) |
| 10       | 90649-1010 | 30.00 (1.181) | 22.50 (.886) |
| 11       | 90649-1011 | 32.50 (1.280) | 25.00 (.984) |

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 12       | 90649-1012 | 35.00 (1.380) | 27.50 (1.083) |
| 13       | 90649-1013 | 37.50 (1.476) | 30.00 (1.181) |
| 14       | 90649-1014 | 40.00 (1.575) | 32.50 (1.280) |
| 15       | 90649-1415 | 42.50 (1.673) | 35.00 (1.378) |
| 16       | 90649-1416 | 45.00 (1.772) | 37.50 (1.476) |
| 17       | 90649-1417 | 47.50 (1.870) | 40.00 (1.575) |
| 18       | 90649-1418 | 50.00 (1.969) | 42.50 (1.673) |
| 19       | 90649-1419 | 52.50 (2.067) | 45.00 (1.772) |
| 20       | 90649-1420 | 55.00 (2.165) | 47.50 (1.870) |

B  
2.00 to 2.50mm (.079 to .098") Pitch

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 20 circuits
- Staggered solder tails: 2.50 x 2.50mm
- Board retention pegs
- Polarized to header and to PCB

Reference Information

Product Specification: 99020-0018  
Packaging: Tray  
Mates With: 90648  
Designed In: Millimeters

Electrical

Voltage: 250V DC max.  
Current: 3.0A  
Contact Resistance: 8mΩ max.  
Insulation Resistance: 500 MΩ min.

Mechanical

Contact Retention to Housing: 15N per contact min.  
Mating Force: 5N max.  
Unmating Force: 3N min.  
Durability: 15 cycles

Physical

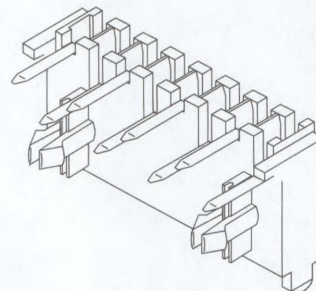
Housing: Polyester, UL 94V-0  
Contact: Phosphor Bronze  
Plating: 3μm Tin/Lead  
Operating Temperature: -25 to +85°C



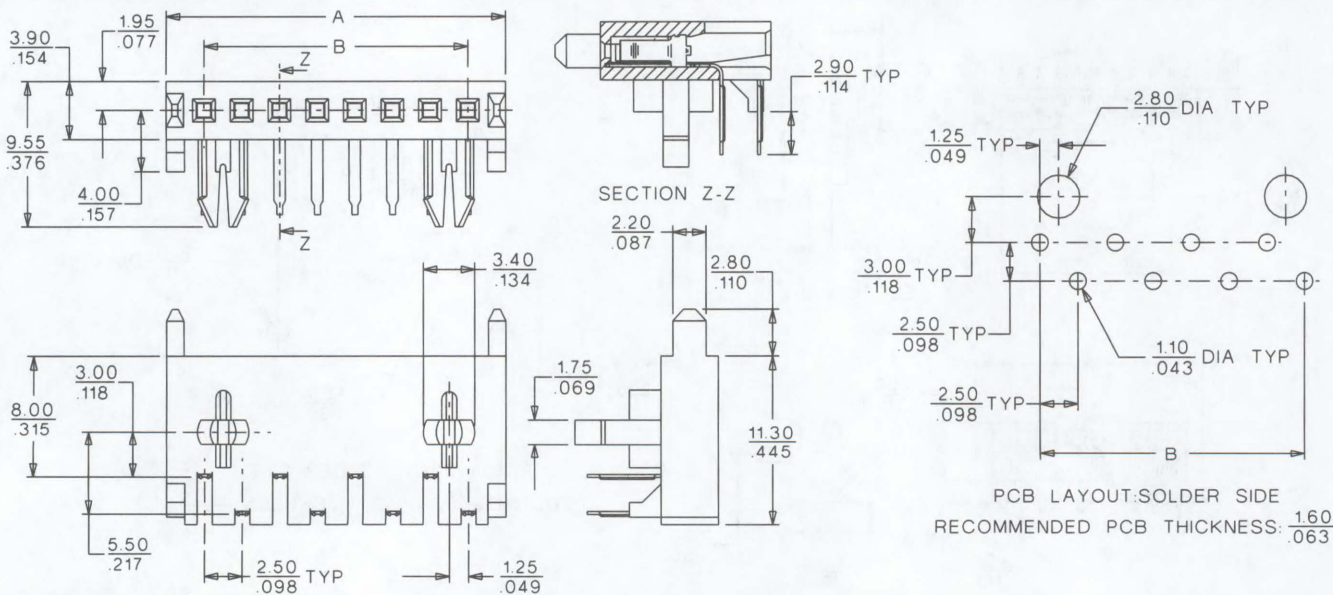
2.50mm (.098") Pitch  
User Friendly  
Board-To-Board  
Receptacle

90651

Right Angle, Unlatched



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |              |
|----------|------------|---------------|--------------|
|          |            | A             | B            |
| 2        | 90651-0002 | 7.50 (.295)   | 2.50 (.098)  |
| 3        | 90651-0003 | 10.00 (.394)  | 5.00 (.197)  |
| 4        | 90651-0004 | 12.50 (.492)  | 7.50 (.295)  |
| 5        | 90651-0005 | 15.00 (.591)  | 10.00 (.394) |
| 6        | 90651-0006 | 17.50 (.689)  | 12.50 (.492) |
| 7        | 90651-0007 | 20.00 (.787)  | 15.00 (.591) |
| 8        | 90651-0008 | 22.50 (.886)  | 17.50 (.689) |
| 9        | 90651-0009 | 25.00 (.984)  | 20.00 (.787) |
| 10       | 90651-0010 | 27.50 (1.083) | 22.50 (.886) |
| 11       | 90651-0011 | 30.00 (1.181) | 25.00 (.984) |

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 12       | 90651-0012 | 32.50 (1.280) | 27.50 (1.083) |
| 13       | 90651-0013 | 35.00 (1.378) | 30.00 (1.181) |
| 14       | 90651-0014 | 37.50 (1.476) | 32.50 (1.280) |
| 15       | 90651-0015 | 40.00 (1.575) | 35.00 (1.378) |
| 16       | 90651-0016 | 42.50 (1.673) | 37.50 (1.476) |
| 17       | 90651-0017 | 45.00 (1.772) | 40.00 (1.575) |
| 18       | 90651-0018 | 47.50 (1.878) | 42.50 (1.673) |
| 19       | 90651-0019 | 50.00 (1.969) | 45.00 (1.772) |
| 20       | 90651-0020 | 52.50 (2.067) | 47.50 (1.870) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 20 circuits
- Straight in-line in on: 2.5mm
- Polarized board snap-in pegs
- Polarized to female

### Reference Information

Product Specification: 99020-0018  
Packaging: Bag  
Mates With: 90651  
Designed In: Millimeters

### Electrical

Voltage: 250V DC max.  
Current: 3.0A  
Contact Resistance: 8mΩ max.  
Insulation Resistance: 500 MΩ min.

### Mechanical

Contact Retention to Housing: 35N per pin  
Mating Force: 5N max. per contact  
Unmating Force: 3N min. per contact  
Durability: 15 cycles

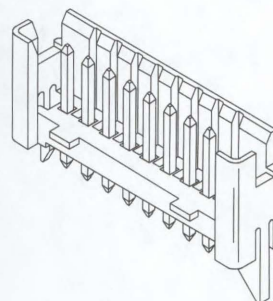
### Physical

Housing: Polyester, UL 94V-0  
Contact: Brass  
Plating: 3μm Tin/Lead  
Operating Temperature: -25 to +85°C

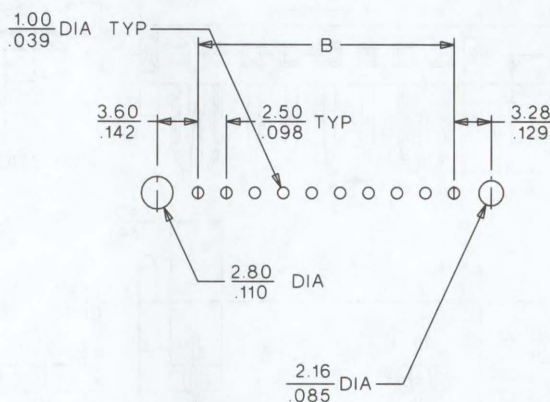
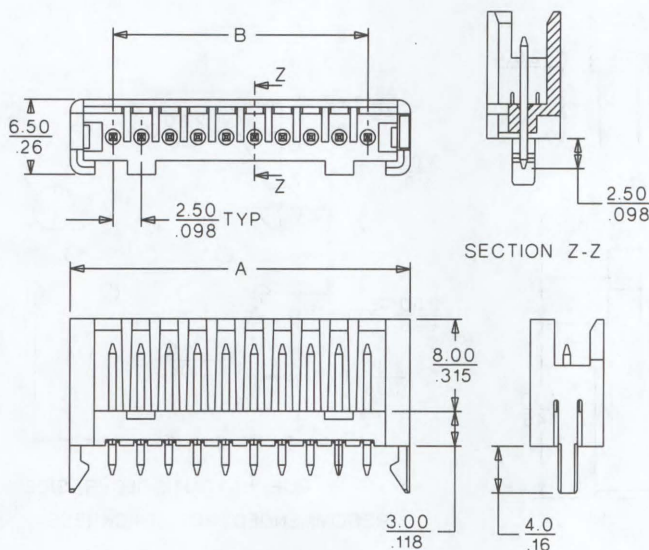


## 2.50mm (.098") Pitch User Friendly Board-to-Board Header

**90648**  
**Vertical, Unlatched**



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: SOLDER SIDE  
RECOMMENDED PCB THICKNESS: 1.60/.063

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |              |
|----------|------------|---------------|--------------|
|          |            | A             | B            |
| 2        | 90648-1002 | 10.00 (.394)  | 2.50 (.098)  |
| 3        | 90648-1003 | 12.50 (.492)  | 5.00 (.197)  |
| 4        | 90648-1004 | 15.00 (.591)  | 7.50 (.295)  |
| 5        | 90648-1005 | 17.50 (.689)  | 10.00 (.394) |
| 6        | 90648-1006 | 20.00 (.787)  | 12.50 (.492) |
| 7        | 90648-1007 | 22.50 (.886)  | 15.00 (.591) |
| 8        | 90648-1008 | 25.00 (.984)  | 17.50 (.689) |
| 9        | 90648-1009 | 27.50 (1.083) | 20.00 (.787) |
| 10       | 90648-1010 | 30.00 (1.181) | 22.50 (.886) |
| 11       | 90648-1011 | 32.50 (1.280) | 25.00 (.984) |

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 12       | 90648-1012 | 35.00 (1.380) | 27.50 (1.083) |
| 13       | 90648-1013 | 37.50 (1.476) | 30.00 (1.181) |
| 14       | 90648-1014 | 40.00 (1.575) | 32.50 (1.280) |
| 15       | 90648-1015 | 42.50 (1.673) | 35.00 (1.378) |
| 16       | 90648-1016 | 45.00 (1.772) | 37.50 (1.476) |
| 17       | 90648-1017 | 47.50 (1.870) | 40.00 (1.575) |
| 18       | 90648-1018 | 50.00 (1.969) | 42.50 (1.673) |
| 19       | 90648-1019 | 52.50 (2.067) | 45.00 (1.772) |
| 20       | 90648-1020 | 55.00 (2.165) | 47.50 (1.870) |

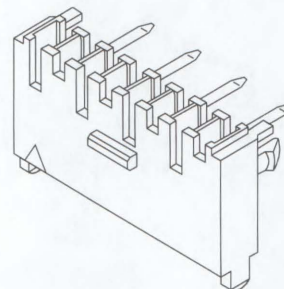
2.00 to 2.50mm (.079 to .098") Pitch

B



## 2.50mm (.098") Pitch User Friendly Board-To-Board Receptacle

**90783**  
**Right Angle, Latched**



### FEATURES AND SPECIFICATIONS

#### Features and Benefits

- Sizes 7 to 20 circuits
- Staggered solder tails: 2.50 x 2.50mm
- Board retention pegs
- Polarized to header and to PCB
- Locking ramp

#### Reference Information

Product Specification: 99020-0018

Packaging: Tray

Mates With: 90784

Designed In: Millimeters

#### Electrical

Voltage: 250V DC max.

Current: 3.0A

Contact Resistance: 8mΩ max.

Insulation Resistance: 500 MΩ min.

#### Mechanical

Contact Retention to Housing: 15N per contact min.

Mating Force: 5N max.

Unmating Force: 3N min.

Durability: 15 cycles

#### Physical

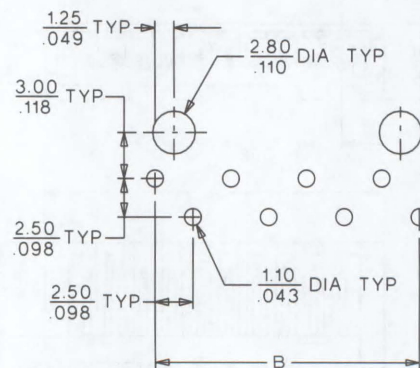
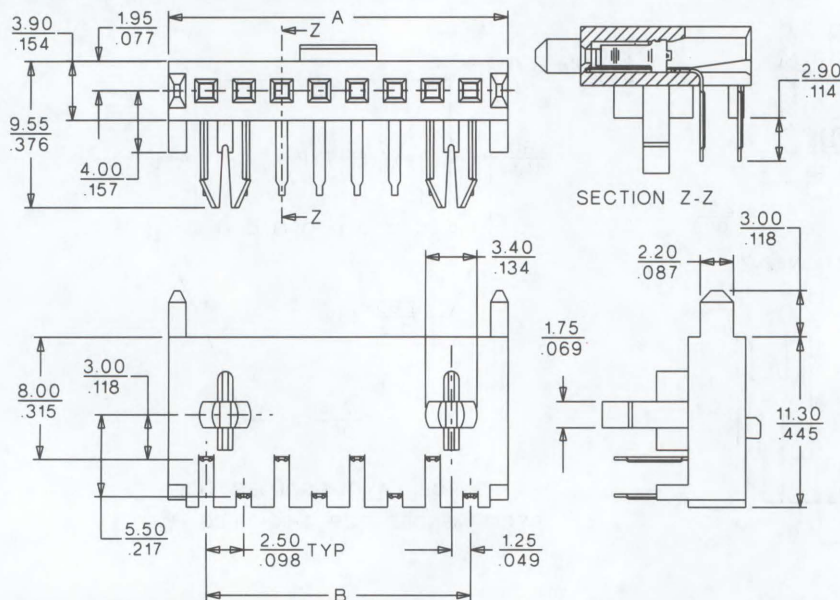
Housing: Polyester, UL 94V-0

Contact: Phosphor Bronze

Plating: 2.5 to 4.5μm Tin/Lead

Operating Temperature: -25 to +85°C

### CATALOG DRAWING (FOR REFERENCE ONLY)



### ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 7        | 90783-0007 | 20.00 (.787)  | 15.00 (.591)  |
| 8        | 90783-0008 | 22.50 (.886)  | 17.50 (.689)  |
| 9        | 90783-0009 | 25.00 (.984)  | 20.00 (.787)  |
| 10       | 90783-0010 | 27.50 (1.083) | 22.50 (.886)  |
| 11       | 90783-0011 | 30.00 (1.181) | 25.00 (.984)  |
| 12       | 90783-0012 | 32.50 (1.280) | 27.50 (1.083) |
| 13       | 90783-0013 | 35.00 (1.378) | 30.00 (1.181) |
| 14       | 90783-0014 | 37.50 (1.476) | 32.50 (1.280) |
| 15       | 90783-0015 | 40.00 (1.575) | 35.00 (1.378) |
| 16       | 90783-0016 | 42.50 (1.673) | 37.50 (1.476) |
| 17       | 90783-0017 | 45.00 (1.772) | 40.00 (1.575) |
| 18       | 90783-0018 | 47.50 (1.870) | 42.50 (1.673) |
| 19       | 90783-0019 | 50.00 (1.969) | 45.00 (1.772) |
| 20       | 90783-0020 | 52.50 (2.067) | 47.50 (1.870) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 7 to 20 circuits
- Straight in-line in on 2.50mm
- Polarized board snap-in pegs
- Polarized to female
- Locking latch

### Reference Information

Product Specification: 99020-0018  
Packaging: Bag  
Mates With: 90783  
Designed In: Millimeters

### Electrical

Voltage: 250V DC max.  
Current: 3.0A  
Contact Resistance: 8mΩ max.  
Insulation Resistance: 500 MΩ min.

### Mechanical

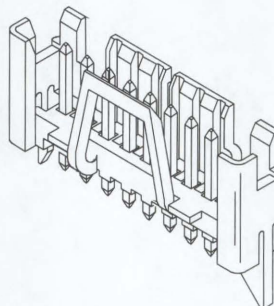
Contact Retention to Housing: 35N per contact min.  
Mating Force: 5N max.  
Unmating Force: 3N min.  
Durability: 15 cycles

### Physical

Housing: 15% glass-filled polyester, UL 94V-0  
Contact: Brass  
Plating: 3μm Tin/Lead  
Operating Temperature: -25 to +85°C

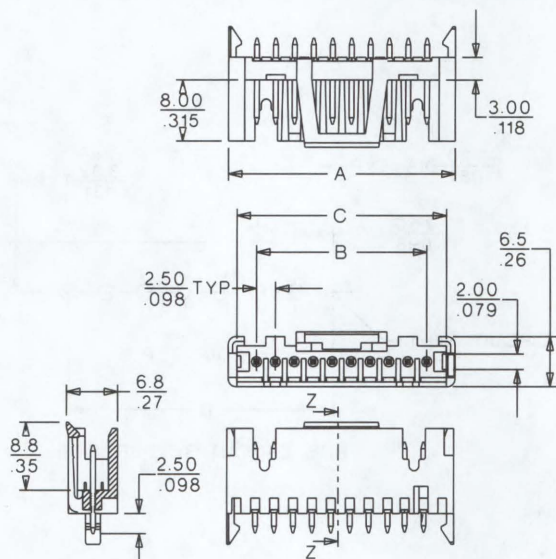
# molex® 2.50mm (.098") Pitch User Friendly Board-To-Board Header

**90784**  
**Vertical, Latched**

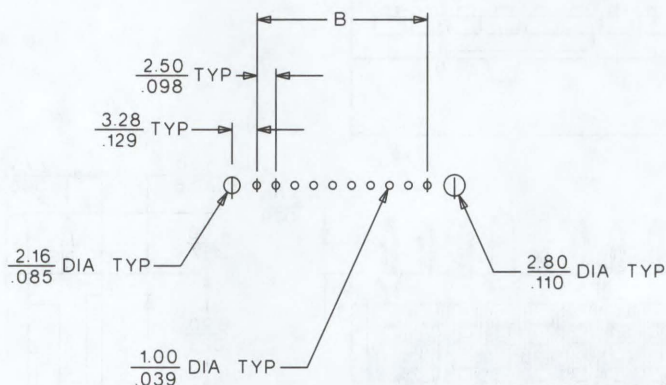


2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



SECTION Z-Z



PCB LAYOUT: SOLDER SIDE  
RECOMMENDED PCB THICKNESS:  $\frac{1.60}{.063}$

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 7        | 90784-1007 | 22.50 (.886)  | 15.00 (.591)  | 20.20 (.795)  |
| 8        | 90784-1008 | 25.00 (.984)  | 17.50 (.689)  | 22.70 (.894)  |
| 9        | 90784-1009 | 27.50 (1.083) | 20.00 (.787)  | 25.20 (.992)  |
| 10       | 90784-1010 | 30.00 (1.181) | 22.50 (.886)  | 27.70 (1.090) |
| 11       | 90784-1011 | 32.50 (1.280) | 25.00 (.984)  | 30.20 (1.189) |
| 12       | 90784-1012 | 35.00 (1.380) | 27.50 (1.083) | 32.70 (1.287) |
| 13       | 90784-1013 | 37.50 (1.476) | 30.00 (1.181) | 35.20 (1.386) |
| 14       | 90784-1014 | 40.00 (1.575) | 32.50 (1.280) | 37.70 (1.484) |
| 15       | 90784-1015 | 42.50 (1.673) | 35.00 (1.378) | 40.20 (1.583) |
| 16       | 90784-1016 | 45.00 (1.772) | 37.50 (1.476) | 42.70 (1.681) |
| 17       | 90784-1017 | 47.50 (1.870) | 40.00 (1.575) | 45.20 (1.779) |
| 18       | 90784-1018 | 50.00 (1.969) | 42.50 (1.673) | 47.70 (1.878) |
| 19       | 90784-1019 | 52.50 (2.067) | 45.00 (1.772) | 50.20 (1.979) |
| 20       | 90784-1020 | 55.00 (2.165) | 47.50 (1.870) | 52.70 (2.075) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 16 circuits plus 20 circuit
- For permanent board connections
- Solder terminal with retention tail
- Accepts 24 AWG solid and 7 strands ribbon cable
- 4 IDT contact points to cable with "O" crimp on insulation
- Polarized to PCB with locating peg

### Reference Information

Product Specification: 99020-0018

Packaging: "Ammo-Pak"

Designed In: Millimeters

### Electrical

Voltage: 250V DC max.

Current: 3.0A

Contact Resistance: 8mΩ max.

Insulation Resistance: 500 MΩ min.

### Mechanical

Wire Pull-Out Force: 15N

### Physical

Housing: Polyester, UL 94V-0

Contact: Phosphor Bronze

Plating: 2.5 to 4.5μm Tin/Lead

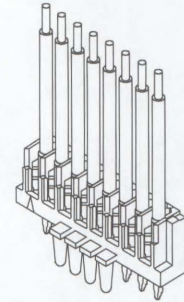
Operating Temperature: -25 to +85°C



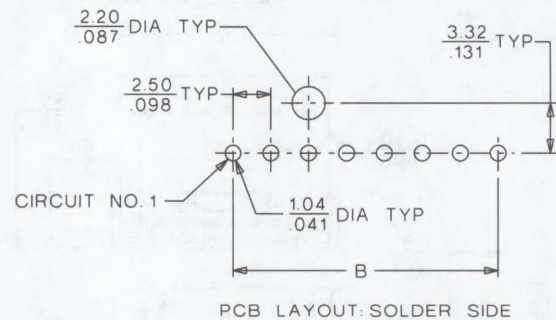
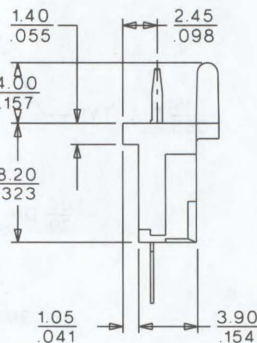
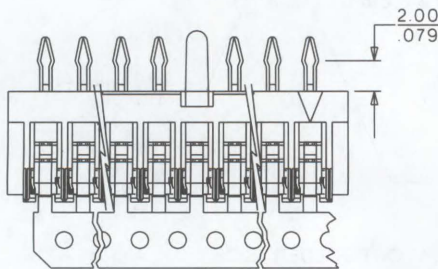
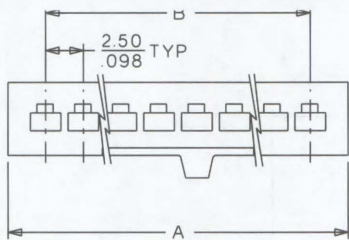
## 2.50mm (.098") Pitch User Friendly Board-In Connector

91226

IDT



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Key and PCB Hole Position | Dimension     |               |
|----------|------------|---------------------------|---------------|---------------|
|          |            |                           | A             | B             |
| 2        | 91226-0001 | 1                         | 7.50 (.295)   | 2.50 (.098)   |
| 3        | 91226-0004 | 1                         | 10.00 (.394)  | 5.00 (.197)   |
| 4        | 91226-0008 | 1                         | 12.50 (.492)  | 7.50 (.295)   |
| 5        | 91226-0012 | 1                         | 15.00 (.591)  | 10.00 (.394)  |
| 6        | 91226-0016 | 2                         | 17.50 (.689)  | 12.50 (.492)  |
| 7        | 91226-0020 | 2                         | 20.00 (.787)  | 15.00 (.591)  |
| 8        | 91226-0024 | 3                         | 22.50 (.886)  | 17.50 (.689)  |
| 9        | 91226-0028 | 3                         | 25.00 (.984)  | 20.00 (.787)  |
| 10       | 91226-0032 | 4                         | 27.50 (1.083) | 22.50 (.886)  |
| 11       | 91226-0035 | 4                         | 30.00 (1.181) | 25.00 (.984)  |
| 12       | 91226-0038 | 5                         | 32.50 (1.280) | 27.50 (1.083) |
| 13       | 91226-0041 | 5                         | 35.00 (1.378) | 30.00 (1.181) |
| 14       | 91226-0044 | 6                         | 37.50 (1.476) | 32.50 (1.280) |
| 15       | 91226-0059 | 7                         | 40.00 (1.574) | 35.00 (1.378) |
| 16       | 91226-0060 |                           | 42.50 (1.674) | 37.50 (1.478) |
| 20       | 91226-0061 |                           | 52.50 (2.067) | 45.50 (1.870) |

| Application Tooling    | Part No.        |
|------------------------|-----------------|
| Hand Tool (changehead) | 69008-0290      |
| Hand Tool (pistol)     | 69008-0210      |
| Bench Press (wire)     | AM-63179        |
| Bench Press (cable)    | AM-63171        |
| Semi-Automatic         | AM-63166        |
| Fully-Automatic        | Contact Factory |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Very low profile
- Anti-fishhooking design
- Box protects pin contact area from contamination during handling

### Reference Information

Packaging: Bag or reel  
Tooling Information: See end of section  
Use With: 5264 housings  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current:

| AWG     | 22  | 24  | 26  | 28  |
|---------|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 2.0 | 1.5 |

Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C



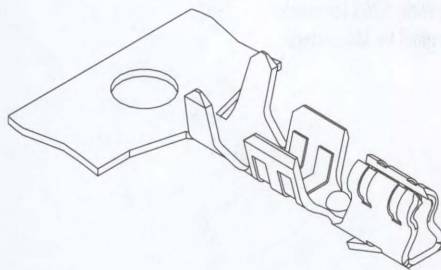
2.50mm (.098") Pitch

SPOX™

Wire-to-Board  
Crimp Terminal

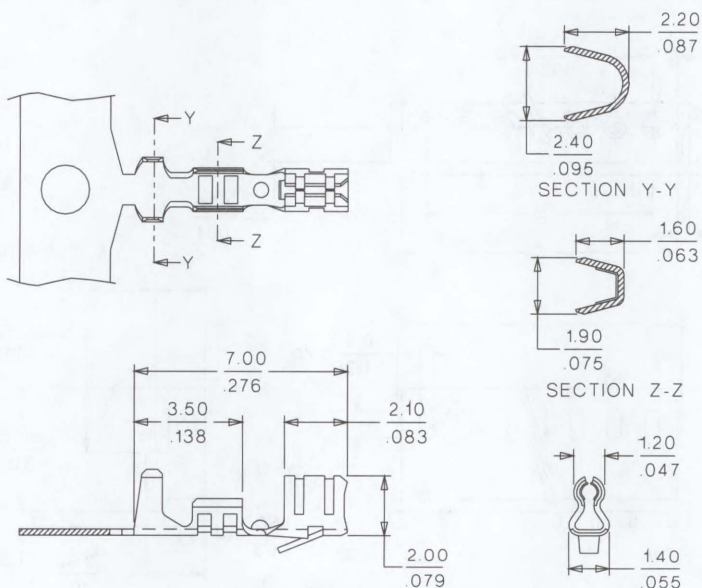
5263

Spring Box



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Order No.  | Terminal | Engineering No. | Wire Range<br>AWG | Insulation Diameter |
|------------|----------|-----------------|-------------------|---------------------|
| 08-70-1039 | Reel     | 5263PBT         | 22-28             | 1.90 (.075) max.    |
| 08-70-1040 | Bag      | 5263PBTB        |                   |                     |

B  
2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Very low profile
- Molded-in pull tabs
- Friction lock

### Reference Information

Packaging: Bag  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 5267-NA-X and 5268-NA  
Use With: 5263 terminals  
Designed In: Millimeters



## 2.50mm (.098") Pitch SPOX™ Wire-to-Board Crimp Terminal Housing

5264-N  
Shrouded

### Electrical

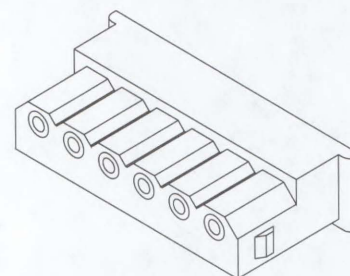
Voltage: 250V  
Current:

| AWG     | 22  | 24  | 26  | 28  |
|---------|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 2.0 | 1.5 |

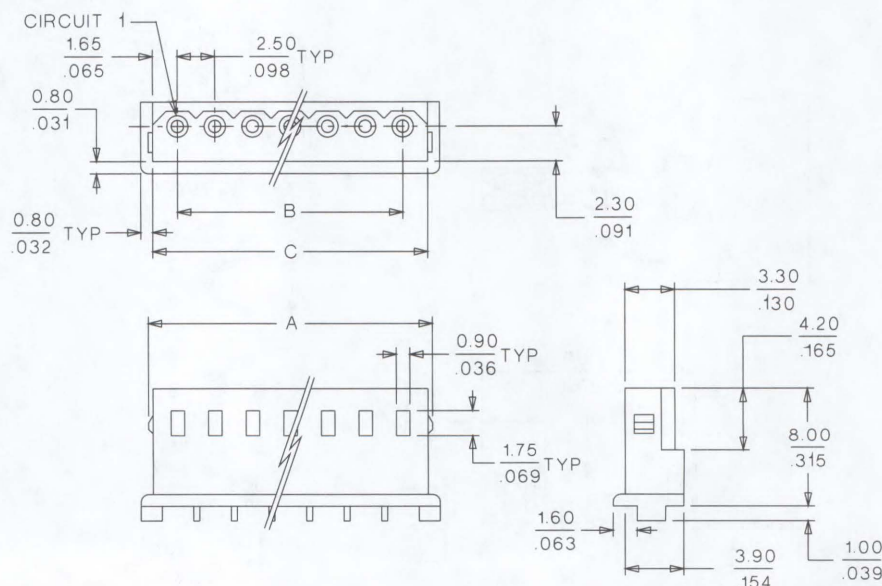
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0  
Operating Temperature: -40 to +105°C



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |               |               |
|----------|------------|--------------|---------------|---------------|
|          |            | A            | B             | C             |
| 2        | 50-37-5023 | 6.40 (.252)  | 2.50 (.098)   | 5.80 (.228)   |
| 3        | 50-37-5033 | 8.90 (.350)  | 5.00 (.197)   | 8.30 (.327)   |
| 4        | 50-37-5043 | 11.40 (.449) | 7.50 (.295)   | 10.80 (.425)  |
| 5        | 50-37-5053 | 13.90 (.547) | 10.00 (.394)  | 13.30 (.524)  |
| 6        | 50-37-5063 | 16.40 (.646) | 12.50 (.492)  | 15.80 (.622)  |
| 7        | 50-37-5073 | 18.90 (.744) | 15.00 (.591)  | 18.30 (.720)  |
| 8        | 50-37-5083 | 21.40 (.843) | 17.50 (.689)  | 20.80 (.819)  |
| 9        | 50-37-5093 |              | 20.00 (.787)  | 23.30 (.917)  |
| 10       | 50-37-5103 |              | 22.50 (.886)  | 25.80 (1.016) |
| 11       | 50-37-5113 |              | 25.00 (.984)  | 28.30 (1.114) |
| 12       | 50-37-5123 |              | 27.50 (1.083) | 30.80 (1.213) |
| 13       | 50-37-5133 |              | 30.00 (1.181) | 33.30 (1.311) |
| 14       | 50-37-5143 |              | 32.50 (1.280) | 35.80 (1.409) |
| 15       | 50-37-5153 |              | 35.00 (1.378) | 38.30 (1.508) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- In-line IDT termination
- Integral crimped strain relief
- Connections supplied on terminal carrier strip for application tooling

### Reference Information

Product Specification: PS-42219

Packaging: Strip

UL File No.: E29179

CSA File No.: LR19980

Mates With: 5267, 5268, 42249 and 42267 headers

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC

Insulation Resistance: 1000 MΩ min.

### Mechanical

Wire Pull-Out Force: See SMES 42219-0002

Mating Force: 1.8kg max. per contact

Unmating Force: 0.15kg min. per contact

Durability: 25 cycles

### Physical

Housing: White Polyester, UL 94V-0

Contact: Phosphor Bronze

Plating: Tin/Lead

Operating Temperature: 0 to +75°C

Wire Accommodation: 24 AWG solid or stranded with topcoat or 26 AWG stranded with topcoat



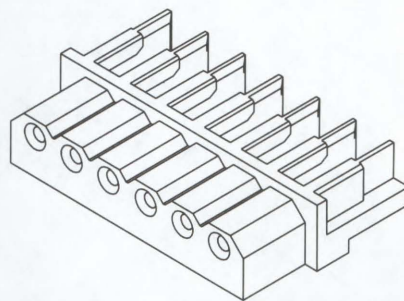
2.50mm (.098") Pitch

SPOX™

Wire-to-Board  
Connector

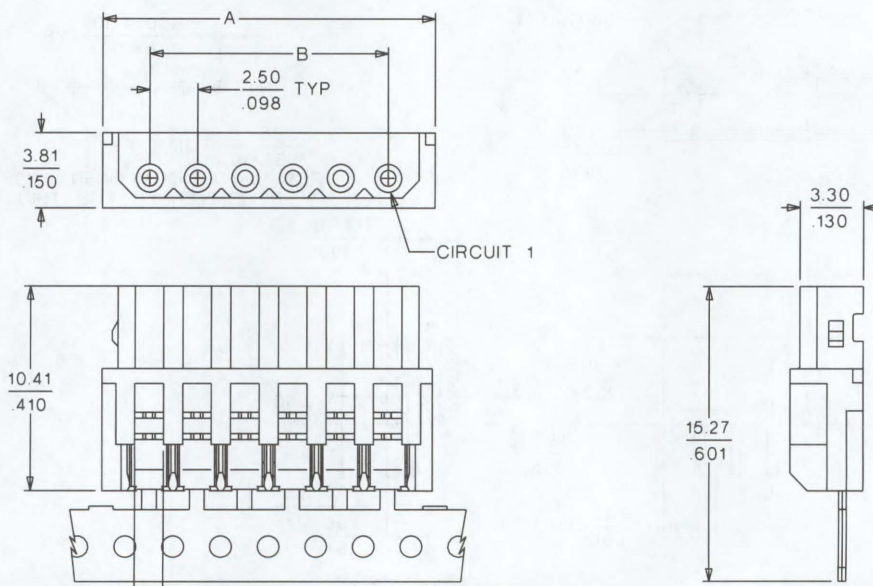
42219

IDT  
Spring Box



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.    | Dimension     |               |
|----------|--------------|---------------|---------------|
|          |              | A             | B             |
| 2        | • 22-43-3020 | 7.40 (.291)   | 2.50 (.098)   |
| 3        | • 22-43-3030 | 9.90 (.390)   | 5.00 (.197)   |
| 4        | • 22-43-3040 | 12.40 (.488)  | 7.50 (.295)   |
| 5        | • 22-43-3050 | 14.90 (.587)  | 10.00 (.394)  |
| 6        | • 22-43-3060 | 17.40 (.685)  | 12.50 (.492)  |
| 7        | • 22-43-3070 | 19.90 (.783)  | 15.00 (.591)  |
| 8        | • 22-43-3080 | 22.40 (.882)  | 17.50 (.689)  |
| 9        | • 22-43-3090 | 24.90 (.980)  | 20.00 (.787)  |
| 10       | • 22-43-3100 | 27.40 (1.079) | 22.50 (.886)  |
| 11       | • 22-43-3110 | 29.90 (1.117) | 25.00 (.984)  |
| 12       | • 22-43-3120 | 32.40 (1.276) | 27.50 (1.082) |
| 13       | • 22-43-3130 | 34.90 (1.374) | 30.00 (1.181) |
| 14       | • 22-43-3140 | 37.40 (1.472) | 32.50 (1.279) |
| 15       | • 22-43-3150 | 39.90 (1.571) | 35.00 (1.378) |

• US Standard Product, available through Molex franchised distributors

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- 0.70mm (.027") round pins
- Polarized
- Friction lock

### Reference Information

Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 5264-N and 42219  
 Designed In: Millimeters

### Electrical

Voltage: 250V  
 Current:

| AWG     | 22  | 24  | 26  | 28  |
|---------|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 2.0 | 1.5 |

Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 1000V AC/1 min.  
 Insulation Resistance: 1000 MΩ min.

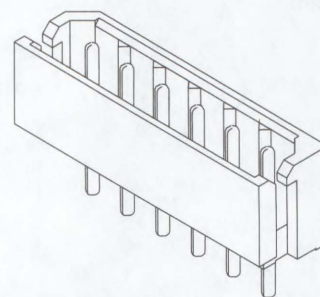
### Physical

Housing: 6/6 nylon, UL 94V-0  
 Contact: Brass  
 Plating: Tin  
 Operating Temperature: 0 to +75°C

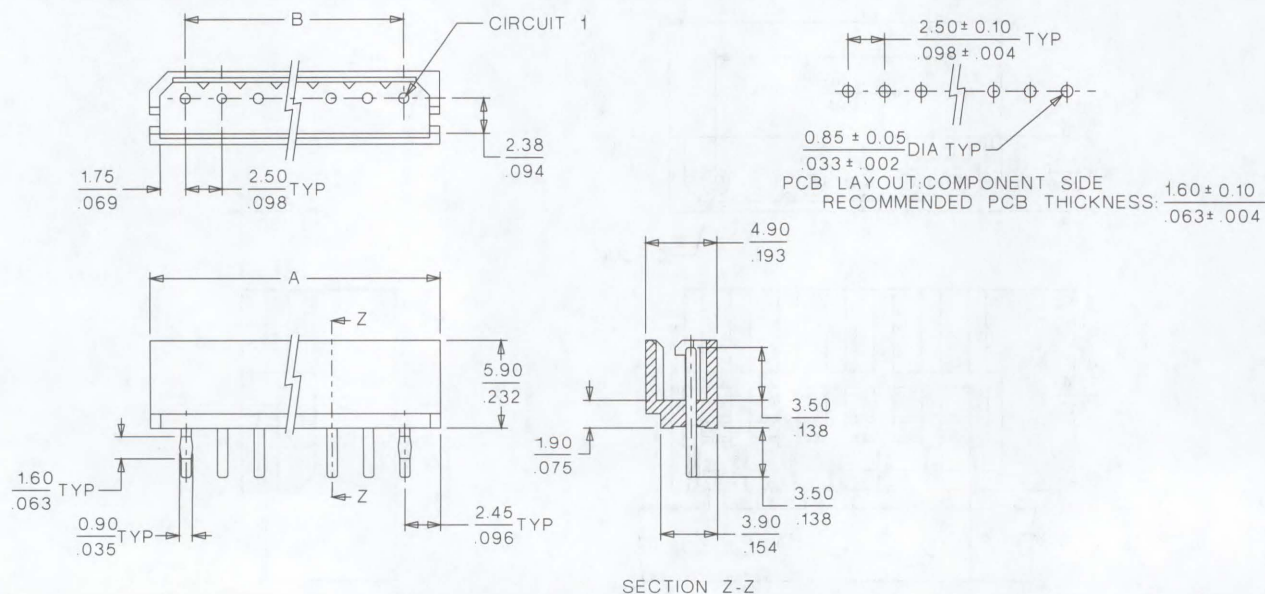


**2.50mm (.098") Pitch**  
**SPOX™**  
**Wire-to-Board**  
**Header**

**5267-NA**  
**Vertical**  
**Fully Shrouded**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 22-03-5025 | 7.40 (.291)   | 2.50 (.098)   |
| 3        | 22-03-5035 | 9.90 (.390)   | 5.00 (.197)   |
| 4        | 22-03-5045 | 12.40 (.488)  | 7.50 (.295)   |
| 5        | 22-03-5055 | 14.90 (.587)  | 10.00 (.394)  |
| 6        | 22-03-5065 | 17.40 (.685)  | 12.50 (.492)  |
| 7        | 22-03-5075 | 19.90 (.783)  | 15.00 (.591)  |
| 8        | 22-03-5085 | 22.40 (.882)  | 17.50 (.689)  |
| 9        | 22-03-5095 | 24.90 (.980)  | 20.00 (.787)  |
| 10       | 22-03-5105 | 27.40 (1.079) | 22.50 (.886)  |
| 11       | 22-03-5115 | 29.90 (1.117) | 25.00 (.984)  |
| 12       | 22-03-5125 | 32.40 (1.276) | 27.50 (1.083) |
| 13       | 22-03-5135 | 34.90 (1.374) | 30.00 (1.181) |
| 14       | 22-03-5145 | 37.40 (1.472) | 32.50 (1.280) |
| 15       | 22-03-5155 | 39.90 (1.571) | 35.00 (1.378) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- 0.70mm (.027") round pins
- Polarized
- Friction lock

### Reference Information

Packaging: Bag  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 5264-N and 42219  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current:

| AWG     | 22  | 24  | 26  | 28  |
|---------|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 2.0 | 1.5 |

Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

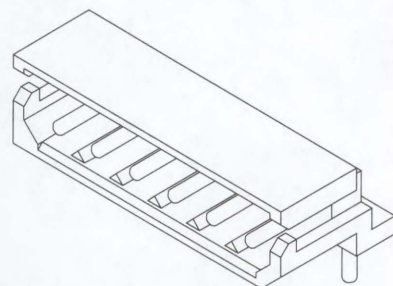
### Physical

Housing: 6/6 nylon, UL 94V-0  
Contact: Brass  
Plating: Tin  
Operating Temperature: -40 to +105°C



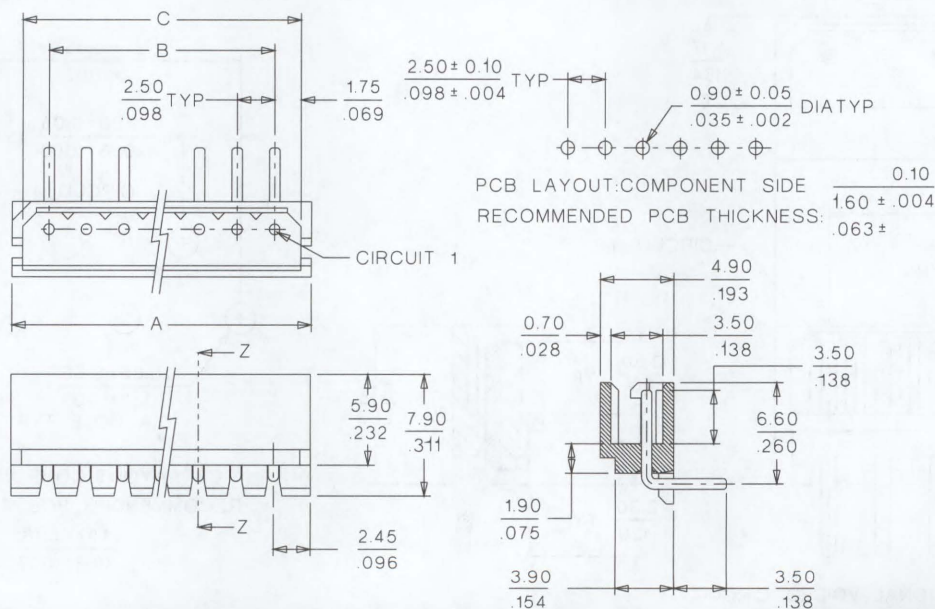
## 2.50mm (.098") Pitch SPOX™ Wire-to-Board Header

### 5268-NA Right Angle Fully Shrouded



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 2        | 22-05-7025 | 7.40 (.291)   | 2.50 (.098)   | 6.00 (.236)   |
| 3        | 22-05-7035 | 9.90 (.390)   | 5.00 (.197)   | 8.50 (.335)   |
| 4        | 22-05-7045 | 12.40 (.488)  | 7.50 (.295)   | 11.00 (.433)  |
| 5        | 22-05-7055 | 14.90 (.587)  | 10.00 (.394)  | 13.50 (.531)  |
| 6        | 22-05-7065 | 17.40 (.685)  | 12.50 (.492)  | 16.00 (.630)  |
| 7        | 22-05-7075 | 19.90 (.783)  | 15.00 (.591)  | 18.50 (.728)  |
| 8        | 22-05-7085 | 22.40 (.882)  | 17.50 (.689)  | 21.00 (.827)  |
| 9        | 22-05-7095 | 24.90 (.980)  | 20.00 (.787)  | 23.50 (.925)  |
| 10       | 22-05-7105 | 27.40 (1.079) | 22.50 (.886)  | 26.00 (1.024) |
| 11       | 22-05-7115 | 29.90 (1.117) | 25.00 (.984)  | 28.50 (1.122) |
| 12       | 22-05-7125 | 32.40 (1.276) | 27.50 (1.083) | 31.00 (1.220) |
| 13       | 22-05-7135 | 34.90 (1.374) | 30.00 (1.181) | 33.50 (1.319) |
| 14       | 22-05-7145 | 37.40 (1.472) | 32.50 (1.280) | 36.00 (1.417) |
| 15       | 22-05-7155 | 39.90 (1.571) | 35.00 (1.378) | 38.50 (1.516) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Polarized to mating connector
- Staggered footprint prevents solder bridging
- Standard kinked PC tails for retention to PC board

### Reference Information

Product Specification: PS-42219  
 Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 42219 connectors  
 Designed In: Millimeters

### Electrical

Voltage: 250V  
 Current: 3.0A  
 Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 1000V AC  
 Insulation Resistance: 1000 MΩ min.

### Mechanical

Mating Force: 1.8kg max.  
 Unmating Force: 0.15kg min.  
 Durability: 25 cycles

### Physical

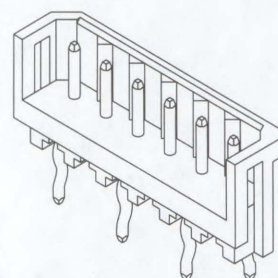
Housing: White Polyester, UL 94V-0  
 Contact: Brass .027" diameter  
 Plating: Tin  
 Operating Temperature: 0 to +75°C



## 2.50mm (.098") Pitch SPOX™ Wire-to-Board Header

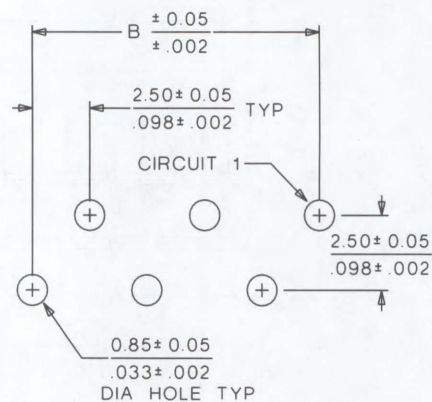
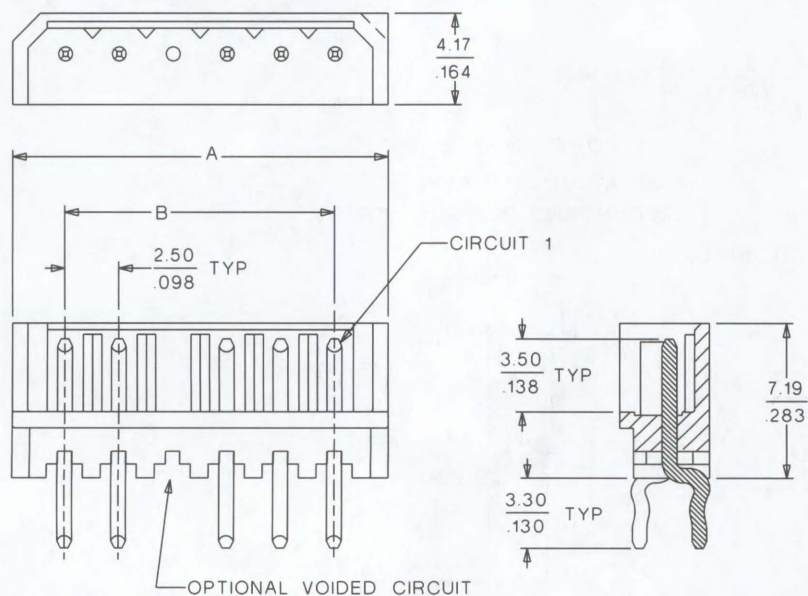
**42249**

## Shrouded Staggered Footprint



2.00 to 2.50mm (.079 to .098") pitch

### CATALOG DRAWING FOR REFERENCE ONLY



### ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.    | Dimension     |               |
|----------|--------------|---------------|---------------|
|          |              | A             | B             |
| 2        | • 22-43-6020 | 7.40 (.291)   | 2.50 (.098)   |
| 3        | • 22-43-6030 | 9.90 (.390)   | 5.00 (.197)   |
| 4        | • 22-43-6040 | 12.40 (.488)  | 7.50 (.295)   |
| 5        | • 22-43-6050 | 14.90 (.587)  | 10.00 (.394)  |
| 6        | • 22-43-6060 | 17.40 (.685)  | 12.50 (.492)  |
| 7        | • 22-43-6070 | 19.90 (.783)  | 15.00 (.591)  |
| 8        | • 22-43-6080 | 22.40 (.882)  | 17.50 (.689)  |
| 9        | • 22-43-6090 | 24.90 (.980)  | 20.00 (.787)  |
| 10       | • 22-43-6100 | 27.40 (1.079) | 22.50 (.886)  |
| 11       | • 22-43-6110 | 29.90 (1.177) | 25.00 (.984)  |
| 12       | • 22-43-6120 | 32.40 (1.276) | 27.50 (1.083) |
| 13       | • 22-43-6130 | 34.90 (1.374) | 30.00 (1.181) |
| 14       | • 22-43-6140 | 37.40 (1.472) | 32.50 (1.280) |
| 15       | • 22-43-6150 | 39.90 (1.571) | 35.00 (1.378) |

• US Standard Product, available through Molex franchised distributors



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Polarized to mating connector
- Standard kinked PC tails for retention to PC board

### Reference Information

Product Specification: PS-42219

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: 42219 connectors

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC

Insulation Resistance: 1000 MΩ min.

### Mechanical

Mating Force: 1.8kg max.

Unmating Force: 0.15kg min.

Durability: 25 cycles

### Physical

Housing: White Polyester, UL 94V-0

Contact: Brass .027" diameter

Plating: Tin

Operating Temperature: 0 to +75°C



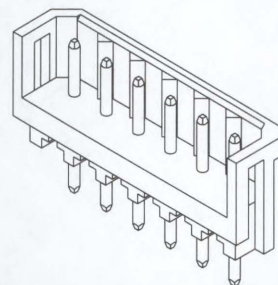
2.50mm (.098") Pitch

SPOX™

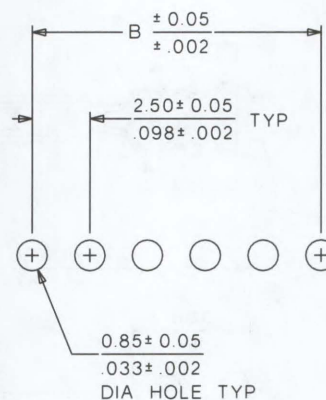
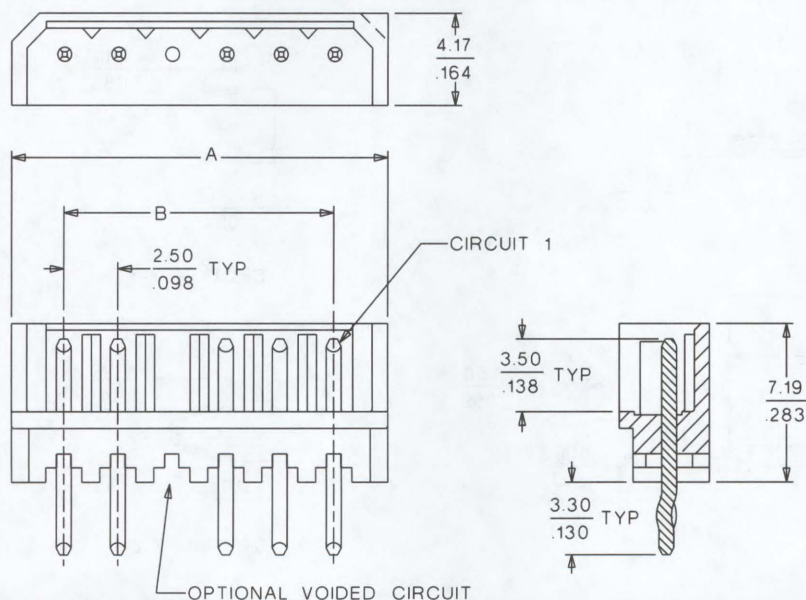
Wire-to-Board  
Header

42267

Shrouded  
In-Line Footprint



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS:

1.57 ± 0.18  
.062 ± .007

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.    | Dimension     |               |
|----------|--------------|---------------|---------------|
|          |              | A             | B             |
| 2        | • 22-43-8020 | 7.40 (.291)   | 2.50 (.098)   |
| 3        | • 22-43-8030 | 9.90 (.390)   | 5.00 (.197)   |
| 4        | • 22-43-8040 | 12.40 (.488)  | 7.50 (.295)   |
| 5        | • 22-43-8050 | 14.90 (.587)  | 10.00 (.394)  |
| 6        | • 22-43-8060 | 17.40 (.685)  | 12.50 (.492)  |
| 7        | • 22-43-8070 | 19.90 (.783)  | 15.00 (.591)  |
| 8        | • 22-43-8080 | 22.40 (.882)  | 17.50 (.689)  |
| 9        | • 22-43-8090 | 24.90 (.980)  | 20.00 (.787)  |
| 10       | • 22-43-8100 | 27.40 (1.079) | 22.50 (.886)  |
| 11       | • 22-43-8110 | 29.90 (1.177) | 25.00 (.984)  |
| 12       | • 22-43-8120 | 32.40 (1.276) | 27.50 (1.083) |
| 13       | • 22-43-8130 | 34.90 (1.374) | 30.00 (1.181) |
| 14       | • 22-43-8140 | 37.40 (1.472) | 32.50 (1.280) |
| 15       | • 22-43-8150 | 39.90 (1.571) | 35.00 (1.378) |

• US Standard Product, available through Molex franchised distributors

B

2.00 to 2.50mm (.079 to .098") Pitch

B

2.00 to 2.50mm (.079 to .098") Pitch

# FEATURES AND SPECIFICATIONS

## Features and Benefits

- Rigid contact

## Reference Information

Packaging: Reel or bag  
 Mates With: 5103 terminals  
 Use With: 5240 housing  
 Designed In: Millimeters

## Electrical

Voltage: 250V  
 Current:

| AWG     | 22  | 24  | 26  | 28  |
|---------|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 2.0 | 1.5 |

Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 1000V AC/1 min.  
 Insulation Resistance: 1000 MΩ min.

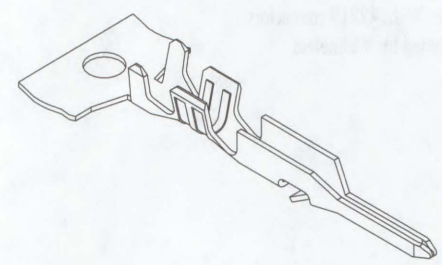
## Physical

Contact: Brass  
 Plating: Tin  
 Operating Temperature: -40 to +105°C  
 Wire Range: 22 to 28 AWG  
 Strip Length: 2.6 to 3.2mm

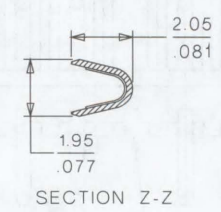
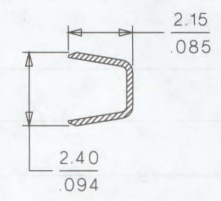
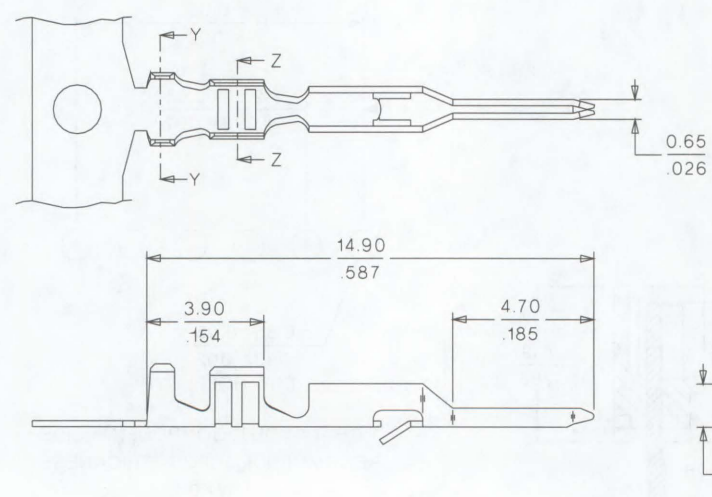


# 2.50mm (.098") Pitch SPOX™ Wire-to-Wire Male Crimp Terminal

5241



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Order No.  | Terminal | Wire Gauge<br>AWG | Insulation Diameter | Contact Material |
|------------|----------|-------------------|---------------------|------------------|
| 08-70-0102 | Reel     | 22-28             | 1.90mm max.         | Tin-Plated Brass |
| 08-70-0103 | Bag      |                   |                     |                  |

Recommended wire range assumes stranded wire



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 12 circuits
- With and without mounting ears

### Reference Information

Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LRT19980  
 Mates With: 5102-N housing  
 Use With: 5241 terminals  
 Designed In: Millimeters

### Electrical

Voltage: 250V  
 Current:

| AWG     | 22  | 24  | 26  | 28  |
|---------|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 2.0 | 1.5 |

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

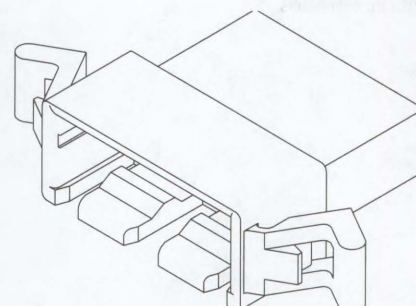
Housing: 6/6 nylon, UL 94V-0

Operating Temperature: -40 to +105°C



## 2.50mm (.098") Pitch SPOX™ Wire-to-Wire Plug Housing

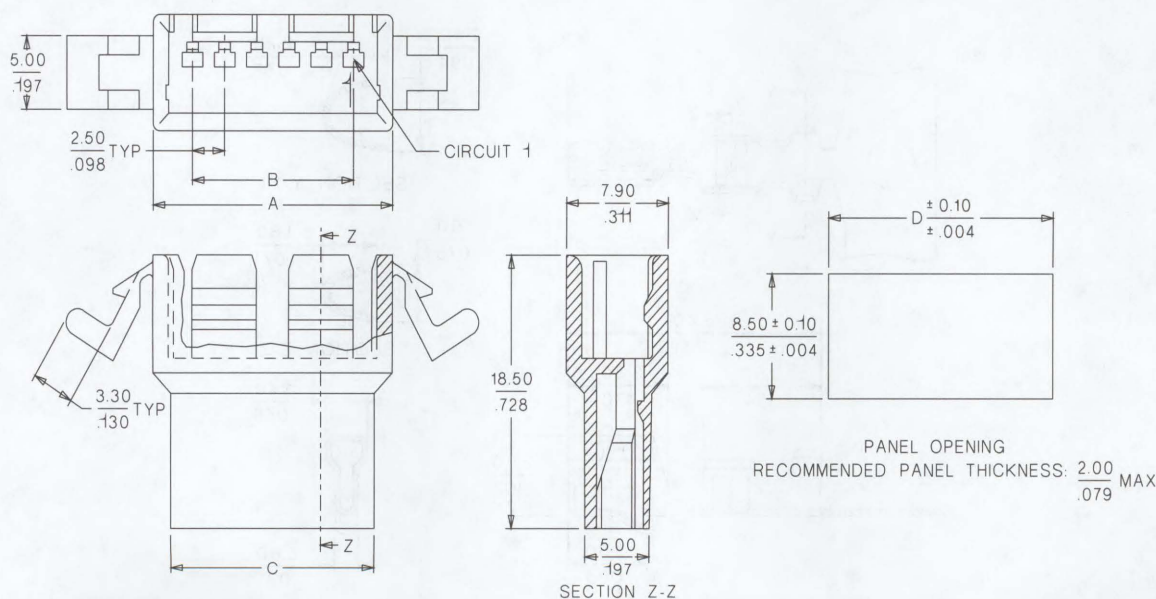
5240



2.00 to 2.50mm (.079 to .098") Pitch

B

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  |              | Dimension     |               |               |               |
|----------|------------|--------------|---------------|---------------|---------------|---------------|
|          | With Ears  | Without Ears | A             | B             | C             | D             |
| 2        | 29-11-0022 | 29-11-0023   | 8.60 (.338)   | 2.50 (.098)   | 5.80 (.228)   | 12.40 (.488)  |
| 3        | 29-11-0032 | 29-11-0033   | 11.10 (.437)  | 5.00 (.197)   | 8.30 (.327)   | 14.90 (.587)  |
| 4        | 29-11-0042 | 29-11-0043   | 13.60 (.535)  | 7.50 (.295)   | 10.80 (.425)  | 17.40 (.685)  |
| 5        | 29-11-0052 | 29-11-0053   | 16.10 (.633)  | 10.00 (.393)  | 13.30 (.524)  | 19.90 (.783)  |
| 6        | 29-11-0062 | 29-11-0063   | 18.60 (.732)  | 12.50 (.492)  | 15.80 (.622)  | 22.40 (.882)  |
| 7        | 29-11-0072 | 29-11-0073   | 21.10 (.830)  | 15.00 (.591)  | 18.30 (.720)  | 24.90 (.980)  |
| 8        | 29-11-0082 | 29-11-0083   | 23.60 (.929)  | 17.50 (.689)  | 20.80 (.819)  | 27.40 (1.079) |
| 9        | 29-11-0092 | 29-11-0093   | 26.10 (1.027) | 20.00 (.787)  | 23.30 (.917)  | 29.90 (1.177) |
| 10       | 29-11-0102 | 29-11-0103   | 28.60 (1.125) | 22.50 (.886)  | 25.80 (1.016) | 32.40 (1.276) |
| 11       | 29-11-0112 | 29-11-0113   | 31.10 (1.224) | 25.00 (.984)  | 28.30 (1.114) | 34.90 (1.374) |
| 12       | 29-11-0122 | 29-11-0123   | 33.60 (1.323) | 27.50 (1.083) | 30.80 (1.213) | 37.40 (1.472) |

B

2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Anti-fishhooking contact design
- 4 points of contact
- Low profile

### Reference Information

Packaging: Reel or bag  
Use With: 5102, 5207 and 5209 housings  
Designed In: Millimeters

### Electrical

Voltage: 250V

Current:

| AWG     | 22  | 24  | 26  | 28  |
|---------|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 2.0 | 1.5 |

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Contact: See Table

Plating: See Table

Operating Temperature: -40 to +105°C

Wire Range: 22 to 28 AWG

Strip Length: 2.6 to 3.2mm



2.50mm (.098") Pitch

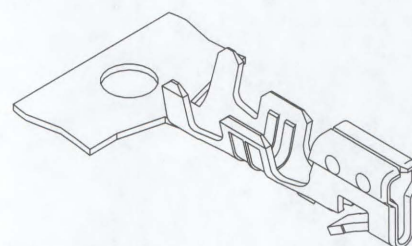
SPOX™

Wire-to-Board

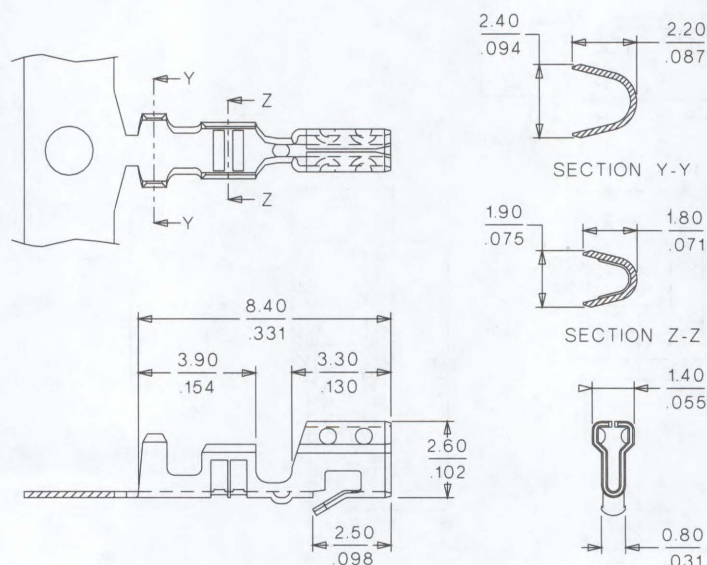
Crimp Terminal

5103

Spring Box



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Order No.  | Terminal | Wire Gauge<br>AWG | Insulation Diameter | Contact Material           |
|------------|----------|-------------------|---------------------|----------------------------|
| 08-70-0056 | Reel     | 22-28             | 1.90 max.           | Tin-Plated Brass           |
| 08-70-0057 | Bag      |                   |                     |                            |
| 08-70-0058 | Reel     |                   |                     | Tin-Plated Phosphor Bronze |
| 08-70-0059 | Bag      |                   |                     |                            |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Low profile
- Molded pull tab
- Friction lock

### Reference Information

Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 5045-NA and 5046-NA  
 Use With: 5103 terminals  
 Designed In: Millimeters

### Electrical

Voltage: 250V  
 Current:

| AWG     | 22  | 24  | 26  | 28  |
|---------|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 2.0 | 1.5 |

Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 1000V AC/1 min.  
 Insulation Resistance: 1000 MΩ min.

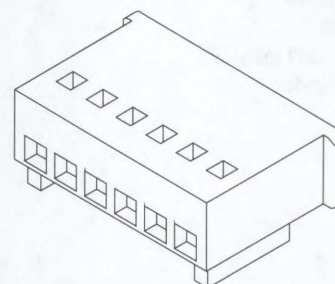
### Physical

Housing: 6/6 nylon, UL 94V-0  
 Operating Temperature: -40 to +105°C

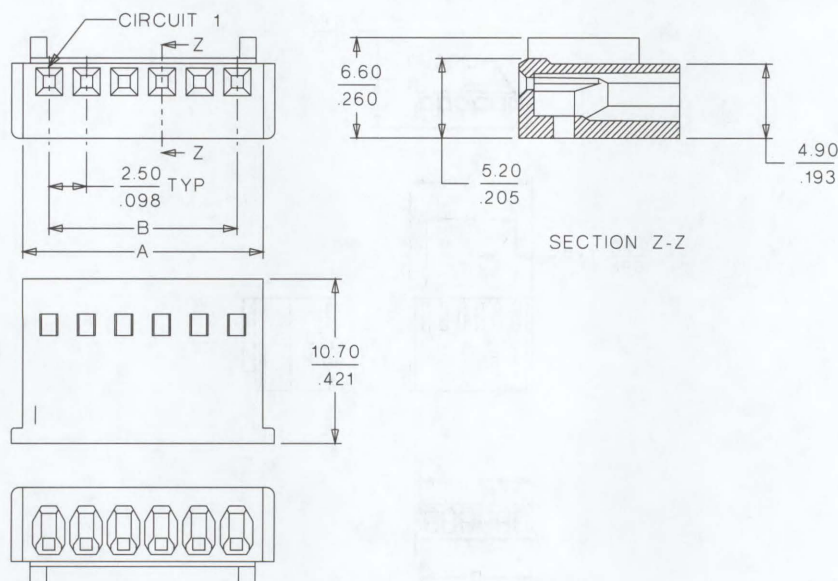


## 2.50mm (.098") Pitch SPOX™ Wire-to-Board Crimp Terminal Housing

5102-N



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 22-01-1024 | 6.00 (.236)   | 2.50 (.098)   |
| 3        | 22-01-1034 | 8.50 (.335)   | 5.00 (.197)   |
| 4        | 22-01-1044 | 11.00 (.433)  | 7.50 (.295)   |
| 5        | 22-01-1054 | 13.50 (.531)  | 10.00 (.394)  |
| 6        | 22-01-1064 | 16.00 (.630)  | 12.50 (.492)  |
| 7        | 22-01-1074 | 18.50 (.728)  | 15.00 (.591)  |
| 8        | 22-01-1084 | 21.00 (.827)  | 17.50 (.689)  |
| 9        | 22-01-1094 | 23.50 (.925)  | 20.00 (.787)  |
| 10       | 22-01-1104 | 26.00 (1.024) | 22.50 (.886)  |
| 11       | 22-01-1114 | 28.50 (1.122) | 25.00 (.984)  |
| 12       | 22-01-1124 | 31.00 (1.220) | 27.50 (1.083) |
| 13       | 22-01-1134 | 33.50 (1.319) | 30.00 (1.181) |
| 14       | 22-01-1144 | 36.00 (1.417) | 32.50 (1.280) |
| 15       | 22-01-1154 | 38.50 (1.516) | 35.00 (1.378) |

2.00 to 2.50mm (.079 to .098") Pitch

B

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 20 circuits
- Friction lock ramp provides secure mating retention
- Side walls facilitate mating and unmating

### Reference Information

Packaging: Bag  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 5508  
Use With: 2759, 4809 and 5159  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

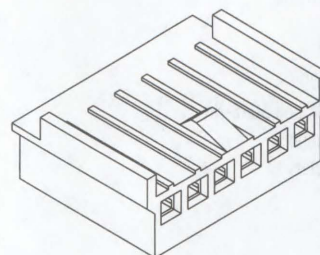
### Physical

Housing: 6/6 nylon, UL 94V-0  
Operating Temperature: -40 to +105°C

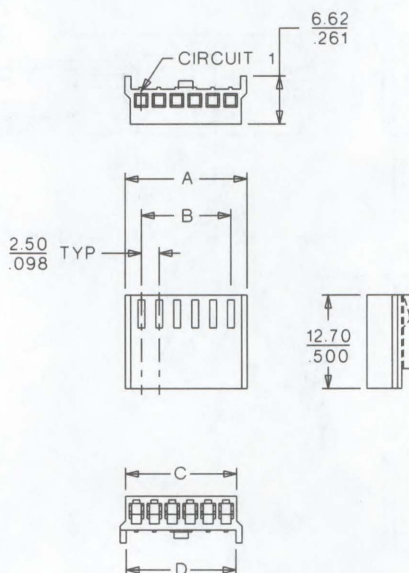


## 2.50mm (.098") Pitch KK® Crimp Terminal Housing

5507



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |              |               |               |
|----------|------------|---------------|--------------|---------------|---------------|
|          |            | A             | B            | C             | D             |
| 2        | 39-01-0025 | 7.00 (.276)   | 2.50 (.098)  | 5.50 (.217)   | 5.30 (.209)   |
| 3        | 39-01-0035 | 9.50 (.374)   | 5.00 (.197)  | 8.00 (.315)   | 7.80 (.307)   |
| 4        | 39-01-0045 | 12.00 (.472)  | 7.50 (.295)  | 10.50 (.413)  | 10.30 (.406)  |
| 5        | 39-01-0055 | 14.50 (.571)  | 10.00 (.394) | 13.00 (.512)  | 12.80 (.504)  |
| 6        | 39-01-0065 | 17.00 (.669)  | 12.50 (.492) | 15.50 (.610)  | 15.30 (.602)  |
| 7        | 39-01-0075 | 19.50 (.768)  | 15.00 (.591) | 18.00 (.709)  | 17.80 (.701)  |
| 8        | 39-01-0085 | 22.00 (.866)  | 17.50 (.689) | 20.50 (.807)  | 20.30 (.799)  |
| 9        | 39-01-0095 | 24.50 (.965)  | 20.00 (.787) | 23.00 (.906)  | 22.80 (.898)  |
| 10       | 39-01-0105 | 27.00 (1.063) | 22.50 (.886) | 25.50 (1.004) | 25.30 (.996)  |
| 11       | 39-01-0115 | 29.50 (1.161) | 25.00 (.984) | 28.00 (1.102) | 27.80 (1.094) |

| Circuits | Order No.  | Dimension     |               |               |               |
|----------|------------|---------------|---------------|---------------|---------------|
|          |            | A             | B             | C             | D             |
| 12       | 39-01-0125 | 32.00 (1.260) | 27.50 (1.083) | 30.50 (1.201) | 30.30 (1.193) |
| 13       | 39-01-0135 | 34.50 (1.358) | 30.00 (1.181) | 33.00 (1.299) | 32.80 (1.291) |
| 14       | 39-01-0145 | 37.00 (1.457) | 32.50 (1.280) | 35.50 (1.398) | 35.30 (1.390) |
| 15       | 39-01-0155 | 39.50 (1.555) | 35.00 (1.378) | 38.00 (1.496) | 37.80 (1.488) |
| 16       | 39-01-0165 | 42.00 (1.654) | 37.50 (1.476) | 40.50 (1.594) | 40.30 (1.587) |
| 17       | 39-01-0175 | 44.50 (1.752) | 40.00 (1.575) | 43.00 (1.693) | 42.80 (1.685) |
| 18       | 39-01-0185 | 47.00 (1.850) | 42.50 (1.673) | 45.50 (1.791) | 45.30 (1.783) |
| 19       | 39-01-0195 | 49.50 (1.949) | 45.00 (1.772) | 48.00 (1.890) | 47.80 (1.882) |
| 20       | 39-01-0205 | 52.00 (2.047) | 47.50 (1.870) | 50.50 (1.988) | 50.30 (1.980) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 20 circuits
- Friction locking window provides secure mating retention

### Reference Information

Packaging: Bag  
Mates With: 5507  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0  
Contact: Brass, Tin over Copper plating  
Operating Temperature: -40 to +105°C



2.50mm (.098") Pitch

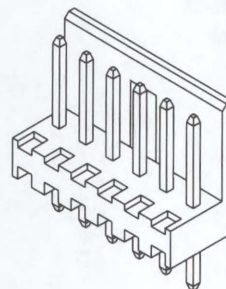
KK®

Header

5508

Vertical

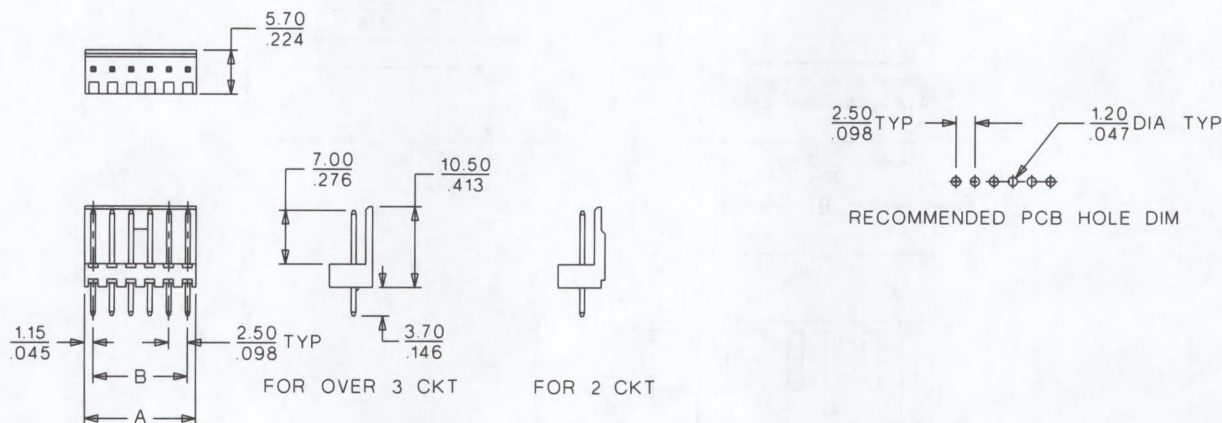
Friction Lock



2.00 to 2.50mm (.079 to .098") Pitch

B

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |              |
|----------|------------|---------------|--------------|
|          |            | A             | B            |
| 2        | 39-27-0026 | 4.80 (.189)   | 2.50 (.098)  |
| 3        | 39-27-0036 | 7.30 (.287)   | 5.00 (.197)  |
| 4        | 39-27-0046 | 9.80 (.386)   | 7.50 (.295)  |
| 5        | 39-27-0056 | 12.30 (.484)  | 10.00 (.394) |
| 6        | 39-27-0066 | 14.80 (.583)  | 12.50 (.492) |
| 7        | 39-27-0076 | 17.30 (.681)  | 15.00 (.591) |
| 8        | 39-27-0086 | 19.80 (.780)  | 17.50 (.689) |
| 9        | 39-27-0096 | 22.30 (.878)  | 20.00 (.787) |
| 10       | 39-27-0106 | 24.80 (.976)  | 22.50 (.886) |
| 11       | 39-27-0116 | 27.30 (1.075) | 25.00 (.984) |

B  
2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Molded friction lock
- Optional locking ramp version
- Stackable end-to-end

### Reference Information

Packaging: Bulk  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: KK 2.50mm (.098") headers or 0.64mm (.025")  
staked pins, 5045-NA and 5046-NA  
Use With: 2759 and 5159 terminals  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0  
Operating Temperature: -40 to +105°C



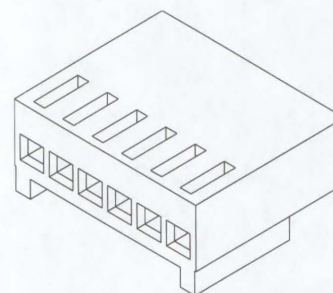
2.50mm (.098") Pitch

KK®

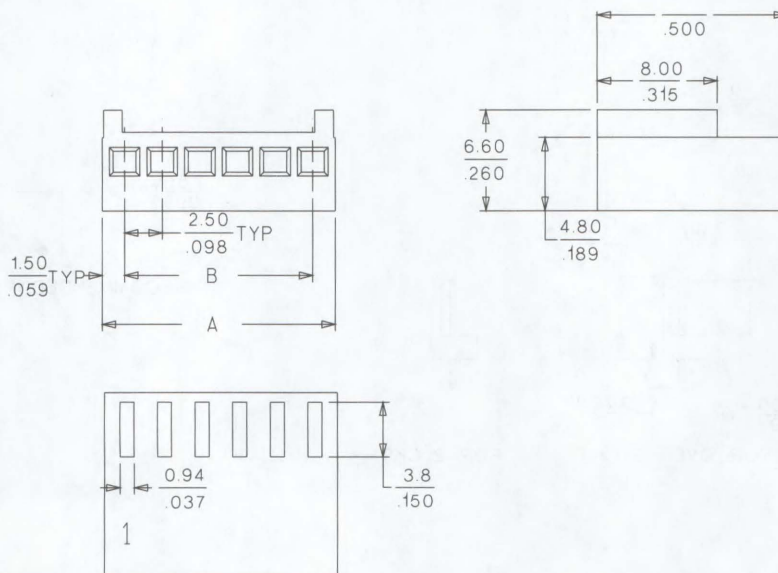
Crimp Terminal Housing

5051-N

Polarized



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 22-01-1022 | 5.50 (.216)   | 2.50 (.098)   |
| 3        | 22-01-1032 | 8.00 (.315)   | 5.00 (.197)   |
| 4        | 22-01-1042 | 10.50 (.413)  | 7.50 (.295)   |
| 5        | 22-01-1052 | 13.00 (.512)  | 10.00 (.394)  |
| 6        | 22-01-1062 | 15.50 (.611)  | 12.50 (.492)  |
| 7        | 22-01-1072 | 18.00 (.709)  | 15.00 (.591)  |
| 8        | 22-01-1082 | 20.50 (.807)  | 17.50 (.689)  |
| 9        | 22-01-1092 | 23.00 (.906)  | 20.00 (.787)  |
| 10       | 22-01-1102 | 25.50 (1.004) | 22.50 (.886)  |
| 11       | 22-01-1112 | 28.00 (1.102) | 25.00 (.984)  |
| 12       | 22-01-1122 | 30.50 (1.201) | 27.50 (1.083) |
| 13       | 22-01-1132 | 33.00 (1.299) | 30.00 (1.181) |
| 14       | 22-01-1142 | 35.50 (1.398) | 32.50 (1.280) |
| 15       | 22-01-1152 | 38.00 (1.496) | 35.00 (1.378) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Box design protects contact area
- Four points of contact for good signal integrity

### Reference Information

Product Specification: Wire-to-Board—PS-51191-002

Wire-to-Wire—PS-51191-003

Packaging: Reel or bag

Mates With: 5241

Use With: 51191

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Contact: Brass

Plating: Tin

Wire Range: 22 to 28 AWG

Insulation Diameter: 1.15 to 1.90mm (.045 to .075") dia.

Strip Length: 2.60 to 3.20mm (.102 to .126")

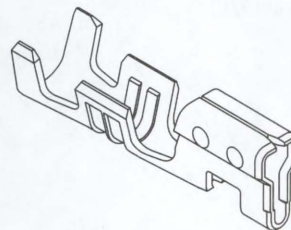
Operating Temperature: -40 to +105°C



## 2.50mm (.098") Pitch Wire-to-Board and Wire-to-Wire Crimp Terminal

**50802**

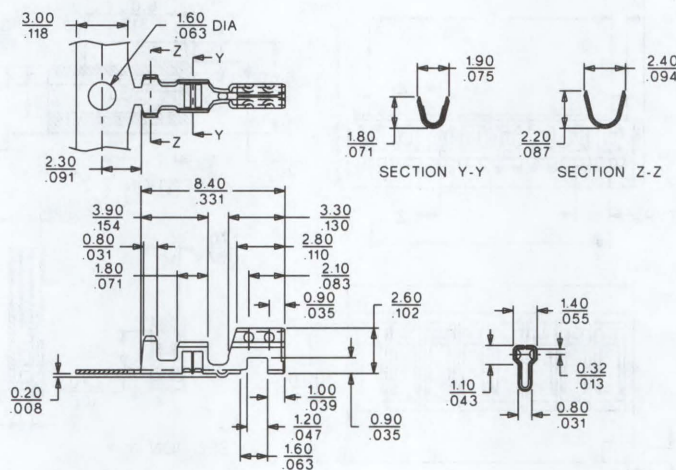
**Female**



**B**

2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Order No.  | Packaging |
|------------|-----------|
| 50802-9001 | Reel      |
| 50802-9101 | Bag       |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 12 circuits
- Guide rails facilitate mating
- Friction lock for mating retention
- Molded pull-tabs enable easy un-mating

### Reference Information

Product Specification: Wire-to-Board—PS-51191-002

Wire-to-Wire—PS-51191-003

Packaging: Bag

UL File No.: E29179

Mates With: 5045, 5046 and 5240

Use With: 50802

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

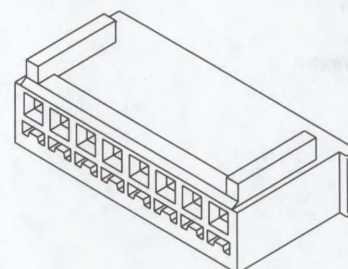
Housing: 6/6 nylon, UL 94V-0

Operating Temperature: -40 to +105°C

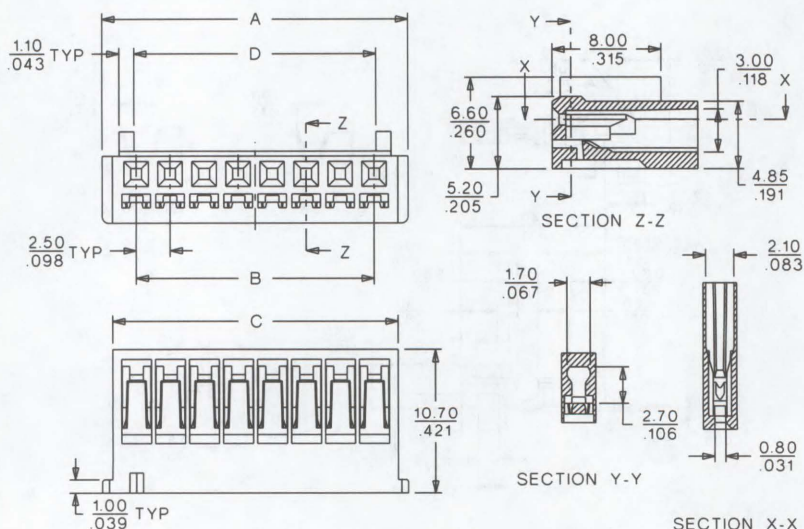


## 2.50mm (.098") Pitch Wire-to-Board and Wire-to-Wire Receptacle

51191



### CATALOG DRAWING (FOR REFERENCE ONLY)



### ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |               |
|----------|------------|---------------|---------------|---------------|---------------|
|          |            | A             | B             | C             | D             |
| 2        | 51191-0200 | 7.50 (.295)   | 2.50 (.098)   | 6.00 (.236)   | 2.80 (.110)   |
| 3        | 51191-0300 | 10.00 (.394)  | 5.00 (.197)   | 8.50 (.335)   | 5.30 (.209)   |
| 4        | 51191-0400 | 12.50 (.492)  | 7.50 (.295)   | 11.00 (.433)  | 7.80 (.307)   |
| 5        | 51191-0500 | 15.00 (.591)  | 10.00 (.394)  | 13.50 (.531)  | 10.30 (.406)  |
| 6        | 51191-0600 | 17.50 (.689)  | 12.50 (.492)  | 16.00 (.630)  | 12.80 (.504)  |
| 7        | 51191-0700 | 20.00 (.787)  | 15.00 (.591)  | 18.50 (.728)  | 15.30 (.602)  |
| 8        | 51191-0800 | 22.50 (.886)  | 17.50 (.689)  | 21.00 (.827)  | 17.80 (.701)  |
| 9        | 51191-0900 | 25.00 (.984)  | 20.00 (.787)  | 23.50 (.925)  | 20.30 (.799)  |
| 10       | 51191-1000 | 27.50 (1.083) | 22.50 (.886)  | 26.00 (1.024) | 22.80 (.898)  |
| 11       | 51191-1100 | 30.00 (1.181) | 25.00 (.984)  | 28.50 (1.122) | 25.30 (.996)  |
| 12       | 51191-1200 | 32.50 (1.280) | 27.50 (1.083) | 31.00 (1.220) | 27.80 (1.094) |
| 13       | 51191-1300 | 35.00 (1.378) | 30.00 (1.181) | 33.50 (1.319) | 30.03 (1.182) |
| 14       | 51191-1400 | 37.50 (1.477) | 32.50 (1.280) | 36.00 (1.420) | 32.80 (1.291) |
| 15       | 51191-1500 | 40.00 (1.575) | 35.00 (1.378) | 38.50 (1.516) | 35.30 (1.390) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- 0.64mm (.025") square wire pins

### Reference Information

Packaging: Bulk  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 5051 housings, KK® 2.50mm (.098")  
 and 5102-N  
 Designed In: Millimeters

### Electrical

Voltage: 250V  
 Current:

| AWG     | 22  | 24  | 26  | 28  |
|---------|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 2.0 | 1.5 |

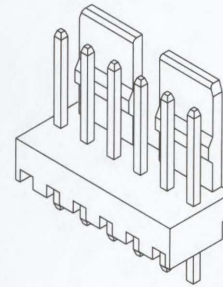
Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 1000V AC/1 min.  
 Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0  
 Contact: Brass  
 Plating: See Table  
 Operating Temperature: -40 to +105°C

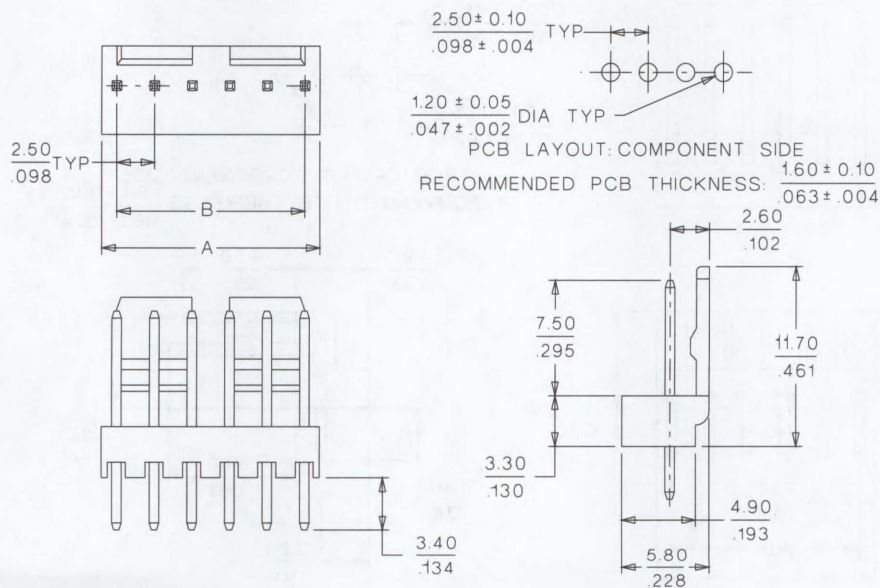
**molex®** 2.50mm (.098") Pitch  
 Header

**5045**  
 Vertical  
 Polarizing Lock



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.    |            | Dimension     |               |
|----------|--------------|------------|---------------|---------------|
|          | Tin          | Gold       | A             | B             |
| 2        | • 22-04-1021 | 22-11-1021 | 4.50 (.098)   | 2.50 (.177)   |
| 3        | • 22-04-1031 | 22-11-1031 | 7.00 (.276)   | 5.00 (.197)   |
| 4        | • 22-04-1041 | 22-11-1041 | 9.50 (.374)   | 7.50 (.295)   |
| 5        | • 22-04-1051 | 22-11-1051 | 12.00 (.472)  | 10.00 (.394)  |
| 6        | • 22-04-1061 | 22-11-1061 | 14.50 (.571)  | 12.50 (.492)  |
| 7        | • 22-04-1071 | 22-11-1071 | 17.00 (.669)  | 15.00 (.591)  |
| 8        | • 22-04-1081 | 22-11-1081 | 19.50 (.768)  | 17.50 (.689)  |
| 9        | • 22-04-1091 | 22-11-1091 | 22.00 (.866)  | 20.00 (.787)  |
| 10       | • 22-04-1101 | 22-11-1101 | 24.50 (.964)  | 22.50 (.886)  |
| 11       | • 22-04-1111 | 22-11-1111 | 27.00 (1.063) | 25.00 (.984)  |
| 12       | • 22-04-1121 | 22-11-1121 | 29.50 (1.161) | 27.50 (1.083) |
| 13       | • 22-04-1131 | 22-11-1131 | 32.00 (1.260) | 30.00 (1.181) |
| 14       | • 22-04-1141 | 22-11-1141 | 34.50 (1.358) | 32.50 (1.279) |
| 15       | • 22-04-1151 | 22-11-1151 | 37.00 (1.457) | 35.00 (1.378) |

• US Standard Product, available through Molex franchised distributors

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- 0.64mm (.025") square wire pins

### Reference Information

Packaging: Bulk  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 5051 housings, KK® 2.50mm (.098")  
 and 5102-N  
 Designed In: Millimeters

### Electrical

Voltage: 250V

Current:

| AWG     | 22  | 24  | 26  | 28  |
|---------|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 2.0 | 1.5 |

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0

Contact: Brass

Plating: See Table

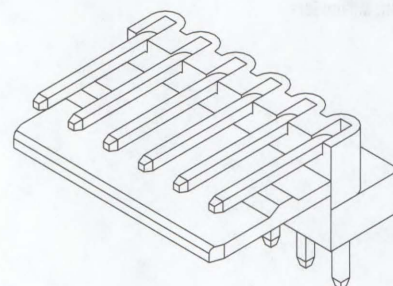
Operating Temperature: -40 to +105°C



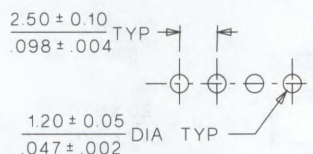
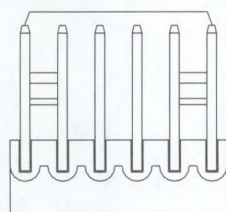
## 2.50mm (.098") Pitch Header

5046

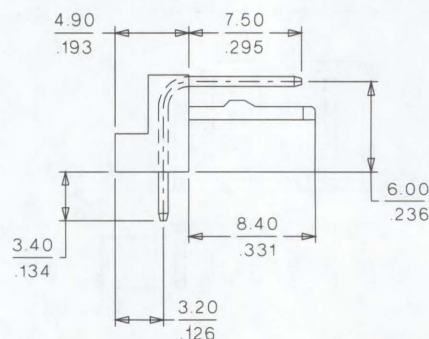
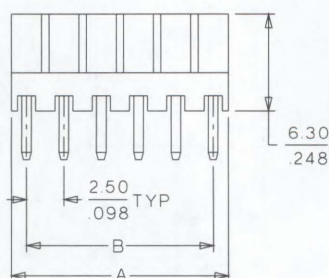
## Right Angle Friction Lock



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE  
 RECOMMENDED PCB THICKNESS:  $\frac{1.60 \pm 0.10}{.063 \pm .004}$



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.    |            | Dimension     |               |
|----------|--------------|------------|---------------|---------------|
|          | Tin          | Gold       | A             | B             |
| 2        | • 22-05-1022 | 22-12-1022 | 4.50 (.177)   | 2.50 (.098)   |
| 3        | • 22-05-1032 | 22-12-1032 | 7.00 (.276)   | 5.00 (.197)   |
| 4        | • 22-05-1042 | 22-12-1042 | 9.50 (.374)   | 7.50 (.295)   |
| 5        | • 22-05-1052 | 22-12-1052 | 12.00 (.472)  | 10.00 (.394)  |
| 6        | • 22-05-1062 | 22-12-1062 | 14.50 (.571)  | 12.50 (.492)  |
| 7        | • 22-05-1072 | 22-12-1072 | 17.00 (.669)  | 15.00 (.591)  |
| 8        | • 22-05-1082 | 22-12-1082 | 19.50 (.768)  | 17.50 (.689)  |
| 9        | • 22-05-1092 | 22-12-1092 | 22.00 (.866)  | 20.00 (.787)  |
| 10       | • 22-05-1102 | 22-12-1102 | 24.50 (.964)  | 22.50 (.886)  |
| 11       | • 22-05-1112 | 22-12-1112 | 27.00 (1.063) | 25.00 (.984)  |
| 12       | • 22-05-1122 | 22-12-1122 | 29.50 (1.161) | 27.50 (1.083) |
| 13       | • 22-05-1132 | 22-12-1132 | 32.00 (1.260) | 30.00 (1.181) |
| 14       | • 22-05-1142 | 22-12-1142 | 34.50 (1.358) | 32.50 (1.279) |
| 15       | • 22-05-1152 | 22-12-1152 | 37.00 (1.457) | 35.00 (1.378) |

• US Standard Product, available through Molex franchised distributors



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 20 circuits
- 4-point IDT contact
- 2-point interface pin contact

### Reference Information

Product Specification: PS-8160

Packaging: Bulk

Mates With: 3022, 3094 and 93610

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 4.0A

Contact Resistance: 8mΩ max.

Dielectric Withstanding Voltage: 3000V AC

Insulation Resistance: 200K MΩ min.

### Mechanical

Contact Retention to Housing 28N min.

Wire Pull-Out Force: Vertical—28.9N min.

Horizontal—8.9N min.

Mating Force: 2.5N max.

Unmating Force: 1.8N min.

Durability: 10 cycles

### Physical

Housing: Polyester, UL 94V-0

Contact: Phosphor Bronze

Plating: Hot Tin/Lead—dip 1.0-2.50μm

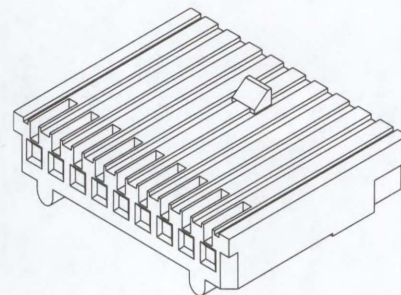
Wire Accommodation: 24 AWG solid discrete wire and cable

Insulation Diameter: 1.00 (.039) to 1.52mm (.060") max.

## molex® 2.50mm (.098") Pitch Connector

### 8160-NG

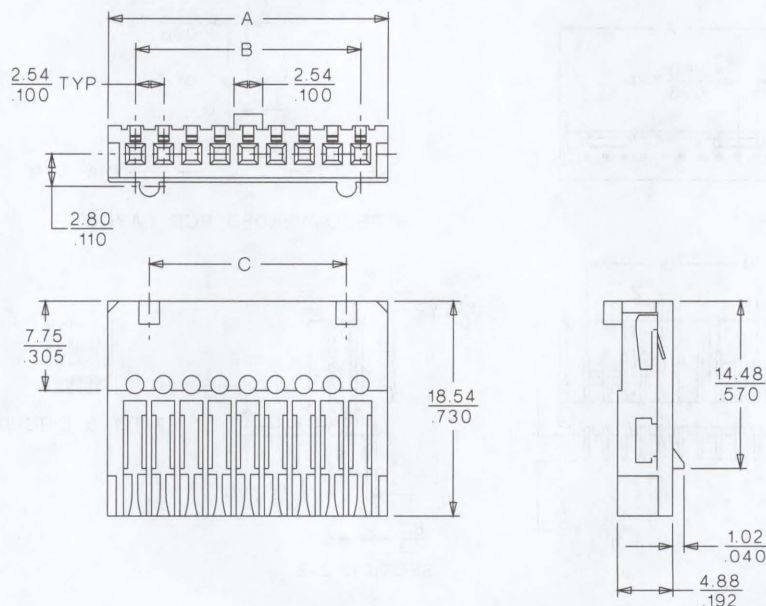
### Euro 250 Series In-Line Wire Exit



2.00 to 2.50mm (.079 to .098") Pitch

**B**

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |              |              |
|----------|------------|---------------|--------------|--------------|
|          |            | A             | B            | C            |
| 2        | 38-00-7272 | 7.50 (.295)   | 2.50 (.098)  |              |
| 3        | 38-00-7384 | 10.00 (.394)  | 5.00 (.197)  | 2.50 (.098)  |
| 4        | 38-00-7385 | 12.50 (.492)  | 7.50 (.295)  | 5.00 (.197)  |
| 5        | 38-00-7386 | 15.00 (.591)  | 10.00 (.394) | 7.50 (.295)  |
| 6        | 38-00-7387 | 17.50 (.689)  | 12.50 (.492) | 10.00 (.394) |
| 7        | 38-00-7388 | 20.00 (.787)  | 15.00 (.591) | 12.50 (.492) |
| 8        | 38-00-7389 | 22.50 (.886)  | 17.50 (.689) | 15.00 (.591) |
| 9        | 38-00-7390 | 25.00 (.984)  | 20.00 (.787) | 17.50 (.689) |
| 10       | 38-00-7391 | 27.50 (1.083) | 22.50 (.886) | 20.00 (.787) |
| 11       | 38-00-7392 | 30.00 (1.180) | 25.00 (.984) | 22.50 (.886) |

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 12       | 38-00-7393 | 32.50 (1.280) | 27.50 (1.083) | 25.00 (.984)  |
| 13       | 38-00-7394 | 35.00 (1.378) | 30.00 (1.180) | 27.50 (1.083) |
| 14       | 38-00-7395 | 37.50 (1.477) | 32.50 (1.280) | 30.00 (1.180) |
| 15       | 38-00-7396 | 40.00 (1.575) | 35.00 (1.378) | 32.50 (1.280) |
| 16       | 38-00-7397 | 42.50 (1.674) | 37.50 (1.477) | 35.00 (1.378) |
| 17       | 38-00-7398 | 45.00 (1.772) | 40.00 (1.575) | 37.50 (1.477) |
| 18       | 38-00-7399 | 47.50 (1.870) | 42.50 (1.674) | 40.00 (1.575) |
| 19       | 38-00-7400 | 50.00 (1.969) | 45.00 (1.772) | 42.50 (1.674) |
| 20       | 38-00-7401 | 52.50 (2.067) | 47.50 (1.870) | 45.00 (1.772) |

2.00 to 2.50mm (.079 to .098") Pitch

B

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 20 circuits

### Reference Information

Packaging: Bag  
Mates With: 5102 and 7534  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 5.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1500V  
Insulation Resistance: 500K MΩ min.

### Mechanical

Contact Retention to Housing: 2 lb min.  
Mating Force: 9 oz max.  
Unmating Force: 3 oz min.  
Durability: 25 cycles

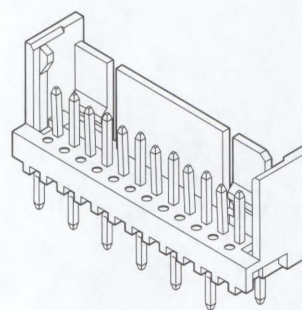
### Physical

Housing: White polyester, UL 94V-0  
Contact: Brass  
Plating: Preplated electro-Tin over Copper  
PC Board Thickness: 1.50mm (.060")

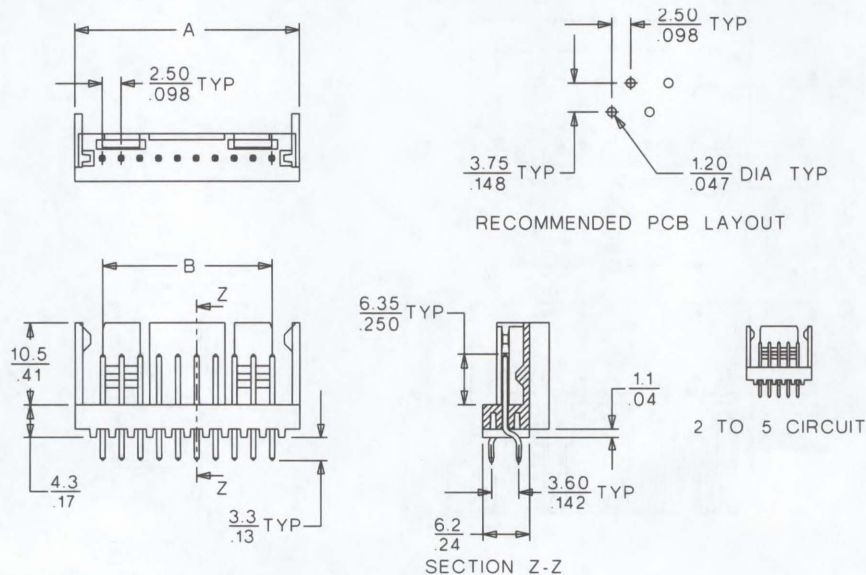
**molex®** 2.50mm (.098") Pitch  
**KK®**  
**Header**

**90293**

**Vertical, Shrouded  
Staggered Tail**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |              |
|----------|------------|---------------|--------------|
|          |            | A             | B            |
| 2        | 90293-0022 | 9.80 (.386)   | 2.50 (.098)  |
| 3        | 90293-0023 | 12.30 (.484)  | 5.00 (.187)  |
| 4        | 90293-0024 | 14.80 (.583)  | 7.50 (.295)  |
| 5        | 90293-0025 | 17.30 (.681)  | 10.00 (.394) |
| 6        | 90293-0026 | 19.80 (.780)  | 12.60 (.492) |
| 7        | 90293-0027 | 22.30 (.878)  | 15.00 (.591) |
| 8        | 90293-0028 | 24.80 (.976)  | 17.50 (.689) |
| 9        | 90293-0029 | 27.30 (1.075) | 20.00 (.787) |
| 10       | 90293-0030 | 29.80 (1.173) | 22.50 (.886) |
| 11       | 90293-0031 | 32.30 (1.272) | 25.00 (.984) |

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 12       | 90293-0032 | 34.80 (1.370) | 27.50 (1.083) |
| 13       | 90293-0033 | 37.30 (1.469) | 30.00 (1.181) |
| 14       | 90293-0034 | 39.80 (1.567) | 32.50 (1.280) |
| 15       | 90293-0035 | 42.30 (1.665) | 35.00 (1.378) |
| 16       | 90293-0036 | 44.80 (1.764) | 37.50 (1.476) |
| 17       | 90293-0037 | 47.30 (1.862) | 40.00 (1.575) |
| 18       | 90293-0038 | 49.80 (1.961) | 42.50 (1.673) |
| 19       | 90293-0039 | 52.30 (2.059) | 45.00 (1.772) |
| 20       | 90293-0040 | 54.80 (2.157) | 47.50 (1.870) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 20 circuits

### Reference Information

Packaging: Bag  
Mates With: 5102 and 7534  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 5.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1500V  
Insulation Resistance: 500K MΩ min.

### Mechanical

Contact Retention to Housing: 2 lb min.  
Mating Force: 9 oz max.  
Unmating Force: 3 oz min.  
Durability: 25 cycles

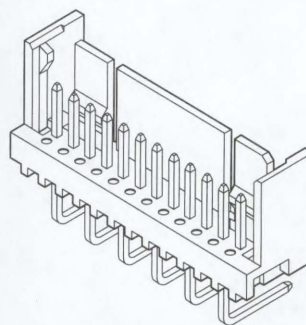
### Physical

Housing: White polyester, UL 94V-0  
Contact: Brass  
Plating: Preplated electro-Tin over Copper  
PC Board Thickness: 1.50mm (.060")

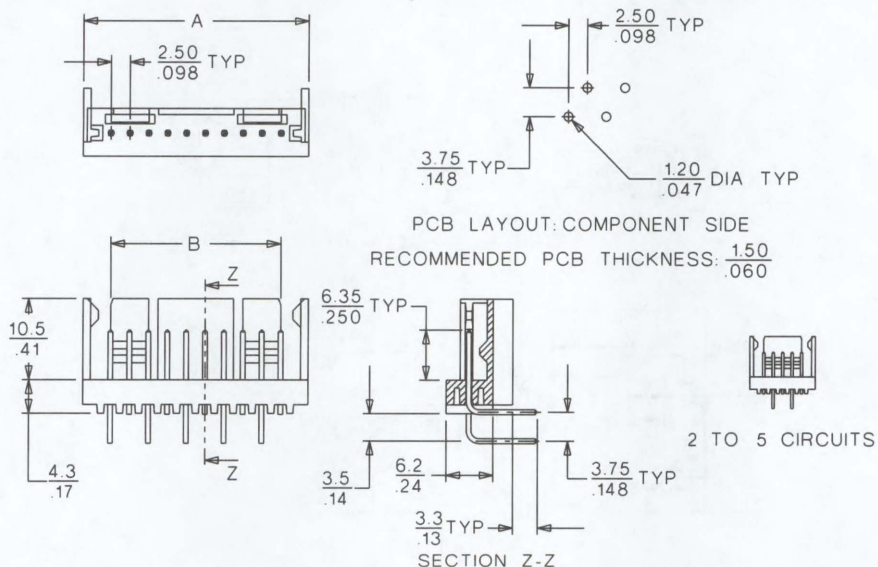
**molex®** 2.50mm (.098") Pitch  
**KK®**  
**Header**

**90298**

**Right Angle, Shrouded  
Staggered Tail**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |              |
|----------|------------|---------------|--------------|
|          |            | A             | B            |
| 2        | 90298-0002 | 9.80 (.386)   | 2.50 (.098)  |
| 3        | 90298-0003 | 12.30 (.484)  | 5.00 (.187)  |
| 4        | 90298-0004 | 14.80 (.583)  | 7.50 (.295)  |
| 5        | 90298-0005 | 17.30 (.681)  | 10.00 (.394) |
| 6        | 90298-0006 | 19.80 (.780)  | 12.60 (.492) |
| 7        | 90298-0007 | 22.30 (.878)  | 15.00 (.591) |
| 8        | 90298-0008 | 24.80 (.976)  | 17.50 (.689) |
| 9        | 90298-0009 | 27.30 (1.075) | 20.00 (.787) |
| 10       | 90298-0010 | 29.80 (1.173) | 22.50 (.886) |
| 11       | 90298-0011 | 32.30 (1.272) | 25.00 (.984) |

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 12       | 90298-0012 | 34.80 (1.370) | 27.50 (1.083) |
| 13       | 90298-0013 | 37.30 (1.469) | 30.00 (1.181) |
| 14       | 90298-0014 | 39.80 (1.567) | 32.50 (1.280) |
| 15       | 90298-0015 | 42.30 (1.665) | 35.00 (1.378) |
| 16       | 90298-0016 | 44.80 (1.764) | 37.50 (1.476) |
| 17       | 90298-0017 | 47.30 (1.862) | 40.00 (1.575) |
| 18       | 90298-0018 | 49.80 (1.961) | 42.50 (1.673) |
| 19       | 90298-0019 | 52.30 (2.059) | 45.00 (1.772) |
| 20       | 90298-0020 | 54.80 (2.157) | 47.50 (1.870) |

2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Box design provides two points of contact and terminal protection
- Locking tang for secure housing retention

### Reference Information

Product Specification: PS-67259-003

Packaging: Reel

Mates With: 67279

Use With: 67259

Designed In: Millimeters

### Electrical

Contact Resistance: 20mΩ max.

### Mechanical

Contact Retention to Housing: 14.7N (3.3 lb) min.

Wire Pull-out Force: 30 AWG — 4.9N (1.1 lb) min.

28 AWG — 9.8N (2.2 lb) min.

26 AWG — 19.6N (4.4 lb) min.

24 AWG — 29.4N (6.6 lb) min.

22 AWG — 49.0N (11.0 lb) min.

### Physical

Insulation Diameter: 0.20mm (.008")

Contact: Brass

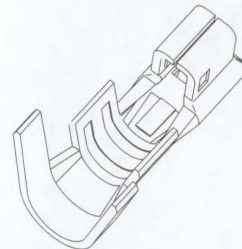
Plating: Tin

Wire Gauge : 22 to 30 AWG

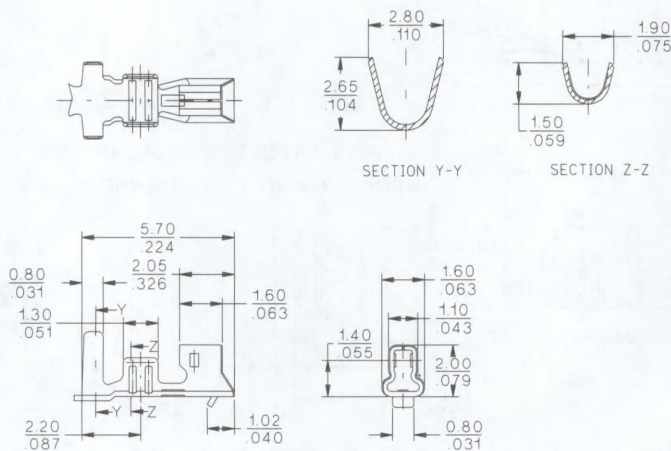
Operating Temperature : -20 to +85°C

# molex® 2.50mm (.098") Pitch Wire-to-Board Crimp Terminal

67260



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Order No.  |
|------------|
| 67260-0001 |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Size 2 to 15 circuits
- Friction lock provides secure mating

### Reference Information

Product Specification: PS-67259-003

Packaging: Bag

Mates With: 67279

Use With: 67260

Designed In: Millimeters

### Electrical

Dielectric Withstanding Voltage: 800V AC/1 min  
Insulation Resistance: 1000 MΩ min.

### Mechanical

Mating Force: 83.3N (18.7 lb) max.  
Unmating Force: 0.98N (0.22 lb) min.  
Contact Retention to Housing: 14.7N (3.3 lb) min.

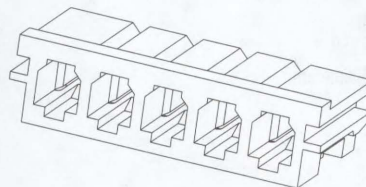
### Physical

Housing: White Nylon 66, UL 94V-0  
Operating Temperature: -20 to +85°C



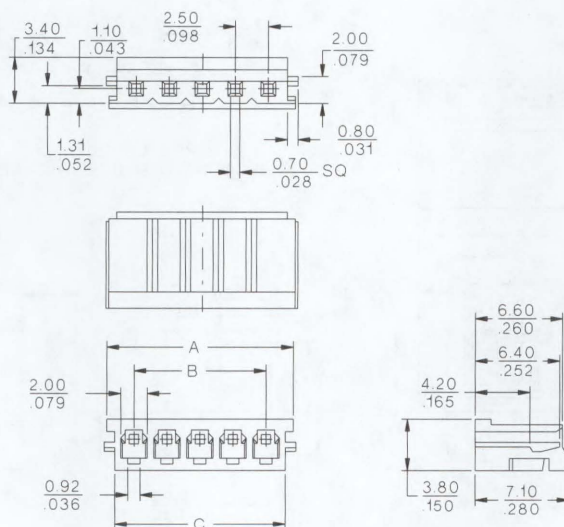
## 2.50mm (.098") Pitch Wire-to-Board Housing

67259



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 2        | 67259-0200 | 6.60 (.260)   | 2.50 (.098)   | 5.40 (.213)   |
| 3        | 67259-0300 | 9.10 (.358)   | 5.00 (.196)   | 7.90 (.311)   |
| 4        | 67259-0400 | 11.60 (.457)  | 7.50 (.295)   | 10.40 (.409)  |
| 5        | 67259-0500 | 14.10 (.555)  | 10.00 (.393)  | 12.90 (.508)  |
| 6        | 67259-0600 | 16.60 (.654)  | 12.50 (.492)  | 15.40 (.606)  |
| 7        | 67259-0700 | 19.10 (.752)  | 15.00 (.590)  | 17.90 (.705)  |
| 8        | 67259-0800 | 21.60 (.850)  | 17.50 (.689)  | 20.40 (.803)  |
| 9        | 67259-0900 | 24.10 (.949)  | 20.00 (.787)  | 22.90 (.902)  |
| 10       | 67259-1000 | 26.60 (1.047) | 22.50 (.886)  | 25.40 (1.000) |
| 11       | 67259-1100 | 29.10 (1.146) | 25.00 (.984)  | 27.90 (1.098) |
| 12       | 67259-1200 | 31.60 (1.244) | 27.50 (1.083) | 30.40 (1.197) |
| 13       | 67259-1300 | 34.10 (1.343) | 30.00 (1.181) | 32.90 (1.295) |
| 14       | 67259-1400 | 36.60 (1.441) | 32.50 (1.280) | 35.40 (1.394) |
| 15       | 67259-1500 | 39.10 (1.539) | 35.00 (1.378) | 37.90 (1.492) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Size 2 to 15 circuits
- Standoffs facilitate post solder cleaning
- Locking windows provide secure mating

### Reference Information

Product Specification: PS-67259-003

Packaging: Bag

Mates With: 67259

Designed In: Millimeters

### Electrical

Voltage: 250V

Current Rating: 1.0A min.

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 800V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Mechanical

Mating Force: 83.3N (18.7 lb) max.

Unmating Force: 0.98N (0.22 lb) min.

Durability: 50 cycles

### Physical

Housing: Thermoplastic, UL 94V-0

Contact: Brass

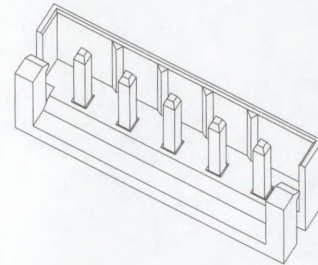
Plating: Tin

PCB Thickness: 1.60mm (.063")

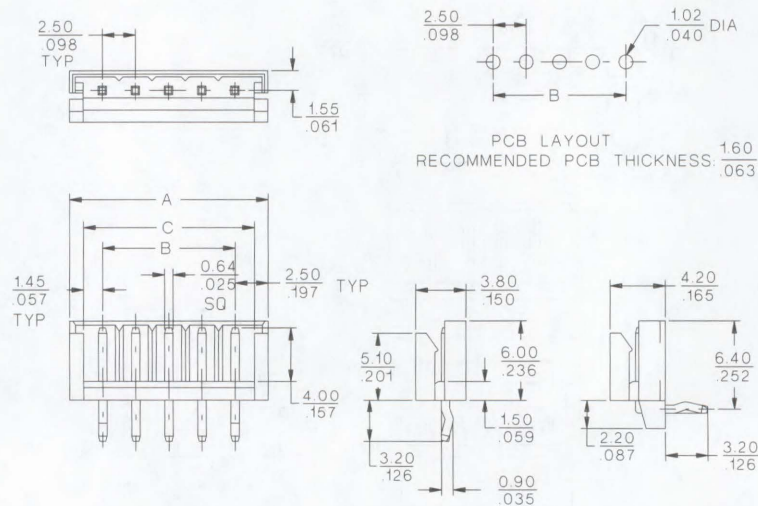
Operating Temperature: -20 to +85°C

# molex® 2.50mm (.098") Pitch Wire-to-Board Header

67279



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  |             | Dimension     |               |               |
|----------|------------|-------------|---------------|---------------|---------------|
|          | Vertical   | Right Angle | A             | B             | C             |
| 2        | 67279-0200 | 67279-0210  | 7.50 (.295)   | 2.50 (.098)   | 5.50 (.217)   |
| 3        | 67279-0300 | 67279-0310  | 10.00 (.393)  | 5.00 (.196)   | 8.00 (.315)   |
| 4        | 67279-0400 | 67279-0410  | 12.50 (.492)  | 7.50 (.295)   | 10.50 (.413)  |
| 5        | 67279-0500 | 67279-0510  | 15.00 (.590)  | 10.00 (.393)  | 13.00 (.512)  |
| 6        | 67279-0600 | 67279-0610  | 17.50 (.689)  | 12.50 (.492)  | 15.50 (.610)  |
| 7        | 67279-0700 | 67279-0710  | 20.00 (.787)  | 15.00 (.590)  | 18.00 (.709)  |
| 8        | 67279-0800 | 67279-0810  | 22.50 (.886)  | 17.50 (.689)  | 20.50 (.807)  |
| 9        | 67279-0900 | 67279-0910  | 25.00 (.984)  | 20.00 (.787)  | 23.00 (.906)  |
| 10       | 67279-1000 | 67279-1010  | 27.50 (1.083) | 22.50 (.886)  | 25.50 (1.004) |
| 11       | 67279-1100 | 67279-1110  | 30.00 (1.181) | 25.00 (.984)  | 28.00 (1.102) |
| 12       | 67279-1200 | 67279-1210  | 32.50 (1.280) | 27.50 (1.083) | 30.50 (1.201) |
| 13       | 67279-1300 | 67279-1310  | 35.00 (1.378) | 30.00 (1.181) | 33.00 (1.299) |
| 14       | 67279-1400 | 67279-1410  | 37.50 (1.476) | 32.50 (1.280) | 35.50 (1.398) |
| 15       | 67279-1500 | 67279-1510  | 40.00 (1.575) | 35.00 (1.378) | 38.00 (1.496) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Box design provides two points of contact and terminal protection
- Locking tang for secure housing retention

### Reference Information

Product Specification: PS-67261-003

Packaging: Reel

Mates With: 67280

Use With: 67261

Designed In: Millimeters

### Electrical

Contact Resistance: 20mΩ max.

### Mechanical

Contact Retention to Housing: 14.7N (3.3 lb) min.

Wire Pull-out Force: 30 AWG — 4.9N (1.1 lb) min.

28 AWG — 9.8N (2.2 lb) min.

26 AWG — 19.6N (4.4 lb) min.

24 AWG — 29.4N (6.6 lb) min.

22 AWG — 49.0N (11.0 lb) min.

### Physical

Insulation Diameter: 0.20mm (.008")

Contact: Brass

Plating: Tin

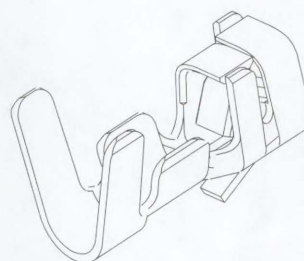
Wire Gauge : 22 to 30 AWG

Operating Temperature : -20 to +85°C



## 2.50mm (.098") Pitch Wire-to-Board Crimp Terminal

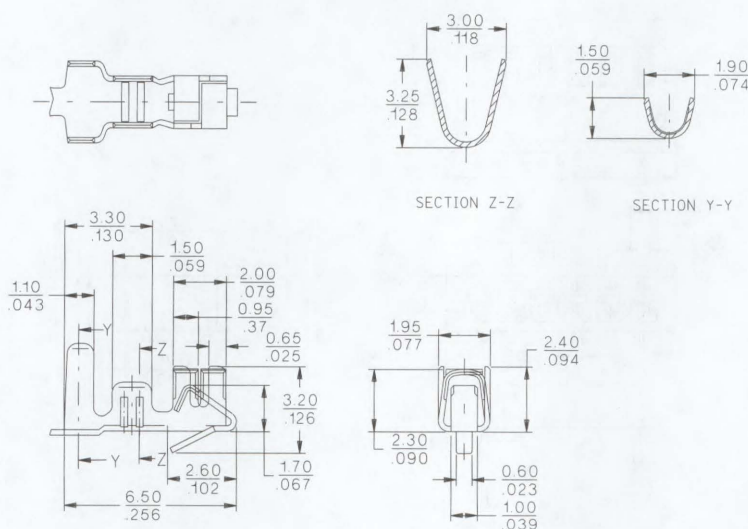
**67262**



**B**

2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Order No.  |
|------------|
| 67262-0001 |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Size 2 to 15 circuits
- Friction lock provides secure mating

### Reference Information

Product Specification: PS-67261-003

Packaging: Bag

Mates With: 67280

Use With: 67262

Designed In: Millimeters

### Electrical

Dielectric Withstanding Voltage: 1000V AC/1 min

Insulation Resistance: 1000 MΩ min.

### Mechanical

Mating Force: 83.3N (18.7 lb) max.

Unmating Force: 0.98N (0.22 lb) min.

Contact Retention to Housing: 14.7N (3.3 lb) min.

### Physical

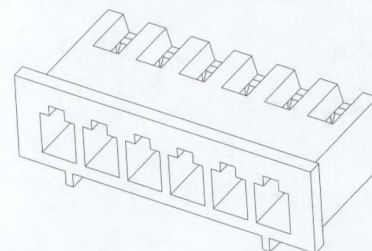
Housing: White Nylon 66, UL 94V-0

Operating Temperature: -20 to +85°C

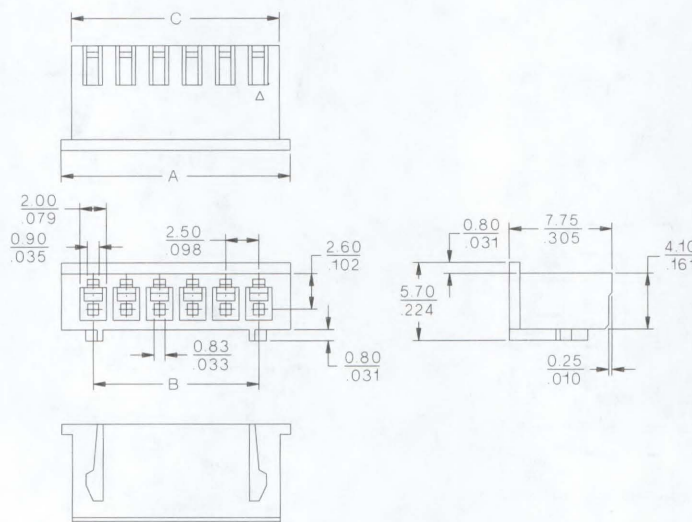


## 2.50mm (.098") Pitch Wire-to-Board Housing

**67261**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 2        | 67261-0200 | 7.30 (.287)   | 2.50 (.098)   | 5.70 (.224)   |
| 3        | 67261-0300 | 9.80 (.386)   | 5.00 (.196)   | 8.20 (.323)   |
| 4        | 67261-0400 | 12.30 (.484)  | 7.50 (.295)   | 10.70 (.421)  |
| 5        | 67261-0500 | 14.80 (.583)  | 10.00 (.393)  | 13.20 (.513)  |
| 6        | 67261-0600 | 17.30 (.681)  | 12.50 (.492)  | 15.70 (.618)  |
| 7        | 67261-0700 | 19.80 (.779)  | 15.00 (.590)  | 18.20 (.717)  |
| 8        | 67261-0800 | 22.30 (.878)  | 17.50 (.689)  | 20.70 (.815)  |
| 9        | 67261-0900 | 24.80 (.976)  | 20.00 (.787)  | 23.20 (.913)  |
| 10       | 67261-1000 | 27.30 (1.075) | 22.50 (.886)  | 25.70 (1.012) |
| 11       | 67261-1100 | 29.80 (1.173) | 25.00 (.984)  | 28.40 (1.118) |
| 12       | 67261-1200 | 32.30 (1.272) | 27.50 (1.083) | 30.70 (1.209) |
| 13       | 67261-1300 | 34.80 (1.370) | 30.00 (1.181) | 33.20 (1.307) |
| 14       | 67261-1400 | 37.30 (1.469) | 32.50 (1.280) | 35.70 (1.406) |
| 15       | 67261-1500 | 39.80 (1.567) | 35.00 (1.378) | 38.20 (1.504) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Size 2 to 15 circuits
- Standoffs facilitate post solder cleaning
- Locking windows provide secure mating

### Reference Information

Product Specification: PS-67261-003

Packaging: Bag

Mates With: 67261

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 1.0A min.

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Mechanical

Mating Force: 83.3N (18.7 lb) max.

Unmating Force: 0.98N (0.22 lb) min.

Durability: 50 cycles

### Physical

Housing: Thermoplastic, UL 94V-0

Contact: Brass

Plating: Tin

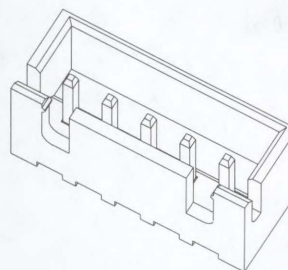
PCB Thickness: 1.60mm (.063")

Operating Temperature: -20 to +85°C



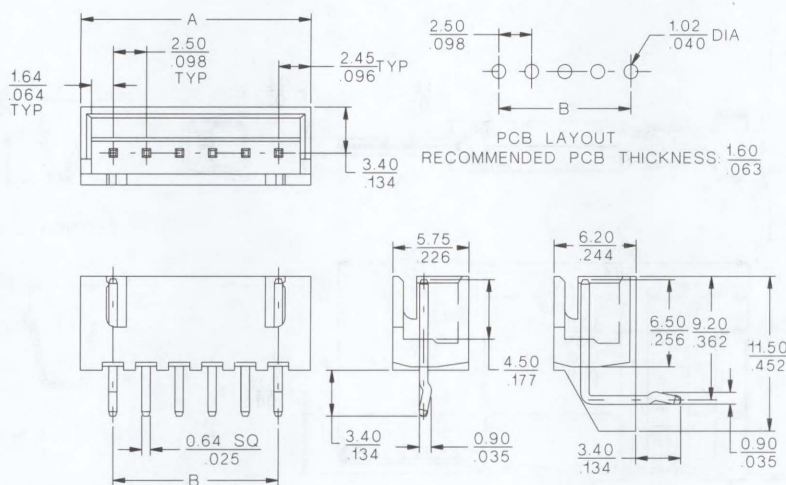
## 2.50mm (.098") Pitch Wire-to-Board Header

**67280**



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  |             | Dimension     |               |
|----------|------------|-------------|---------------|---------------|
|          | Vertical   | Right Angle | A             | B             |
| 2        | 67280-0200 | 67280-0210  | 7.50 (.295)   | 2.50 (.098)   |
| 3        | 67280-0300 | 67280-0310  | 10.00 (.393)  | 5.00 (.196)   |
| 4        | 67280-0400 | 67280-0410  | 12.50 (.492)  | 7.50 (.295)   |
| 5        | 67280-0500 | 67280-0510  | 15.00 (.590)  | 10.00 (.393)  |
| 6        | 67280-0600 | 67280-0610  | 17.50 (.689)  | 12.50 (.492)  |
| 7        | 67280-0700 | 67280-0710  | 20.00 (.787)  | 15.00 (.590)  |
| 8        | 67280-0800 | 67280-0810  | 22.50 (.886)  | 17.50 (.689)  |
| 9        | 67280-0900 | 67280-0910  | 25.00 (.984)  | 20.00 (.787)  |
| 10       | 67280-1000 | 67280-1010  | 27.50 (1.083) | 22.50 (.886)  |
| 11       | 67280-1100 | 67280-1110  | 30.00 (1.181) | 25.00 (.984)  |
| 12       | 67280-1200 | 67280-1210  | 32.50 (1.280) | 27.50 (1.083) |
| 13       | 67280-1300 | 67280-1310  | 35.00 (1.378) | 30.00 (1.181) |
| 14       | 67280-1400 | 67280-1410  | 37.50 (1.476) | 32.50 (1.280) |
| 15       | 67280-1500 | 67280-1510  | 40.00 (1.575) | 35.00 (1.378) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Locking window provides secure mating retention to housing lance

### Reference Information

Product Specification: PS-51198-003

Packaging: Reel or bag

Mates With: 50351 and 50752

Use With: 51198

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Contact: Phosphor Bronze

Plating: Tin

Wire Range: 22 to 28 AWG

Insulation Diameter: 1.15 to 1.80mm (.045 to .071")

Strip Length: 2.30 to 2.80mm (.091 to .110")

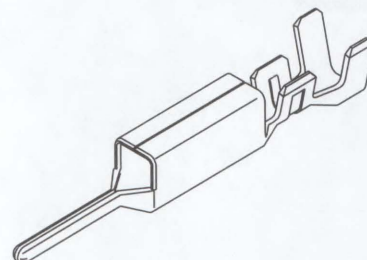
Operating Temperature: -40 to +105°C



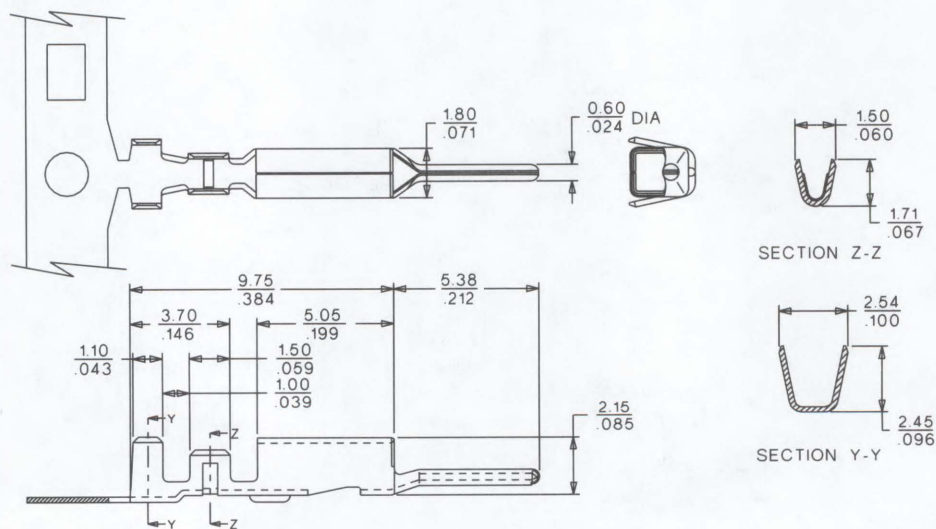
## 2.50mm (.098") Pitch Wire-to-Wire Crimp Terminal

**50837**

**Male**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Order No.  | Packaging |
|------------|-----------|
| 50837-8000 | Reel      |
| 50837-8100 | Bag       |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- One-piece mounting ears provide easy panel attachment and secure retention
- Guide ramp helps facilitate mating
- Housing locking tang for secure terminal retention
- Polarized for correct mating

### Reference Information

Product Specification: PS-51198-003

Packaging: Bag

UL File No.: E29179

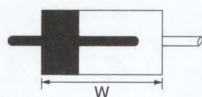
CSA File No.: LR19980

Mates With: 51103

Use With: 50837

Designed In: Millimeters

**Mating Dimensions**  
51198/50837/51103/  
50351 or 50752  
W=23.00mm (.906")



### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: White PBT, UL 94V-0

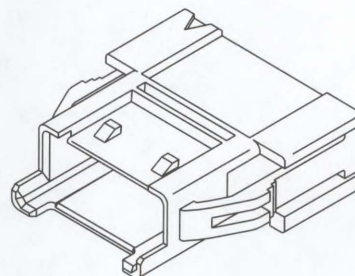
Operating Temperature: -40 to +105°C



**2.50mm (.098") Pitch**  
**Wire-to-Wire**  
**Plug**

**51198**

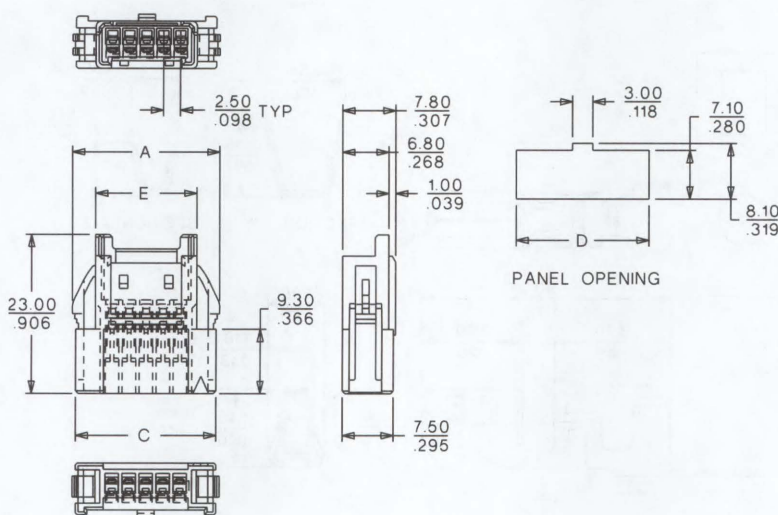
**Positive Lock**  
**Panel Mount**



2.00 to 2.50mm (.079 to .098") Pitch

**B**

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |               |
|----------|------------|---------------|---------------|---------------|---------------|
|          |            | A             | C             | D             | E             |
| 2        | 51198-0200 | 14.20 (.559)  | 13.20 (.520)  | 12.10 (.476)  | 7.40 (.291)   |
| 3        | 51198-0300 | 16.70 (.657)  | 15.70 (.618)  | 14.60 (.575)  | 9.90 (.390)   |
| 4        | 51198-0400 | 19.20 (.756)  | 18.20 (.717)  | 17.10 (.673)  | 12.40 (.488)  |
| 5        | 51198-0500 | 21.70 (.854)  | 20.70 (.815)  | 19.60 (.772)  | 14.90 (.587)  |
| 6        | 51198-0600 | 24.20 (.953)  | 23.20 (.913)  | 22.10 (.870)  | 17.40 (.685)  |
| 7        | 51198-0700 | 26.70 (1.051) | 25.70 (1.012) | 24.60 (.969)  | 19.90 (.783)  |
| 8        | 51198-0800 | 29.20 (1.150) | 28.20 (1.110) | 27.10 (1.067) | 22.40 (.882)  |
| 9        | 51198-0900 | 31.70 (1.248) | 30.70 (1.209) | 29.60 (1.165) | 24.90 (.980)  |
| 10       | 51198-1000 | 34.20 (1.346) | 33.20 (1.307) | 32.10 (1.264) | 27.40 (1.079) |
| 11       | 51198-1100 | 36.70 (1.445) | 35.70 (1.406) | 34.60 (1.362) | 29.90 (1.177) |
| 12       | 51198-1200 | 39.20 (1.543) | 38.20 (1.504) | 37.10 (1.461) | 32.40 (1.276) |
| 13       | 51198-1300 | 41.70 (1.642) | 40.70 (1.602) | 39.60 (1.559) | 34.90 (1.374) |
| 14       | 51198-1400 | 44.20 (1.740) | 43.20 (1.701) | 42.10 (1.657) | 37.40 (1.472) |
| 15       | 51198-1500 | 46.70 (1.839) | 45.70 (1.799) | 44.60 (1.756) | 39.90 (1.571) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Four points of contact
- Housing lance provides secure terminal retention

### Reference Information

Packaging: Reel or bag  
Use With: 51102 and 51103  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3.0A

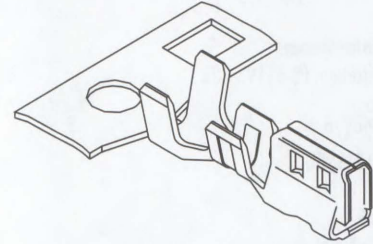
### Physical

Contact: Phosphor Bronze  
Plating: Tin  
Wire Range: 22 to 28 AWG  
Insulation Range: 1.15 to 1.80mm dia.  
Strip Length: 2.30 to 2.80mm

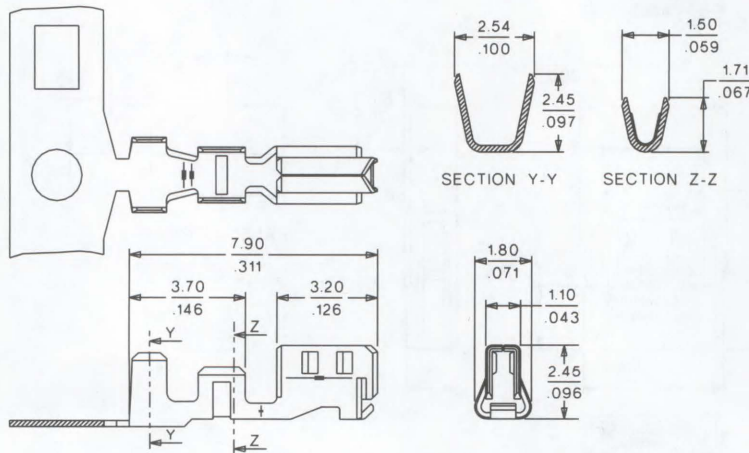


## 2.50mm (.098") Pitch Wire-to-Board Crimp Terminal

**50351**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Order No.  | Terminal |
|------------|----------|
| 50351-8000 | Reel     |
| 50351-8100 | Bag      |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Four points of contact
- Terminal design locks into housing lance

### Reference Information

Product specification: Contact Inside Sales

Packaging: Reel or bag

Mates With: 51103 and 51163

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Contact: Phosphor Bronze

Plating: Tin

Wire Range: 22 to 28 AWG

Insulation Range: 1.15 to 1.80mm (.045 to .070") dia.

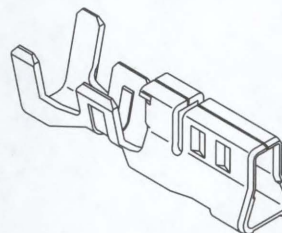
Strip Length: 2.00 to 2.50mm (.079 to .098")



## 2.50mm (.098") Pitch Wire-to-Board Crimp Terminal

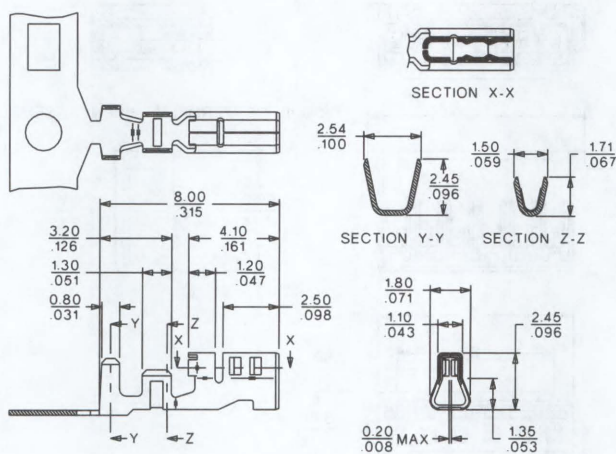
**50752**

**Female**



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

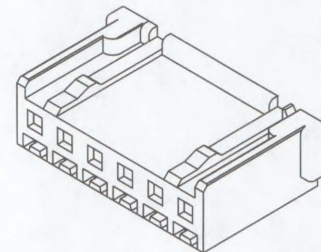
| Order No.  | Packaging |
|------------|-----------|
| 50752-8000 | Reel      |
| 50752-8100 | Bag       |



## 2.50mm (.098") Pitch Wire-to-Board Housing

### 51102

## Friction Lock Type



### FEATURES AND SPECIFICATIONS

#### Features and Benefits

- Sizes 2 to 15 circuits
- Friction lock provides secure mating retention
- Pull tabs on top and sides enable easy extraction
- Housing lance provides secure terminal retention

#### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

#### Physical

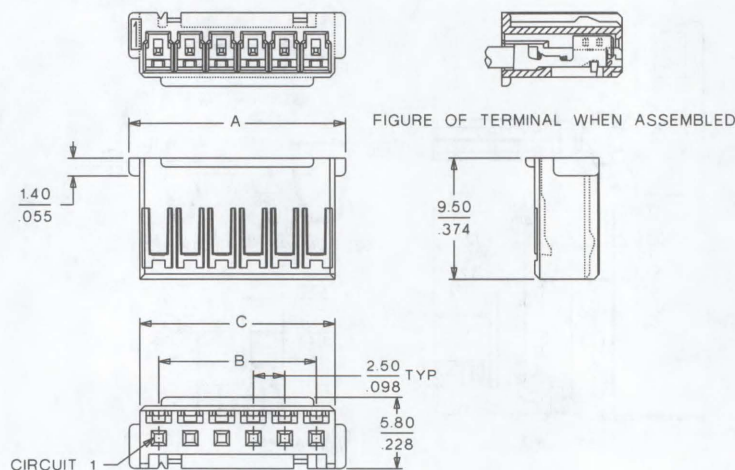
Housing: White PBTP, UL 94V-0  
Operating Temperature: -40 to +105°C

#### Reference Information

Packaging: Bag  
Mates With: 53375, 53426 and 53517  
Use With: 50351  
Designed In: Millimeters

B  
2.00 to 2.50mm (.079 to .098") Pitch

### CATALOG DRAWING (FOR REFERENCE ONLY)



### ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 2        | 51102-0200 | 7.20 (.283)   | 2.50 (.098)   | 5.50 (.217)   |
| 3        | 51102-0300 | 9.70 (.382)   | 5.00 (.197)   | 8.00 (.315)   |
| 4        | 51102-0400 | 12.20 (.480)  | 7.50 (.295)   | 10.50 (.413)  |
| 5        | 51102-0500 | 14.70 (.579)  | 10.00 (.394)  | 13.00 (.512)  |
| 6        | 51102-0600 | 17.20 (.677)  | 12.50 (.492)  | 15.50 (.610)  |
| 7        | 51102-0700 | 19.70 (.776)  | 15.00 (.591)  | 18.00 (.709)  |
| 8        | 51102-0800 | 22.20 (.874)  | 17.50 (.689)  | 20.50 (.807)  |
| 9        | 51102-0900 | 24.70 (.972)  | 20.00 (.787)  | 23.00 (.906)  |
| 10       | 51102-1000 | 27.20 (1.071) | 22.50 (.886)  | 25.50 (1.004) |
| 11       | 51102-1100 | 29.70 (1.169) | 25.00 (.984)  | 28.00 (1.102) |
| 12       | 51102-1200 | 32.20 (1.268) | 27.50 (1.083) | 30.50 (1.201) |
| 13       | 51102-1300 | 34.70 (1.366) | 30.00 (1.181) | 33.00 (1.299) |
| 14       | 51102-1400 | 37.20 (1.465) | 32.50 (1.280) | 35.50 (1.398) |
| 15       | 51102-1500 | 39.70 (1.563) | 35.00 (1.378) | 38.00 (1.496) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Anti-overstress feature protects latch
- Pull tabs on top and side enable easy extraction
- Housing lance provides secure terminal retention

### Reference Information

Packaging: Bag  
UL File No.: E29179  
Mates With: 53375, 53426 and 53517  
Use With: 50351  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

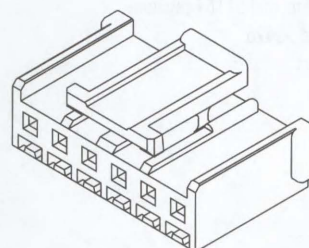
Housing: White PBTP, UL 94V-0  
Operating Temperature: -40 to +105°C



## 2.50mm (.098") Pitch Wire-to-Board Housing

**51103**

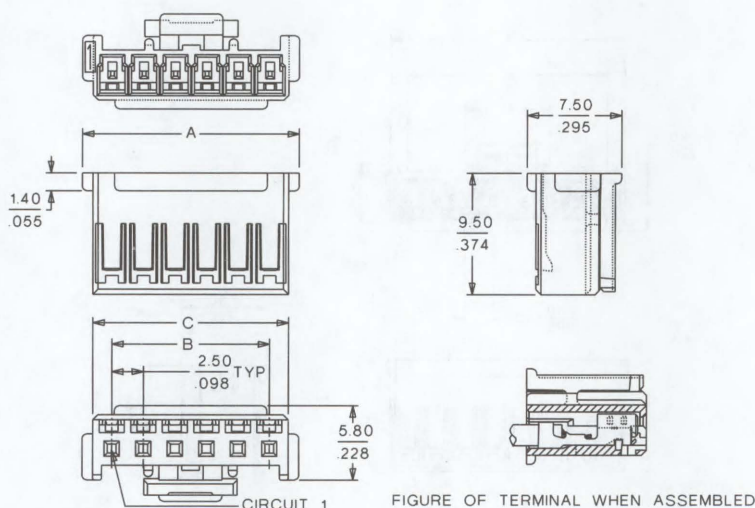
## Positive Lock Type



2.00 to 2.50mm (.079 to .098") Pitch

**B**

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 2        | 51103-0200 | 7.20 (.283)   |               | 5.50 (.217)   |
| 3        | 51103-0300 | 9.70 (.382)   | 5.00 (.197)   | 8.00 (.315)   |
| 4        | 51103-0400 | 12.20 (.480)  | 7.50 (.295)   | 10.50 (.413)  |
| 5        | 51103-0500 | 14.70 (.579)  | 10.00 (.394)  | 13.00 (.512)  |
| 6        | 51103-0600 | 17.20 (.677)  | 12.50 (.492)  | 15.50 (.610)  |
| 7        | 51103-0700 | 19.70 (.776)  | 15.00 (.591)  | 18.00 (.709)  |
| 8        | 51103-0800 | 22.20 (.874)  | 17.50 (.689)  | 20.50 (.807)  |
| 9        | 51103-0900 | 24.70 (.972)  | 20.00 (.787)  | 23.00 (.906)  |
| 10       | 51103-1000 | 27.20 (1.071) | 22.50 (.886)  | 25.50 (1.004) |
| 11       | 51103-1100 | 29.70 (1.169) | 25.00 (.984)  | 28.00 (1.102) |
| 12       | 51103-1200 | 32.20 (1.268) | 27.50 (1.083) | 30.50 (1.201) |
| 13       | 51103-1300 | 34.70 (1.366) | 30.00 (1.181) | 33.00 (1.299) |
| 14       | 51103-1400 | 37.20 (1.465) | 32.50 (1.280) | 35.50 (1.398) |
| 15       | 51103-1500 | 39.70 (1.563) | 35.00 (1.378) | 38.00 (1.496) |

B  
2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Positive lock latch provides secure mating retention
- Anti-overstress feature protects latch
- Housing lance provides secure terminal retention

### Reference Information

Product specification: Contact Inside Sales  
Packaging: Bag  
Use With: 50752 terminal and 51164 retainer  
Mates With: 53375 and 53426  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

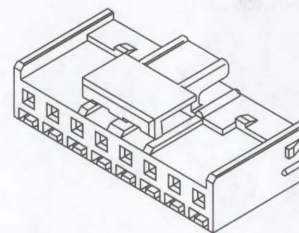
Housing: White PBTP, UL 94V-0  
Operating Temperature: -40 to +105°C



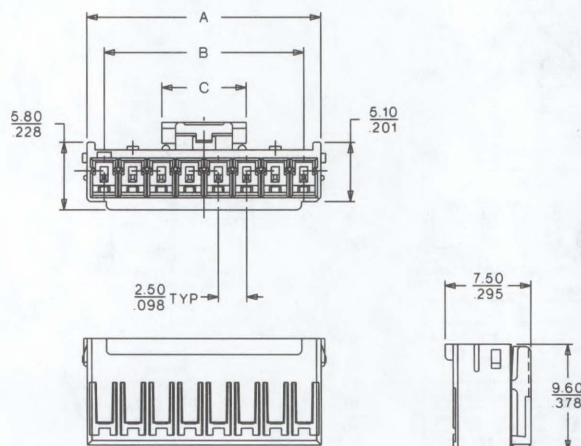
## 2.50mm (.098") Pitch Wire-to-Board Housing

**51163**

## Positive Lock Type



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |              |            |
|----------|------------|--------------|--------------|------------|
|          |            | A            | B            | C          |
| 2        | 51163-0200 | 5.5 (.217)   | 2.5 (.098)   | 3.6 (.142) |
| 3        | 51163-0300 | 8.0 (.315)   | 5.0 (.197)   | 5.0 (.197) |
| 4        | 51163-0400 | 10.5 (.413)  | 7.5 (.295)   | 7.4 (.291) |
| 5        | 51163-0500 | 13.0 (.512)  | 10.0 (.394)  | 7.4 (.291) |
| 6        | 51163-0600 | 15.5 (.610)  | 12.5 (.492)  | 7.4 (.291) |
| 7        | 51163-0700 | 18.0 (.709)  | 15.0 (.591)  | 7.4 (.291) |
| 8        | 51163-0800 | 20.5 (.807)  | 17.5 (.689)  | 7.4 (.291) |
| 9        | 51163-0900 | 23.0 (.906)  | 20.0 (.787)  | 7.4 (.291) |
| 10       | 51163-1000 | 25.5 (1.004) | 22.5 (.886)  | 7.4 (.291) |
| 11       | 51163-1100 | 28.0 (1.102) | 25.0 (.984)  | 7.4 (.291) |
| 12       | 51163-1200 | 30.5 (1.201) | 27.5 (1.083) | 7.4 (.291) |
| 13       | 51163-1300 | 33.0 (1.299) | 30.0 (1.181) | 7.4 (.291) |
| 14       | 51163-1400 | 35.5 (1.398) | 32.5 (1.280) | 7.4 (.291) |
| 15       | 51163-1500 | 38.0 (1.496) | 35.0 (1.378) | 7.4 (.291) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Provides additional terminal retention and alignment

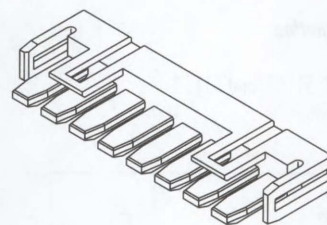
### Physical

Housing: Gray PBTP, UL 94V-0  
Operating Temperature: -40 to +105°C



## 2.50mm (.098") Pitch Wire-to-Board Terminal Retainer

51164



### Reference Information

Product specification: Contact Inside Sales

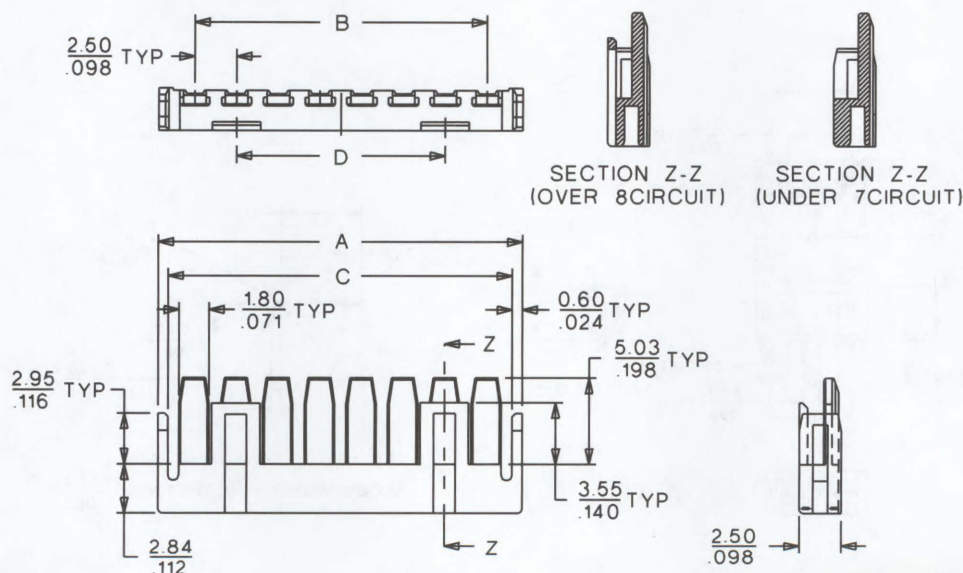
Packaging: Bag

Use With: 51163

Designed In: Millimeters

2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |              |              |             |
|----------|------------|--------------|--------------|--------------|-------------|
|          |            | A            | B            | C            | D           |
| 2        | 51164-0205 | 6.8 (.268)   | 2.5 (.098)   | 5.6 (.220)   |             |
| 3        | 51164-0305 | 9.3 (.366)   | 5.0 (.197)   | 8.1 (.319)   |             |
| 4        | 51164-0405 | 11.8 (.465)  | 7.5 (.295)   | 10.6 (.417)  |             |
| 5        | 51164-0505 | 14.3 (.563)  | 10.0 (.394)  | 13.1 (.516)  |             |
| 6        | 51164-0605 | 16.8 (.661)  | 12.5 (.492)  | 15.6 (.614)  |             |
| 7        | 51164-0705 | 19.3 (.760)  | 15.0 (.591)  | 18.1 (.713)  |             |
| 8        | 51164-0805 | 21.8 (.858)  | 17.5 (.689)  | 20.6 (.811)  | 12.5 (.492) |
| 9        | 51164-0905 | 24.3 (.957)  | 20.0 (.787)  | 23.1 (.909)  | 12.5 (.492) |
| 10       | 51164-1005 | 26.8 (1.055) | 22.5 (.886)  | 25.6 (1.008) | 12.5 (.492) |
| 11       | 51164-1105 | 29.3 (1.154) | 25.0 (.984)  | 28.1 (1.106) | 12.5 (.492) |
| 12       | 51164-1205 | 31.8 (1.252) | 27.5 (1.083) | 30.6 (1.205) | 12.5 (.492) |
| 13       | 51164-1305 | 34.3 (1.350) | 30.0 (1.181) | 33.1 (1.303) | 12.5 (.492) |
| 14       | 51164-1405 | 36.8 (1.449) | 32.5 (1.280) | 35.6 (1.402) | 12.5 (.492) |
| 15       | 51164-1505 | 39.3 (1.547) | 35.0 (1.378) | 38.1 (1.500) | 12.5 (.492) |

## FEATURES AND SPECIFICATIONS

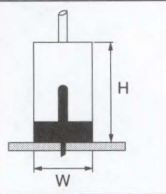
### Features and Benefits

- Sizes 2 to 15 circuits
- Locking ribs and holes accept either positive or friction-locking housings
- High guide walls protect terminals and facilitate mating
- Kinked PC tails provide secure PCB retention

### Reference Information

Packaging: Bag  
Mates With: 51102, 51103, and 51163  
Designed In: Millimeters

**Mating Dimensions**  
1.53375/51102/50351  
H=11.5mm W=6.8mm  
2.53375/51103/50351  
H=11.5mm W=7.6mm



### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

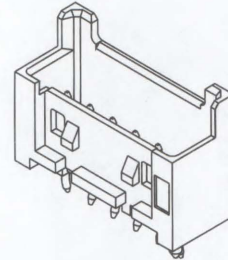
### Physical

Housing: Glass-filled PBTP, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C

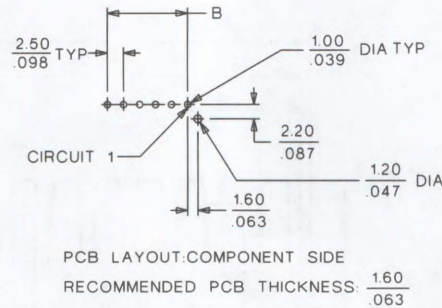
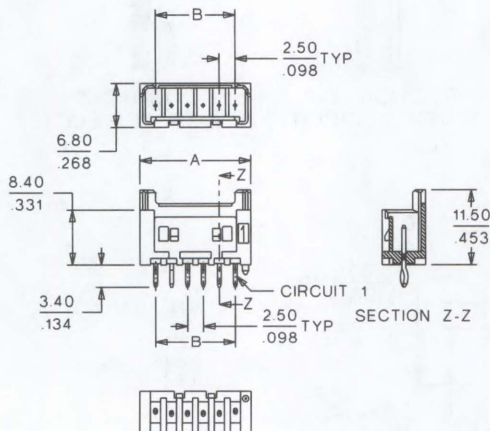
## molex® 2.50mm (.098") Pitch Wire-to-Board Header

53375

Vertical



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |               |
|----------|------------|--------------|---------------|
|          |            | A            | B             |
| 2        | 53375-0210 | 7.4 (.291)   | 2.50 (.098)   |
| 3        | 53375-0310 | 9.9 (.390)   | 5.00 (.197)   |
| 4        | 53375-0410 | 12.4 (.488)  | 7.50 (.295)   |
| 5        | 53375-0510 | 14.9 (.587)  | 10.00 (.394)  |
| 6        | 53375-0610 | 17.4 (.685)  | 12.50 (.492)  |
| 7        | 53375-0710 | 19.9 (.783)  | 15.00 (.591)  |
| 8        | 53375-0810 | 22.4 (.882)  | 17.50 (.689)  |
| 9        | 53375-0910 | 24.9 (.980)  | 20.00 (.787)  |
| 10       | 53375-1010 | 27.4 (1.079) | 22.50 (.886)  |
| 11       | 53375-1110 | 29.9 (1.177) | 25.00 (.984)  |
| 12       | 53375-1210 | 32.4 (1.276) | 27.50 (1.083) |
| 13       | 53375-1310 | 34.9 (1.374) | 30.00 (1.181) |
| 14       | 53375-1410 | 37.4 (1.472) | 32.50 (1.280) |
| 15       | 53375-1510 | 39.9 (1.571) | 35.00 (1.378) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 8 circuits
- Radial tape enables high volume automatic placement of through hole components
- Locking ribs and holes accept either positive or friction-locking housings
- High guide walls protect terminals and facilitate mating
- Kinked PC tails provide secure PCB retention

### Reference Information

Packaging: Radial tape

Mates With: 51102, 51103, and 51163

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: Glass-filled PBTP, UL 94V-0

Contact: Phosphor Bronze

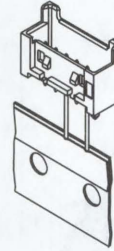
Plating: Tin

Operating Temperature: -40 to +105°C

## molex® 2.50mm (.098") Pitch Wire-to-Board Header

### 53375

### Vertical Radial Tape



#### Mating Dimensions

1. 53375/51102/50351

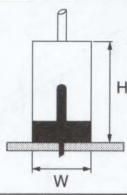
H=11.55mm (.453") W=6.8mm (.269")

2. 53375/51103/50351/50752

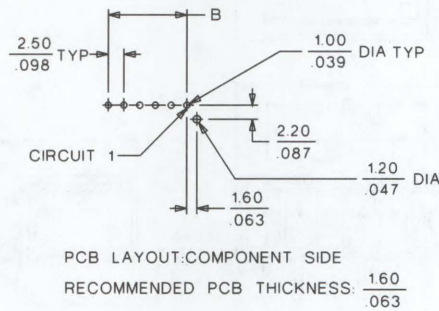
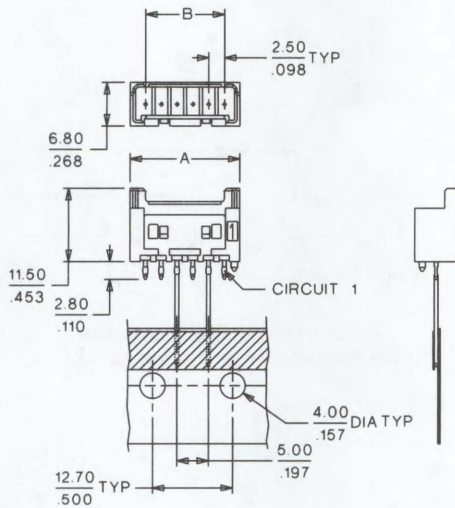
H=11.55mm (.453") W=7.6mm (.299")

3. 53375/51163/51164/50752

H=14.44mm (.568") W=7.55mm (.297")



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS: 1.60 / .063

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |              |
|----------|------------|--------------|--------------|
|          |            | A            | B            |
| 2        | 53375-0290 | 7.40 (.291)  | 2.50 (.098)  |
| 3        | 53375-0390 | 9.90 (.390)  | 5.00 (.197)  |
| 4        | 53375-0490 | 12.40 (.488) | 7.50 (.295)  |
| 5        | 53375-0590 | 14.90 (.587) | 10.00 (.394) |
| 6        | 53375-0690 | 17.40 (.685) | 12.50 (.492) |
| 7        | 53375-0790 | 19.90 (.783) | 15.00 (.591) |
| 8        | 53375-0890 | 22.40 (.882) | 17.50 (.689) |

B

2.00 to 2.50mm (.079 to .098") Pitch

B

2.00 to 2.50mm (.079 to .098") Pitch

# FEATURES AND SPECIFICATIONS

## Features and Benefits

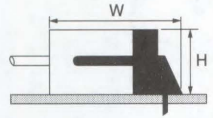
- Sizes 2 to 15 circuits
- Locking ribs and holes accept either positive or friction-locking housings
- Shrouded design protects terminals and facilitates mating
- Kinked PC tails provide secure PCB retention

## Reference Information

Packaging: Tray  
 UL File No.: E29179  
 Mates With: 51102, 51103, and 51163  
 Designed In: Millimeters

## Mating Dimensions

- 53426/51102/50351  
 H=6.7mm (.264")  
 W=14.35mm (.565")
- 53426/51103/50351/50752  
 H=7.75mm (.305")  
 W=14.35mm (.565")
- 53426/51163/51164/50752  
 H=9.35mm (.368")  
 W=15.59mm (.612")



## Electrical

Voltage: 250V  
 Current: 3.0A  
 Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 1000V AC/1 min.  
 Insulation Resistance: 1000 MΩ min.

## Physical

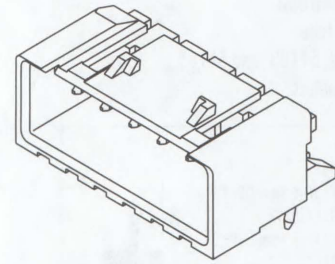
Housing: Glass-filled PBTP, UL 94V-0  
 Contact: Phosphor Bronze  
 Plating: Tin  
 Operating Temperature: -40 to +105°C



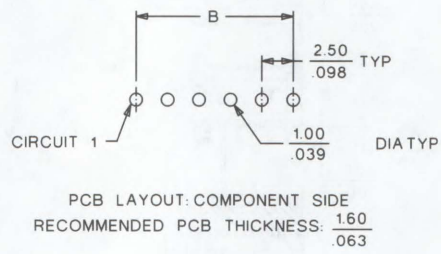
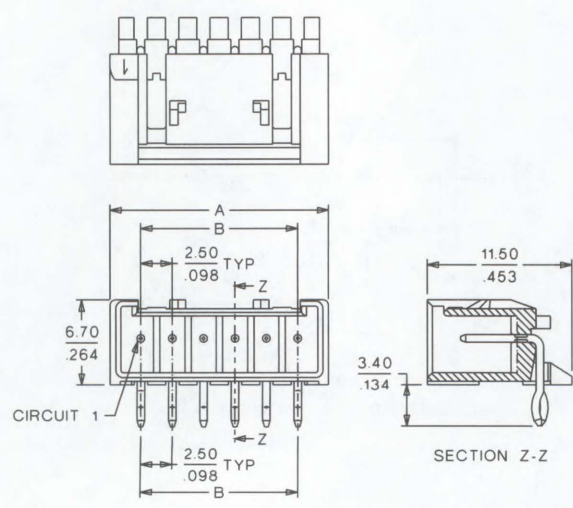
# 2.50mm (.098") Pitch Wire-to-Board Header

53426

## Right Angle



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |               |
|----------|------------|--------------|---------------|
|          |            | dA           | B             |
| 2        | 53426-0210 | 7.4 (.291)   | 2.50 (.098)   |
| 3        | 53426-0310 | 9.9 (.390)   | 5.00 (.197)   |
| 4        | 53426-0410 | 12.4 (.488)  | 7.50 (.295)   |
| 5        | 53426-0510 | 14.9 (.587)  | 10.00 (.394)  |
| 6        | 53426-0610 | 17.4 (.685)  | 12.50 (.492)  |
| 7        | 53426-0710 | 19.9 (.783)  | 15.00 (.591)  |
| 8        | 53426-0810 | 22.4 (.882)  | 17.50 (.689)  |
| 9        | 53426-0910 | 24.9 (.980)  | 20.00 (.787)  |
| 10       | 53426-1010 | 27.4 (1.079) | 22.50 (.886)  |
| 11       | 53426-1110 | 29.9 (1.177) | 25.00 (.984)  |
| 12       | 53426-1210 | 32.4 (1.276) | 27.50 (1.083) |
| 13       | 53426-1310 | 34.9 (1.374) | 30.00 (1.181) |
| 14       | 53426-1410 | 37.4 (1.472) | 32.50 (1.280) |
| 15       | 53426-1510 | 39.9 (1.571) | 35.00 (1.378) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 8 circuits
- Radial tape enables high volume automatic placement of through hole components
- Locking ribs and holes accept either positive or friction-locking housings
- Shrouded design protects terminals and facilitates mating
- Kinked PC tails provide secure PCB retention

### Reference Information

Packaging: Radial tape

UL File No.: E29179

Mates With: 51102, 51103, and 51163

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: Glass-filled PBTP, UL 94V-0

Contact: Phosphor Bronze

Plating: Tin

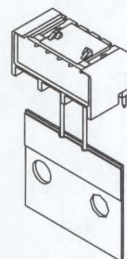
Operating Temperature: -40 to +105°C



## 2.50mm (.098") Pitch Wire-to-Board Header

**53426**

### Right Angle Radial Tape



### Mating Dimensions

1. 53426/51102/50351

H=8.2mm (.323")

W=12.65mm (.498")

2. 53426/51103/50351/50752

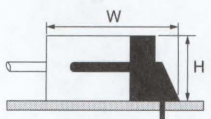
H=9.25mm (.364")

W=12.65mm (.498")

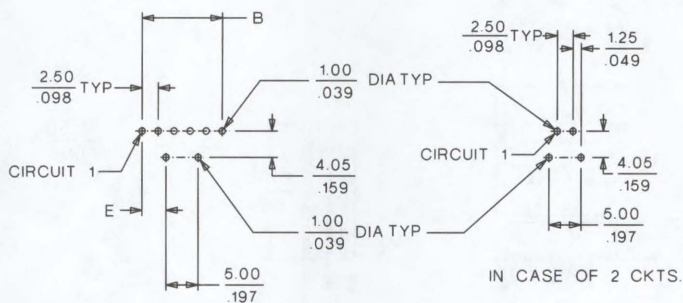
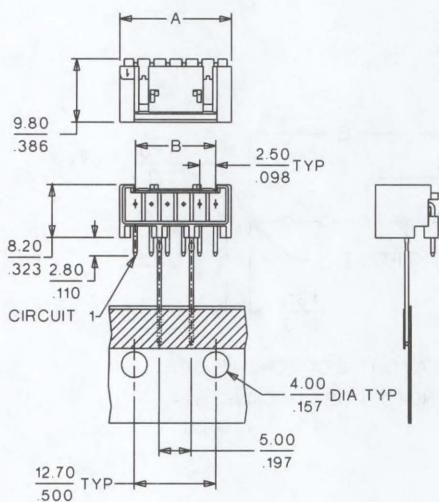
3. 53426/51163/51164/50752

H=9.35mm (.368")

W=15.59mm (.612")



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: 1.60 .063

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |              |
|----------|------------|--------------|--------------|
|          |            | A            | B            |
| 2        | 53426-0290 | 7.40 (.291)  | 2.50 (.098)  |
| 3        | 53426-0390 | 9.90 (.390)  | 5.00 (.197)  |
| 4        | 53426-0490 | 12.40 (.488) | 7.50 (.295)  |
| 5        | 53426-0590 | 14.90 (.587) | 10.00 (.394) |
| 6        | 53426-0690 | 17.40 (.685) | 12.50 (.492) |
| 7        | 53426-0790 | 19.90 (.783) | 15.00 (.591) |
| 8        | 53426-0890 | 22.40 (.882) | 17.50 (.689) |

2.00 to 2.50mm (.079 to .098") Pitch

**B**

## FEATURES AND SPECIFICATIONS

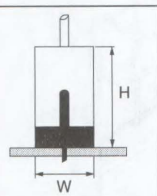
### Features and Benefits

- Sizes 2 to 15 circuits
- Potting type used for sealing components in white goods applications
- Bottom ridge protects terminal signal area during potting

### Reference Information

Packaging: Tray  
UL File No.: E29179  
Mates With: 51102 and 51103  
Designed In: Millimeters

**Mating Dimensions**  
1.53517/51102/50351  
H=17.5mm W=6.8mm  
2.53517/51103/50351  
H=17.5mm W=7.6mm



### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

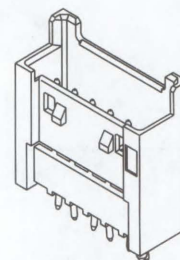
Housing: 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C



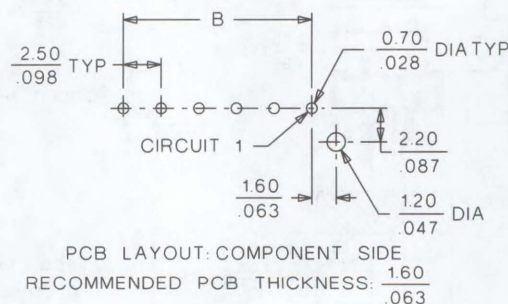
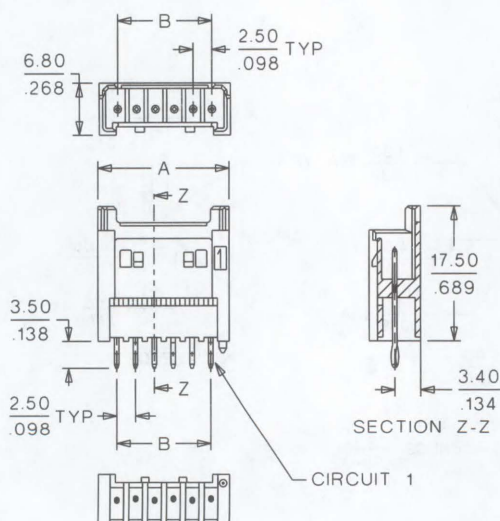
## 2.50mm (.098") Pitch Wire-to-Board Header

**53517**

**Vertical**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |               |
|----------|------------|--------------|---------------|
|          |            | A            | B             |
| 2        | 53517-0210 | 7.4 (.291)   | 2.50 (.098)   |
| 3        | 53517-0310 | 9.9 (.390)   | 5.00 (.197)   |
| 4        | 53517-0410 | 12.4 (.488)  | 7.50 (.295)   |
| 5        | 53517-0510 | 14.9 (.587)  | 10.00 (.394)  |
| 6        | 53517-0610 | 17.4 (.685)  | 12.50 (.492)  |
| 7        | 53517-0710 | 19.9 (.783)  | 15.00 (.591)  |
| 8        | 53517-0810 | 22.4 (.882)  | 17.50 (.689)  |
| 9        | 53517-0910 | 24.9 (.980)  | 20.00 (.787)  |
| 10       | 53517-1010 | 27.4 (1.079) | 22.50 (.886)  |
| 11       | 53517-1110 | 29.9 (1.177) | 25.00 (.984)  |
| 12       | 53517-1210 | 32.4 (1.276) | 27.50 (1.083) |
| 13       | 53517-1310 | 34.9 (1.374) | 30.00 (1.181) |
| 14       | 53517-1410 | 37.4 (1.472) | 32.50 (1.280) |
| 15       | 53517-1510 | 39.9 (1.571) | 35.00 (1.378) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 8 circuits
- Radial tape enables high volume automatic placement of through hole components
- Potting type used for sealing components in White Goods applications
- Bottom ridge protects terminal signal area during potting
- High guide walls protect terminals and facilitate mating
- Locking ribs and holes accept either positive or friction-locking housings

### Reference Information

Product specification: Contact Inside Sales  
Packaging: Radial tape  
UL File No.: E29179  
Mates With: 51103  
Designed In: Millimeters

### Electrical

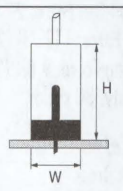
Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C

### Mating Dimensions

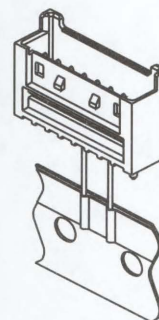
53608/51103/50351 or 50752  
H=16.25mm (.640") W=7.60mm (.299")



## 2.50mm (.098") Pitch Wire-to-Board Header

**53608**

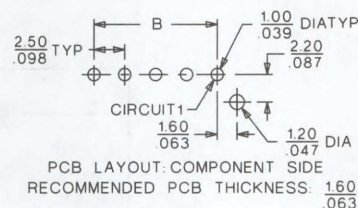
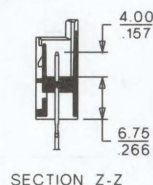
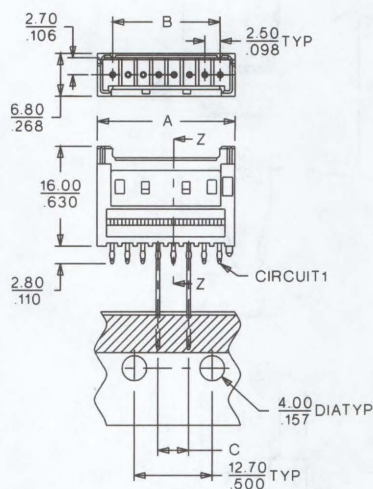
## Vertical Radial Tape



2.00 to 2.50mm (.079 to .098") Pitch

B

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension   |             |            |
|----------|------------|-------------|-------------|------------|
|          |            | A           | B           | C          |
| 2        | 53608-0290 | 7.4 (.291)  | 2.5 (.098)  | 2.5 (.098) |
| 3        | 53608-0390 | 9.9 (.390)  | 5.0 (.197)  | 5.0 (.197) |
| 4        | 53608-0490 | 12.4 (.488) | 7.5 (.295)  | 5.0 (.197) |
| 5        | 53608-0590 | 14.9 (.587) | 10.0 (.394) | 5.0 (.197) |
| 6        | 53608-0690 | 17.4 (.685) | 12.5 (.492) | 5.0 (.197) |
| 7        | 53608-0790 | 19.9 (.783) | 15.0 (.591) | 5.0 (.197) |
| 8        | 53608-0890 | 22.4 (.882) | 17.5 (.689) | 5.0 (.197) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Rigid contact

### Reference Information

Product Specification: PS-35184

Packaging: Reel

Mates With: 5103

Use With: 35184

Designed In: Millimeters

### Electrical

Voltage: 250V

Current:

| AWG     | 22  | 24  | 26  | 28  |
|---------|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 1.5 | 1.0 |

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 500 MΩ min.

### Mechanical

Contact Insertion Force: 14.7N (3.3 lb) max.

Contact Retention to Housing: 14.7N (3.3 lb) min.

Wire Pull-Out Force: 22 AWG—39.2N (8.8 lb) min.

Mating Force: 117.7N (26.5 lb) max.

Unmating Force: 9.8N (2.2 lb) min.

Durability: 30 cycles

### Physical

Contact: Brass

Plating: Contact Area—Tin

Underplating—Copper

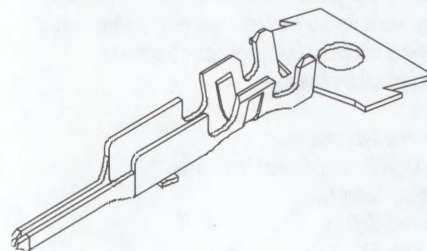
Insulation Diameter: 1.90mm (.075") max.

Wire Gauge: 22 to 28 AWG

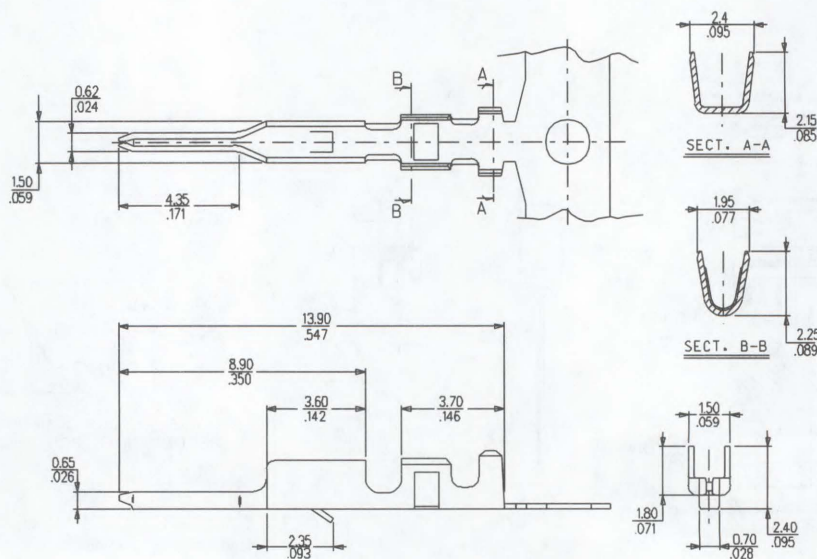


## 2.50mm (.098") Pitch Wire-to-Wire Terminal

**35053**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Order No.  |
|------------|
| 35053-9002 |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Locking windows secure terminal to housing
- Accepts 22 to 28 AWG

### Reference Information

Product Specification: PS-35184

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: 35155 and 35572

Use With: 35053

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 500 MΩ min.

### Mechanical

Contact Insertion Force: 14.7N (3.3 lb) max.

Contact Retention to Housing: 14.7N (3.3 lb) min.

Mating Force: 117.7N (26.5 lb) max.

Unmating Force: 9.8N (2.2 lb) min.

Durability: 30 cycles

### Physical

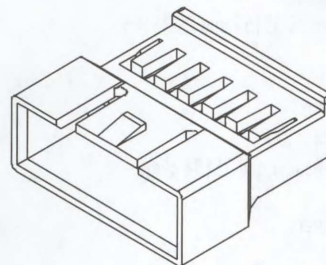
Housing: Polyester, UL 94V-0

Operating Temperature: -40 to +105°C



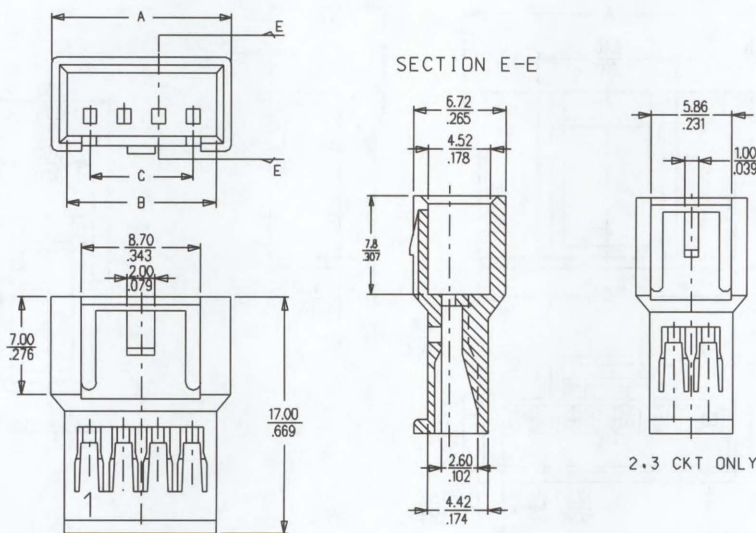
## 2.50mm (.098") Pitch Wire-to-Wire Plug

**35184**



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  |            | Dimension     |               |               |
|----------|------------|------------|---------------|---------------|---------------|
|          | Natural    | Red        | A             | B             | C             |
| 2        | 35184-0200 | 35184-0202 | 8.06 (.317)   | 5.86 (.231)   | 2.50 (.197)   |
| 3        | 35184-0300 | 35184-0302 | 10.56 (.416)  | 8.36 (.329)   | 5.00 (.295)   |
| 4        | 35184-0400 | 35184-0402 | 13.06 (.514)  | 10.86 (.428)  | 7.50 (.394)   |
| 5        | 35184-0500 | 35184-0502 | 15.56 (.613)  | 13.36 (.526)  | 10.00 (.492)  |
| 6        | 35184-0600 | 35184-0602 | 18.06 (.711)  | 15.86 (.624)  | 12.50 (.591)  |
| 7        | 35184-0700 | 35184-0702 | 20.56 (.809)  | 18.36 (.723)  | 15.00 (.689)  |
| 8        | 35184-0800 | 35184-0802 | 23.06 (.908)  | 20.86 (.821)  | 17.50 (.787)  |
| 9        | 35184-0900 | 35184-0902 | 25.56 (1.006) | 23.36 (.920)  | 20.00 (.787)  |
| 10       | 35184-1000 | 35184-1002 | 28.06 (1.105) | 25.86 (1.018) | 22.50 (.886)  |
| 11       | 35184-1100 | 35184-1102 | 30.56 (1.203) | 28.36 (1.117) | 25.00 (.984)  |
| 12       | 35184-1200 | 35184-1202 | 33.06 (1.302) | 30.86 (1.215) | 27.50 (1.083) |
| 13       | 35184-1300 | 35184-1302 | 35.56 (1.400) | 33.36 (1.313) | 30.00 (1.181) |
| 14       | 35184-1400 | 35184-1402 | 38.06 (1.498) | 35.86 (1.412) | 32.50 (1.280) |
| 15       | 35184-1500 | 35184-1502 | 40.56 (1.597) | 38.36 (1.510) | 35.00 (1.378) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Positive locking latch
- Polarization prevents mismatching
- Protective ribs on each side of latch

### Reference Information

Product Specification: PS-35155 and PS-35184

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R9451371

Mates With: 35312 header and 35184 plug

Use With: 5103

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 14.7N (3.3 lb) max.

Contact Retention to Housing: 14.7N (3.3 lb) min.

Mating Force: 117.7N (26.5 lb) max.

Unmating Force: 21.6N (4.9 lb) min.

Durability: 30 cycles

### Physical

Housing: PBTP, UL 94V-0

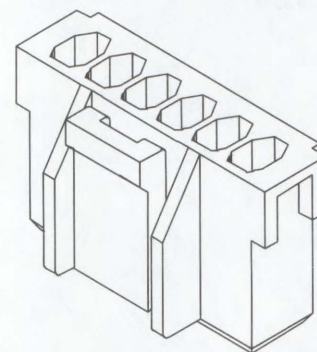
Operating Temperature: -40 to +105°C



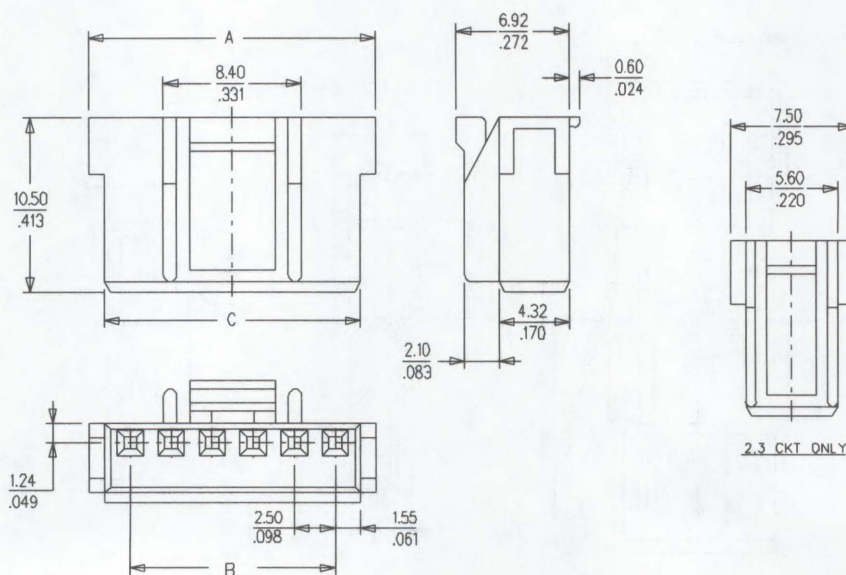
## 2.50mm (.098") Pitch Wire-to-Wire and Wire-to-Board Housing

**35155**

### Positive Lock



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  |            |            |            | Dimension     |               |               |
|----------|------------|------------|------------|------------|---------------|---------------|---------------|
|          | Natural    | Red        | Yellow     | Blue       | A             | B             | C             |
| 2        | 35155-0200 | 35155-0202 | 35155-0203 | 35155-0204 | 7.50 (.295)   | 2.50 (.197)   | 5.60 (.220)   |
| 3        | 35155-0300 | 35155-0302 | 35155-0303 | 35155-0304 | 10.00 (.394)  | 5.00 (.295)   | 8.10 (.319)   |
| 4        | 35155-0400 | 35155-0402 | 35155-0403 | 35155-0404 | 12.50 (.492)  | 7.50 (.295)   | 10.60 (.417)  |
| 5        | 35155-0500 | 35155-0502 | 35155-0503 | 35155-0504 | 15.00 (.591)  | 10.00 (.394)  | 13.10 (.516)  |
| 6        | 35155-0600 | 35155-0602 | 35155-0603 | 35155-0604 | 17.50 (.689)  | 12.50 (.492)  | 15.60 (.614)  |
| 7        | 35155-0700 | 35155-0702 | 35155-0703 | 35155-0704 | 20.00 (.787)  | 15.00 (.591)  | 18.10 (.713)  |
| 8        | 35155-0800 | 35155-0802 | 35155-0803 | 35155-0804 | 22.50 (.886)  | 17.50 (.689)  | 20.60 (.811)  |
| 9        | 35155-0900 | 35155-0902 | 35155-0903 | 35155-0904 | 25.00 (.984)  | 20.00 (.787)  | 23.10 (.909)  |
| 10       | 35155-1000 | 35155-1002 | 35155-1003 | 35155-1004 | 27.50 (1.083) | 22.50 (.886)  | 25.60 (1.008) |
| 11       | 35155-1100 | 35155-1102 | 35155-1103 | 35155-1104 | 30.00 (1.181) | 25.00 (.984)  | 28.10 (1.106) |
| 12       | 35155-1200 | 35155-1202 | 35155-1203 | 35155-1204 | 32.50 (1.280) | 27.50 (1.083) | 30.60 (1.205) |
| 13       | 35155-1300 | 35155-1302 | 35155-1303 | 35155-1304 | 35.00 (1.378) | 30.00 (1.181) | 33.10 (1.303) |
| 14       | 35155-1400 | 35155-1402 | 35155-1403 | 35155-1404 | 37.50 (1.476) | 32.50 (1.280) | 35.60 (1.402) |
| 15       | 35155-1500 | 35155-1502 | 35155-1503 | 35155-1504 | 40.00 (1.575) | 35.00 (1.378) | 38.10 (1.500) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- 4 points of contact
- Box-style design protects contact area

### Reference Information

Product Specification: PS-35572-001

Packaging: Reel

Use With: 35572

Designed In: Millimeters

### Electrical

Voltage: 250V

Current:

| AWG     | 22  | 24  | 26  | 28  |
|---------|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 1.5 | 1.0 |

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 500 MΩ min.

### Mechanical

Contact Insertion Force: 9.8N (2.2 lb) max.

Contact Retention to Housing: 14.7N (3.3 lb) min.

Wire Pull-Out Force: 22 AWG—39.2N (8.8 lb) min.

Mating Force: 81.4N (18.3 lb) max.

Unmating Force: 16.2N (3.6 lb) min.

Durability: 30 cycles

### Physical

Contact: Phosphor Bronze or Brass

Plating: Contact Area—Tin

Underplating—Copper (Brass only)

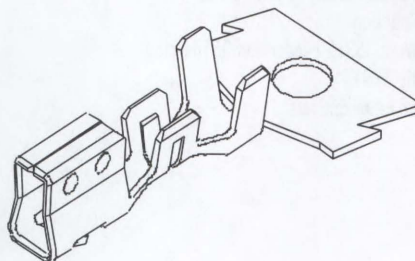
Insulation Diameter: 1.80mm (.071") max.

Wire Gauge: 22 to 28 AWG



## 2.50mm (.098") Pitch Wire-to-Board Terminal

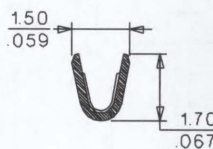
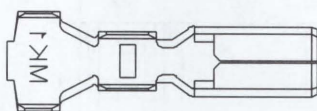
57915



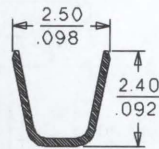
2.00 to 2.50mm (.079 to .098") Pitch

B

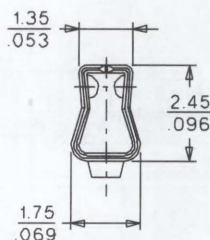
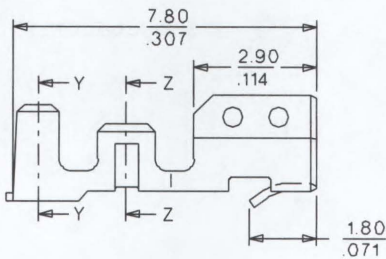
## CATALOG DRAWING (FOR REFERENCE ONLY)



SECTION Z-Z



SECTION Y-Y



## ORDERING INFORMATION

| Order No.  | Contact                    |
|------------|----------------------------|
| 57915-8001 | Pre-Tinned Phosphor Bronze |
| 57915-9002 | Pre-Tinned Brass           |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 3 to 15 circuits
- Locking windows secure terminal to housing
- Protective ribs on each side of latch

### Reference Information

Product Specification: PS-35572-001

Packaging: Bag

Mates With: 35312 header and 35184 plug

Use With: 57915

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 500 MΩ min.

### Mechanical

Contact Insertion Force: 9.8N (2.2 lb) max.

Contact Retention to Housing: 14.7N (3.3 lb) min.

Mating Force: 81.4N (18.3 lb) max.

Unmating Force: 16.2N (3.6 lb) min.

Durability: 30 cycles

### Physical

Housing: Natural PA 66, UL 94V-0

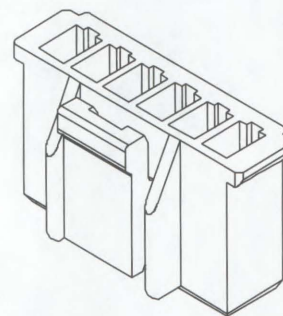
Operating Temperature: -40 to +105°C



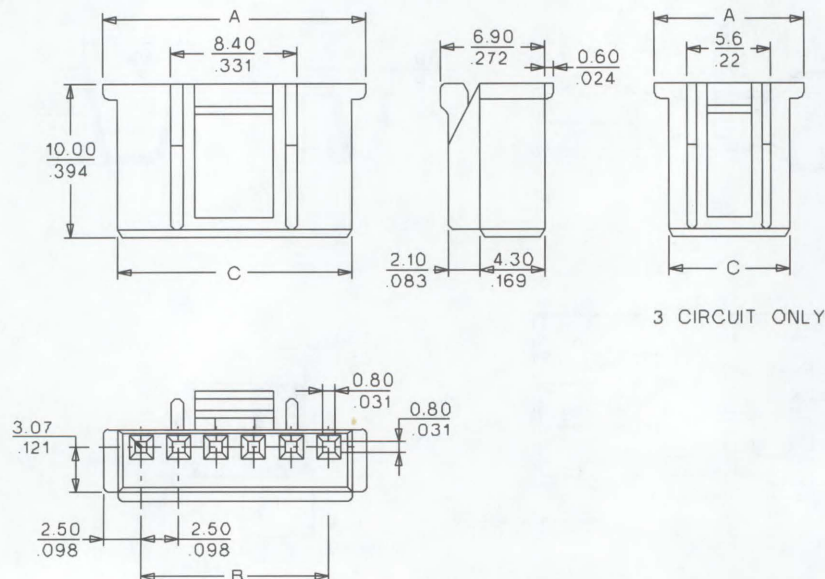
## 2.50mm (.098") Pitch Wire-to-Wire and Wire-to-Board Housing

**35572**

### Positive Lock



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 3        | 35572-0300 | 10.00 (.394)  | 5.00 (.295)   | 8.10 (.319)   |
| 4        | 35572-0400 | 12.50 (.492)  | 7.50 (.295)   | 10.60 (.417)  |
| 5        | 35572-0500 | 15.00 (.591)  | 10.00 (.394)  | 13.10 (.516)  |
| 6        | 35572-0600 | 17.50 (.689)  | 12.50 (.492)  | 15.60 (.614)  |
| 7        | 35572-0700 | 20.00 (.787)  | 15.00 (.591)  | 18.10 (.713)  |
| 8        | 35572-0800 | 22.50 (.886)  | 17.50 (.689)  | 20.60 (.811)  |
| 9        | 35572-0900 | 25.00 (.984)  | 20.00 (.787)  | 23.10 (.909)  |
| 10       | 35572-1000 | 27.50 (1.083) | 22.50 (.886)  | 25.60 (1.008) |
| 11       | 35572-1100 | 30.00 (1.181) | 25.00 (.984)  | 28.10 (1.106) |
| 12       | 35572-1200 | 32.50 (1.280) | 27.50 (1.083) | 30.60 (1.205) |
| 13       | 35572-1300 | 35.00 (1.378) | 30.00 (1.181) | 33.10 (1.303) |
| 14       | 35572-1400 | 37.50 (1.476) | 32.50 (1.280) | 35.60 (1.402) |
| 15       | 35572-1500 | 40.00 (1.575) | 35.00 (1.378) | 38.10 (1.500) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Low profile
- 0.64mm (.025") square wire pins
- Polarized
- Positive locking

### Reference Information

Product Specification: PS-35312  
 Packaging: Bag and tube  
 UL File No.: E29179  
 CSA File No.: LR19980A  
 Mates With: 35155 and 35572 housings  
 Designed In: Millimeters

### Electrical

Voltage: 250V  
 Current: 3.0A  
 Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 1500V  
 Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Retention to Housing: 14.7N (3.3 lb) min.  
 Durability: 30 cycles

### Physical

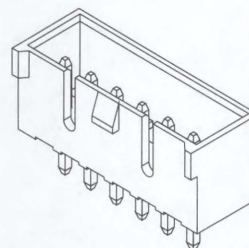
Housing: 6/6 nylon, UL 94V-0  
 Contact: Brass  
 Plating: Tin  
 Operating Temperature: -40 to +105°C



## 2.50mm (.098") Pitch Wire-to-Board Header

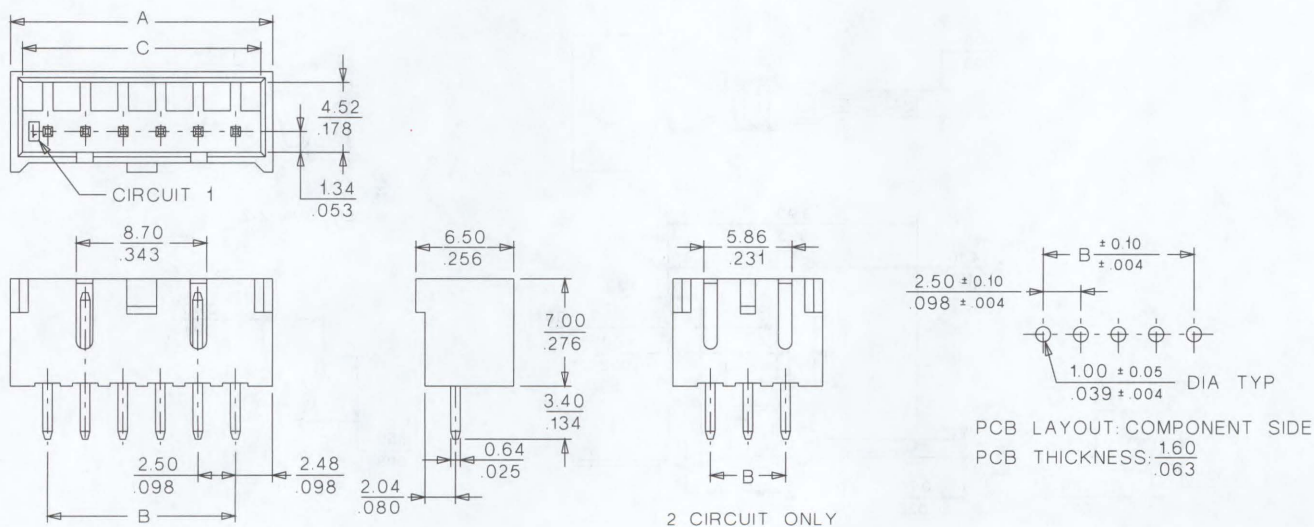
**35312**

## Vertical Fully Shrouded



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 2        | 35312-0210 | 7.46 (.294)   | 2.50 (.098)   | 5.86 (.231)   |
| 3        | 35312-0310 | 9.96 (.392)   | 5.00 (.197)   | 8.36 (.329)   |
| 4        | 35312-0410 | 12.46 (.491)  | 7.50 (.295)   | 10.86 (.428)  |
| 5        | 35312-0510 | 14.96 (.589)  | 10.00 (.394)  | 13.36 (.526)  |
| 6        | 35312-0610 | 17.46 (.687)  | 12.50 (.492)  | 15.86 (.624)  |
| 7        | 35312-0710 | 19.96 (.786)  | 15.00 (.591)  | 18.36 (.723)  |
| 8        | 35312-0810 | 22.46 (.884)  | 17.50 (.689)  | 20.86 (.821)  |
| 9        | 35312-0910 | 24.96 (.983)  | 20.00 (.787)  | 23.36 (.920)  |
| 10       | 35312-1010 | 27.46 (1.081) | 22.50 (.886)  | 25.86 (1.018) |
| 11       | 35312-1110 | 29.96 (1.180) | 25.00 (.984)  | 28.36 (1.117) |
| 12       | 35312-1210 | 32.46 (1.278) | 27.50 (1.083) | 30.86 (1.215) |
| 13       | 35312-1310 | 34.96 (1.376) | 30.00 (1.181) | 33.36 (1.313) |
| 14       | 35312-1410 | 37.46 (1.475) | 32.50 (1.280) | 35.86 (1.412) |
| 15       | 35312-1510 | 39.96 (1.573) | 35.00 (1.378) | 38.36 (1.510) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Spring-fit style terminal provides high pressure retention to PCB
- Housing lance provides secure retention to housing and protects terminal
- PCB guide ridge helps position terminal to board

### Reference Information

Packaging: Reel or bag  
Use With: 51035  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 4.0A

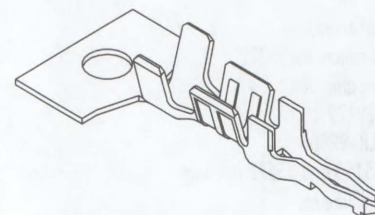
### Physical

Contact: Phosphor Bronze  
Plating: Tin  
Wire Range: 20 to 24 AWG  
0.20 to 0.50 sq. KV  
0.30 to 0.50 sq. AVS  
Insulation Range: 2.10mm dia. max.  
Strip Length: 2.50 to 3.00mm

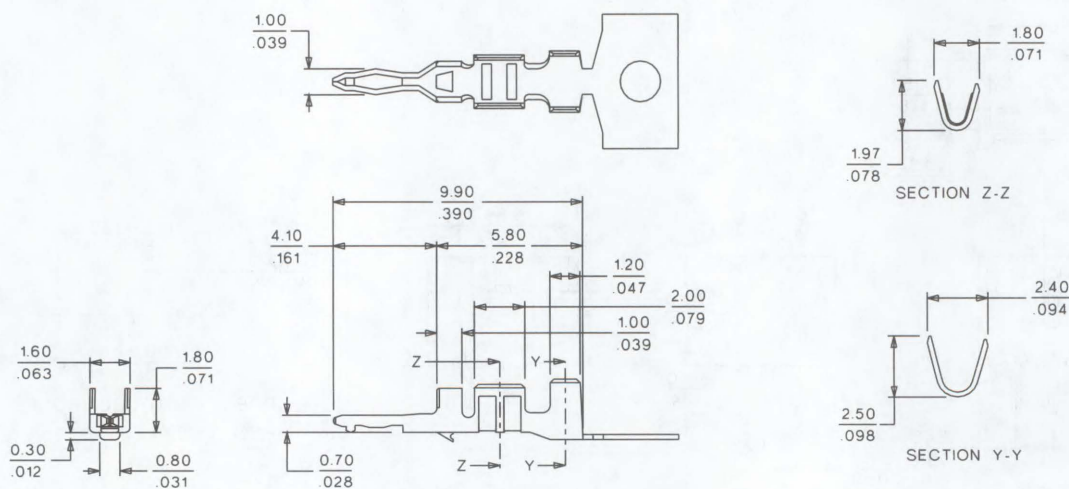


## 2.50mm (.098") Pitch Board-In Terminal

50097



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Order No.  | Terminal |
|------------|----------|
| 50097-8000 | Reel     |
| 50097-8100 | Bag      |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 18 circuits
- Housing lance provides secure terminal retention and protection

### Reference Information

Packaging: Bag

Use With: 50097

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 4.0A

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ2min.

### Physical

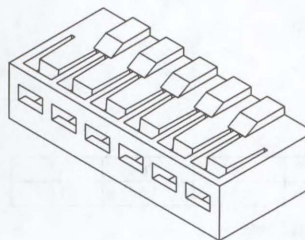
Housing: 6/6 nylon, UL 94V-0

Operating Temperature: -40 to +105°C



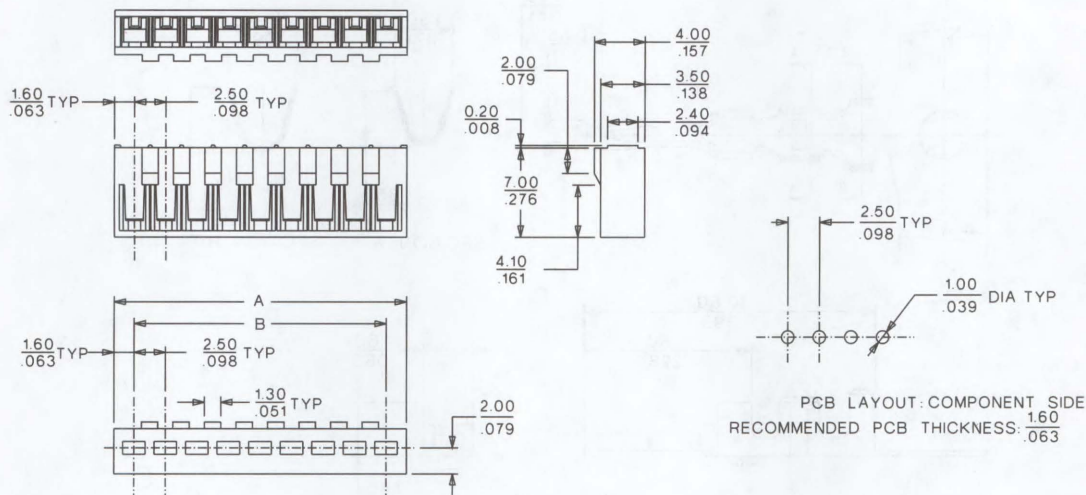
## 2.50mm (.098") Pitch Board-In Housing

51035



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 51035-0200 | 5.70 (.224)   | 2.50 (.098)   |
| 3        | 51035-0300 | 8.20 (.323)   | 5.00 (.197)   |
| 4        | 51035-0400 | 10.70 (.421)  | 7.50 (.295)   |
| 5        | 51035-0500 | 13.20 (.520)  | 10.00 (.394)  |
| 6        | 51035-0600 | 15.70 (.618)  | 12.50 (.492)  |
| 7        | 51035-0700 | 18.20 (.717)  | 15.00 (.591)  |
| 8        | 51035-0800 | 20.70 (.815)  | 17.50 (.689)  |
| 9        | 51035-0900 | 23.20 (.913)  | 20.00 (.787)  |
| 10       | 51035-1000 | 25.70 (1.012) | 22.50 (.886)  |
| 11       | 51035-1100 | 28.20 (1.110) | 25.00 (.984)  |
| 12       | 51035-1200 | 30.70 (1.209) | 27.50 (1.083) |
| 13       | 51035-1300 | 33.20 (1.307) | 30.00 (1.181) |
| 14       | 51035-1400 | 35.70 (1.406) | 32.50 (1.280) |
| 15       | 51035-1500 | 38.20 (1.504) | 35.00 (1.378) |
| 16       | 51035-1600 | 40.70 (1.602) | 37.50 (1.476) |
| 17       | 51035-1700 | 43.20 (1.701) | 40.00 (1.575) |
| 18       | 51035-1800 | 45.70 (1.799) | 42.50 (1.673) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Locking tab secures terminal to housing

### Reference Information

Product Specification: PS-35164

Packaging: Reel

Use With: 35164

Designed In: Millimeters

### Electrical

Voltage: 250V

Current:

| AWG     | 22  | 24  | 26  | 28  |
|---------|-----|-----|-----|-----|
| Amperes | 3.0 | 2.5 | 1.5 | 1.0 |

Contact Resistance: 5mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 14.7N (3.3 lb) max.

Contact Retention to Housing: 14.7N (3.3 lb) min.

Wire Pull-Out Force: 22 AWG—39.2N (8.8 lb) min.

Insertion Force to PCB: 14.7N (3.3 lb) max.

### Physical

Contact: Brass

Plating: Contact Area—Tin

Solder Tail Area—Tin

Underplating—Copper

Insulation Diameter: 1.90mm (.075") max.

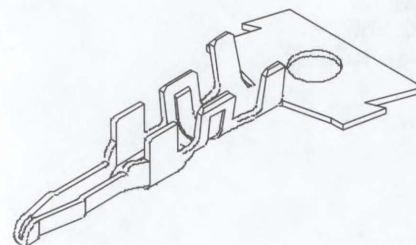
Wire Gauge: 22 to 28 AWG

PCB Thickness: 1.60mm (.063")

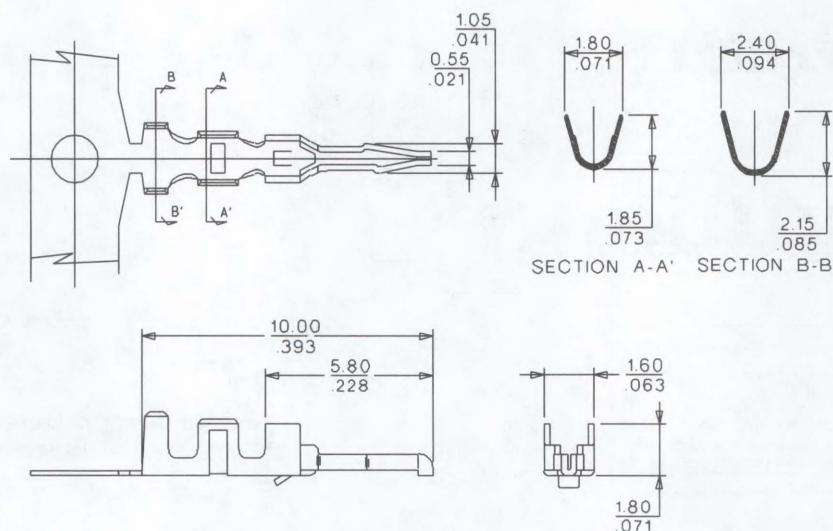


## 2.50mm (.098") Pitch Board-In Terminal

35047



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Order No.  | Plating  |
|------------|----------|
| 35047-9802 | Pre-Tin  |
| 35047-9810 | Post-Tin |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 15 circuits
- Locking windows secure terminal to housing

### Reference Information

Product Specification: PS-35164

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Use With: 35047

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 5mΩ max

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 14.7N (3.3 lb) max.

Contact Retention to Housing: 14.7N (3.3 lb) min.

### Physical

Housing: 6/6 nylon, UL 94V-0

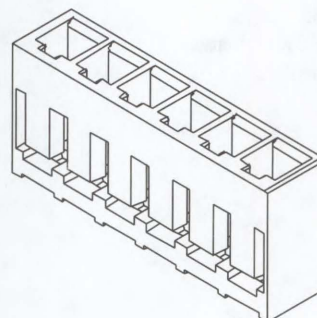
Operating Temperature: -40 to +105°C



## 2.50mm (.098") Pitch Board-In Housing

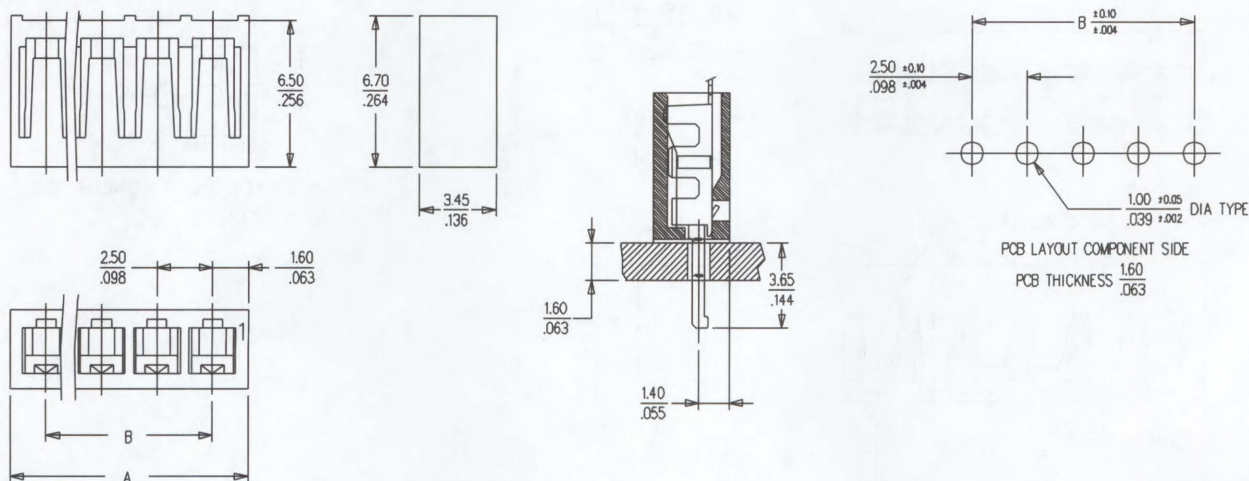
35164

Vertical



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION

| Circuits | Order No.     |            | Dimension    |              |
|----------|---------------|------------|--------------|--------------|
|          | Natural Color | Red Color  | A            | B            |
| 2        | 35164-0200    | 35164-0202 | 5.7 (.224)   | 2.5 (.197)   |
| 3        | 35164-0300    | 35164-0302 | 8.2 (.323)   | 5.0 (.295)   |
| 4        | 35164-0400    | 35164-0402 | 10.7 (.421)  | 7.5 (.394)   |
| 5        | 35164-0500    | 35164-0502 | 13.2 (.520)  | 10.0 (.492)  |
| 6        | 35164-0600    | 35164-0602 | 15.7 (.618)  | 12.5 (.591)  |
| 7        | 35164-0700    | 35164-0702 | 18.2 (.717)  | 15.0 (.689)  |
| 8        | 35164-0800    | 35164-0802 | 20.7 (.815)  | 17.5 (.787)  |
| 9        | 35164-0900    | 35164-0902 | 23.2 (.913)  | 20.0 (.787)  |
| 10       | 35164-1000    | 35164-1002 | 25.7 (1.012) | 22.5 (.886)  |
| 11       | 35164-1100    | 35164-1102 | 28.2 (1.110) | 25.0 (.984)  |
| 12       | 35164-1200    | 35164-1202 | 30.7 (1.209) | 27.5 (1.083) |
| 13       | 35164-1300    | 35164-1302 | 34.0 (1.307) | 30.0 (1.181) |
| 14       | 35164-1400    | 35164-1402 | 35.7 (1.406) | 32.5 (1.280) |
| 15       | 35164-1500    | 35164-1502 | 38.2 (1.504) | 35.0 (1.378) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 16 circuits
- Low profile (2.95mm)
- Terminal locking window
- Solders directly to PCB

### Reference Information

Product Specification: PS-35022  
 Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Use With: 35021 and 35044 terminal  
 Designed In: Millimeters

### Electrical

Voltage: 125V  
 Current: 3.0A  
 Contact Resistance: 5mΩ max.  
 Dielectric Withstanding Voltage: 1000V  
 Insulation Resistance: 1000 MΩ min.

### Mechanical

Contact Insertion Force: 9.81N (2.2 lb) max.  
 Contact Retention to Housing: 9.81N (2.2 lb) min.  
 Insertion Force to PCB: 9.81N (2.2 lb)

### Physical

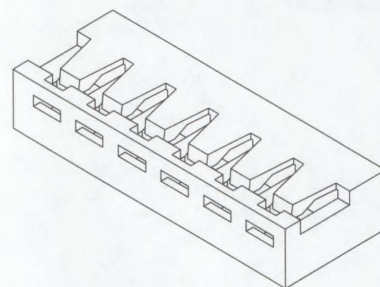
Housing: 6/6 nylon, UL 94V-0  
 Operating Temperature: -40 to +105°C



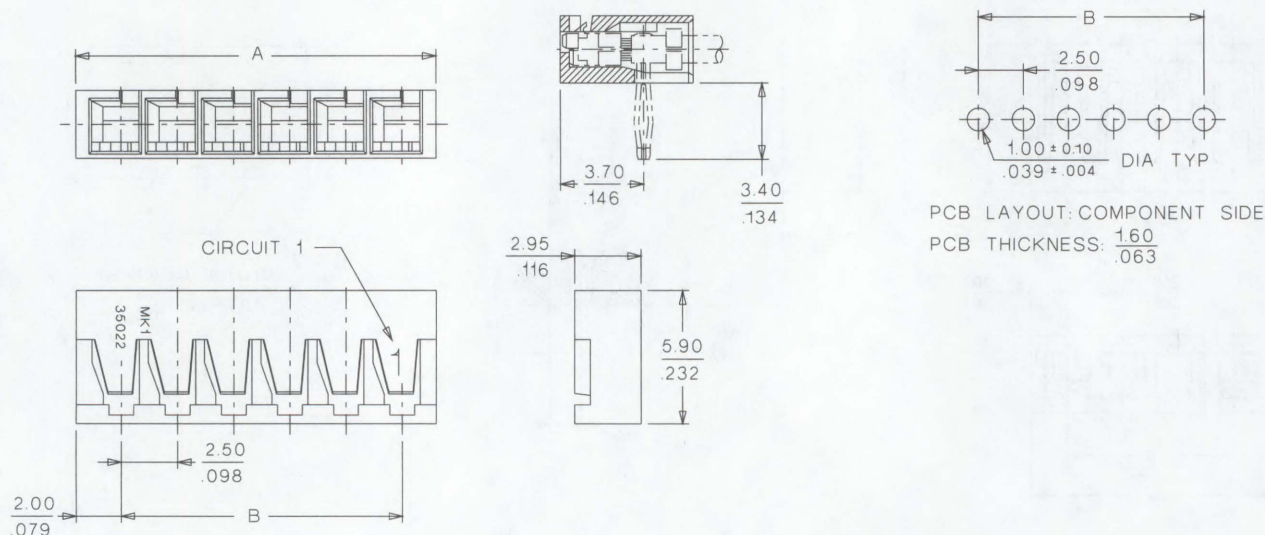
## 2.50mm (.098") Pitch Board-In Connector Housing

**35022**

## Right Angle



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 2        | 35022-0002 | 6.00 (.236)   | 2.50 (.098)   |
| 3        | 35022-0003 | 8.50 (.335)   | 5.00 (.197)   |
| 4        | 35022-0004 | 11.00 (.433)  | 7.50 (.295)   |
| 5        | 35022-0005 | 13.50 (.531)  | 10.00 (.394)  |
| 6        | 35022-0006 | 16.00 (.630)  | 12.50 (.492)  |
| 7        | 35022-0007 | 18.50 (.728)  | 15.00 (.591)  |
| 8        | 35022-0008 | 21.00 (.827)  | 17.50 (.689)  |
| 9        | 35022-0009 | 23.50 (.925)  | 20.00 (.787)  |
| 10       | 35022-0010 | 26.00 (1.024) | 22.50 (.886)  |
| 11       | 35022-0011 | 28.00 (1.122) | 25.00 (.984)  |
| 12       | 35022-0012 | 31.00 (1.220) | 27.50 (1.083) |
| 13       | 35022-0013 | 33.50 (1.319) | 30.00 (1.181) |
| 14       | 35022-0014 | 36.00 (1.417) | 32.50 (1.280) |
| 15       | 35022-0015 | 38.50 (1.516) | 35.00 (1.378) |
| 16       | 35022-0016 | 41.00 (1.614) | 37.50 (1.476) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Solders directly to PCB
- In-line IDT termination
- Integral crimped strain relief
- Low profile, eliminates headers
- Connectors supplied on terminal carrier strip for application tooling

### Reference Information

Packaging: Strip

UL File No.: E29179

CSA File No.: LR19980

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC

Insulation Resistance: 1000 MΩ min.

### Mechanical

Wire Pull-Out Force: See SMES 42219-0002

Insertion Force to PCB: 1kg max.

### Physical

Housing: Polyester, UL 94V-0

Contact: Phosphor Bronze

Plating: Tin/Lead

Operating Temperature: 0 to +75°C

Wire Accommodation: 24 AWG solid or stranded with topcoat or 26 AWG stranded with topcoat



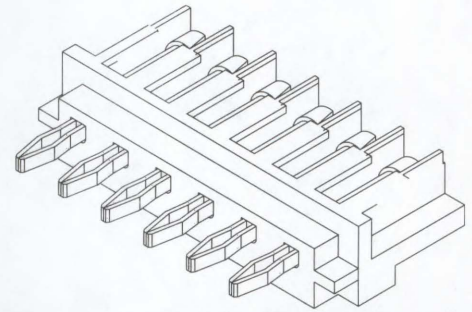
**2.50mm (.098") Pitch**

**SPOX™**

**Wire-to-Board  
Connector**

**42254**

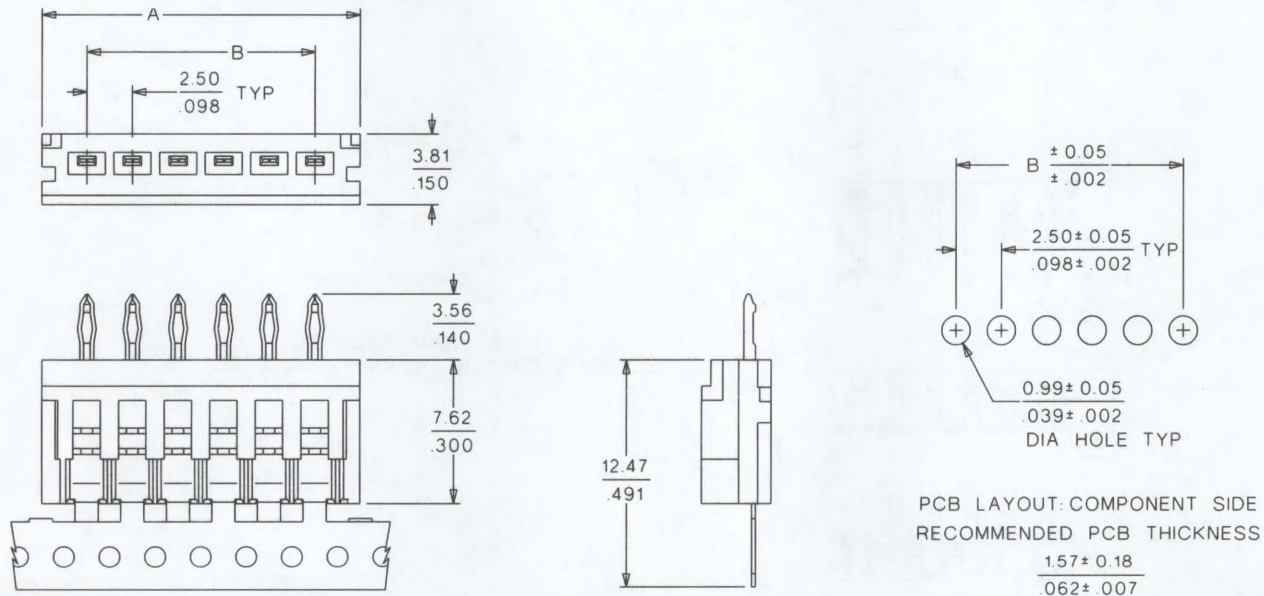
**IDT  
Board-In**



**B**

**2.00 to 2.50mm (.079 to .098") Pitch**

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.    | Dimension     |               |
|----------|--------------|---------------|---------------|
|          |              | A             | B             |
| 2        | • 22-43-2020 | 7.40 (.291)   | 2.50 (.098)   |
| 3        | • 22-43-2030 | 9.90 (.390)   | 5.00 (.197)   |
| 4        | • 22-43-2040 | 12.40 (.488)  | 7.50 (.295)   |
| 5        | • 22-43-2050 | 14.90 (.587)  | 10.00 (.394)  |
| 6        | • 22-43-2060 | 17.40 (.685)  | 12.50 (.492)  |
| 7        | • 22-43-2070 | 19.90 (.783)  | 15.00 (.591)  |
| 8        | • 22-43-2080 | 22.40 (.882)  | 17.50 (.689)  |
| 9        | • 22-43-2090 | 24.90 (.980)  | 20.00 (.787)  |
| 10       | • 22-43-2100 | 27.40 (1.079) | 22.50 (.886)  |
| 11       | • 22-43-2110 | 29.90 (1.117) | 25.00 (.984)  |
| 12       | • 22-43-2120 | 32.40 (1.276) | 27.50 (1.082) |
| 13       | • 22-43-2130 | 34.90 (1.374) | 30.00 (1.181) |
| 14       | • 22-43-2140 | 37.40 (1.472) | 32.50 (1.279) |
| 15       | • 22-43-2150 | 39.90 (1.571) | 35.00 (1.378) |

• US Standard Product, available through Molex franchised distributors

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Friction lock provides secure retention
- Guide feature facilitates mating
- Kinked tails provide additional PCB retention

### Reference Information

Packaging: Tray  
Mates With: 53291  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 2.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

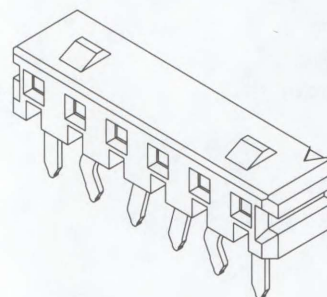
Housing: Glass-filled PBTP, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C



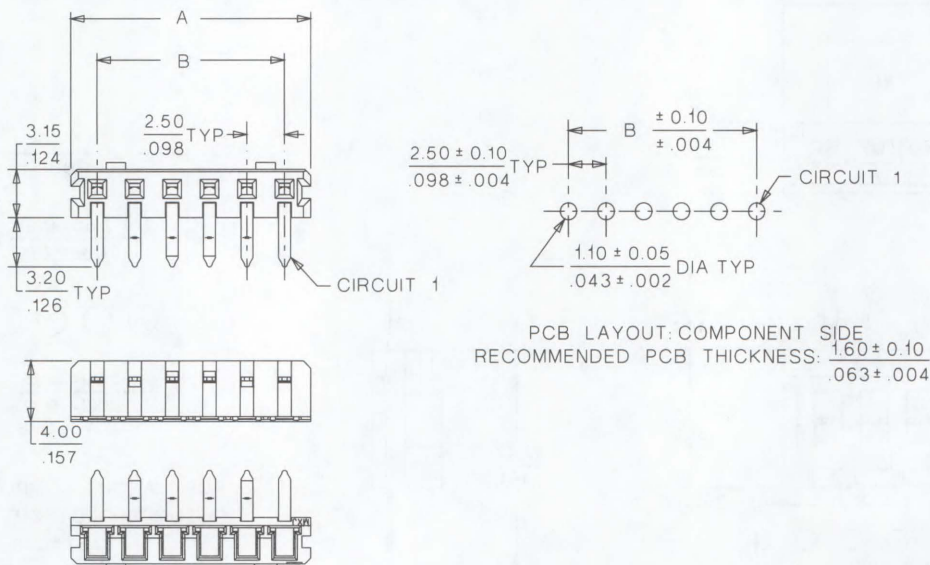
## 2.50mm (.098") Pitch Board-to-Board Receptacle

**52419**

## Right Angle



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 3        | 52419-0310 | 8.50 (.334)   | 5.00 (.196)   |
| 4        | 52419-0410 | 11.00 (.433)  | 7.50 (.295)   |
| 5        | 52419-0510 | 13.50 (.531)  | 10.00 (.393)  |
| 6        | 52419-0610 | 16.00 (.629)  | 12.50 (.492)  |
| 7        | 52419-0710 | 18.50 (.728)  | 15.00 (.590)  |
| 8        | 52419-0810 | 21.00 (.826)  | 17.50 (.688)  |
| 9        | 52419-0910 | 23.50 (.925)  | 20.00 (.787)  |
| 10       | 52419-1010 | 26.00 (1.023) | 22.50 (.885)  |
| 11       | 52419-1110 | 28.50 (1.122) | 25.00 (.984)  |
| 12       | 52419-1210 | 31.00 (1.220) | 27.50 (1.082) |
| 13       | 52419-1310 | 33.50 (1.318) | 30.00 (1.181) |
| 14       | 52419-1410 | 36.00 (1.417) | 32.50 (1.279) |
| 15       | 52419-1510 | 38.50 (1.515) | 35.00 (1.377) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Friction lock provides secure retention
- Guide feature facilitates mating

### Reference Information

Packaging: Tube  
Mates With: 52419  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 2.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

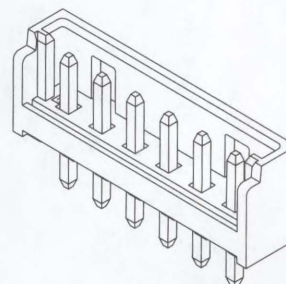
Housing: PBTP, UL 94V-0  
Contact: Brass  
Plating: Tin  
Operating Temperature: -40 to +105°C



## 2.50mm (.098") Pitch Board-to-Board Header

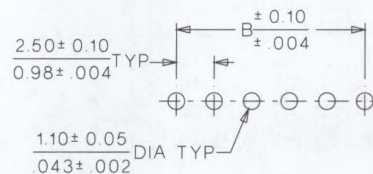
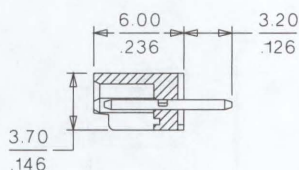
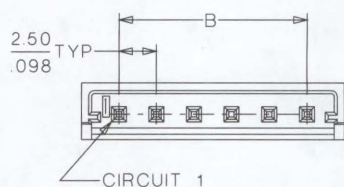
**53291**

**Vertical**

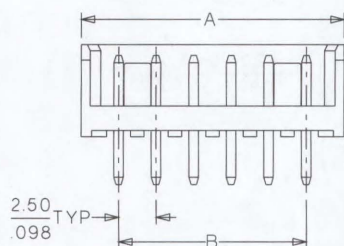


2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT : COMPONENT SIDE  
RECOMMENDED PCB THICKNESS:  $\frac{1.60 \pm 0.10}{.063 \pm .004}$



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 3        | 53291-0391 | 10.00 (.393)  | 5.00 (.196)   |
| 4        | 53291-0491 | 12.50 (.492)  | 7.50 (.295)   |
| 5        | 53291-0591 | 15.00 (.590)  | 10.00 (.393)  |
| 6        | 53291-0691 | 17.50 (.688)  | 12.50 (.492)  |
| 7        | 53291-0791 | 20.00 (.787)  | 15.00 (.590)  |
| 8        | 53291-0891 | 22.50 (.865)  | 17.50 (.688)  |
| 9        | 53291-0991 | 25.00 (.984)  | 20.00 (.787)  |
| 10       | 53291-1091 | 27.50 (1.082) | 22.50 (.865)  |
| 11       | 53291-1191 | 30.00 (1.181) | 25.00 (.984)  |
| 12       | 53291-1291 | 32.50 (1.279) | 27.50 (1.070) |
| 13       | 53291-1391 | 35.00 (1.377) | 30.00 (1.181) |
| 14       | 53291-1491 | 37.50 (1.476) | 32.50 (1.279) |
| 15       | 53291-1591 | 40.00 (1.574) | 35.00 (1.377) |

Note: Kinked version and bag packaging available, contact Inside Sales for details

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 3 to 15 circuits

### Reference Information

Packaging: Tray  
 UL File No.: E29179  
 CSA File No.: LR19980  
 Mates With: 5245-NA  
 Mated Height: 12.00mm (.472")  
 Mated Width: 9.10mm (.358")  
 Designed In: Millimeters

### Electrical

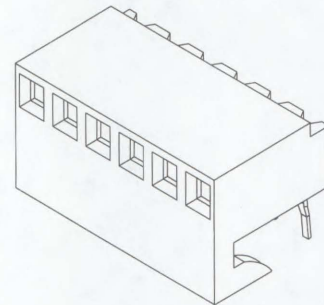
Voltage: 250V  
 Current: 3.0A  
 Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 1000V AC/1 min.  
 Insulation Resistance: 1000 MΩ min.

### Physical

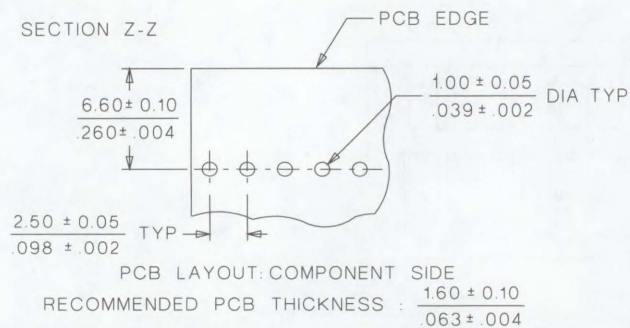
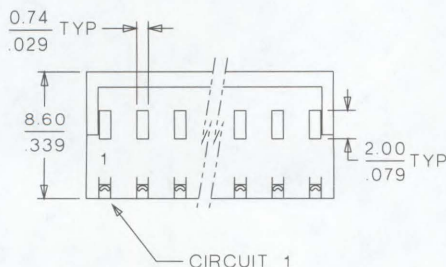
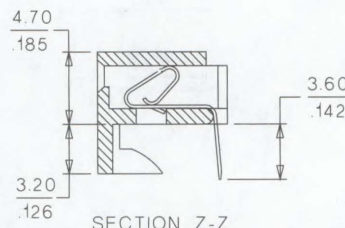
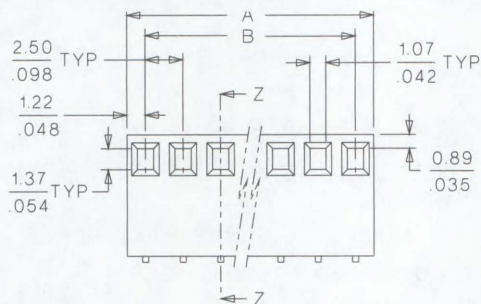
Housing: 6/6 nylon, UL 94V-0  
 Contact: Phosphor Bronze  
 Plating: Tin  
 Operating Temperature: -40 to +105°C

## molex® 2.50mm (.098") Pitch Board-to-Board Receptacle

### 5244-NAHPB Single Row



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 3        | 22-15-3032 | 7.44 (.293)   | 5.00 (.196)   |
| 4        | 22-15-3042 | 9.94 (.391)   | 7.50 (.295)   |
| 5        | 22-15-3052 | 12.44 (.490)  | 10.00 (.393)  |
| 6        | 22-15-3062 | 14.94 (.588)  | 12.50 (.492)  |
| 7        | 22-15-3072 | 17.44 (.687)  | 15.00 (.590)  |
| 8        | 22-15-3082 | 19.94 (.785)  | 17.50 (.688)  |
| 9        | 22-15-3092 | 22.44 (.883)  | 20.00 (.787)  |
| 10       | 22-15-3102 | 24.94 (.982)  | 22.50 (.885)  |
| 11       | 22-15-3112 | 27.44 (1.080) | 25.00 (.984)  |
| 12       | 22-15-3122 | 29.94 (1.179) | 27.50 (1.082) |
| 13       | 22-15-3132 | 32.44 (1.277) | 30.00 (1.181) |
| 14       | 22-15-3142 | 34.94 (1.376) | 32.50 (1.279) |
| 15       | 22-15-3152 | 37.44 (1.474) | 35.00 (1.377) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 3 to 15 circuits

### Reference Information

Packaging: Bulk

UL File No.: E29179

CSA File No.: LR19980

Mates With: 5244-NAHPB

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0

Contact: Brass

Plating: Tin

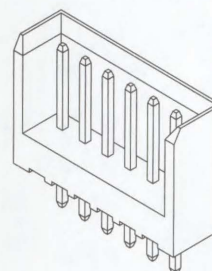
Operating Temperature: -40 to +105°C



## 2.50mm (.098") Pitch Board-to-Board Backwall Header

**5245-NA**

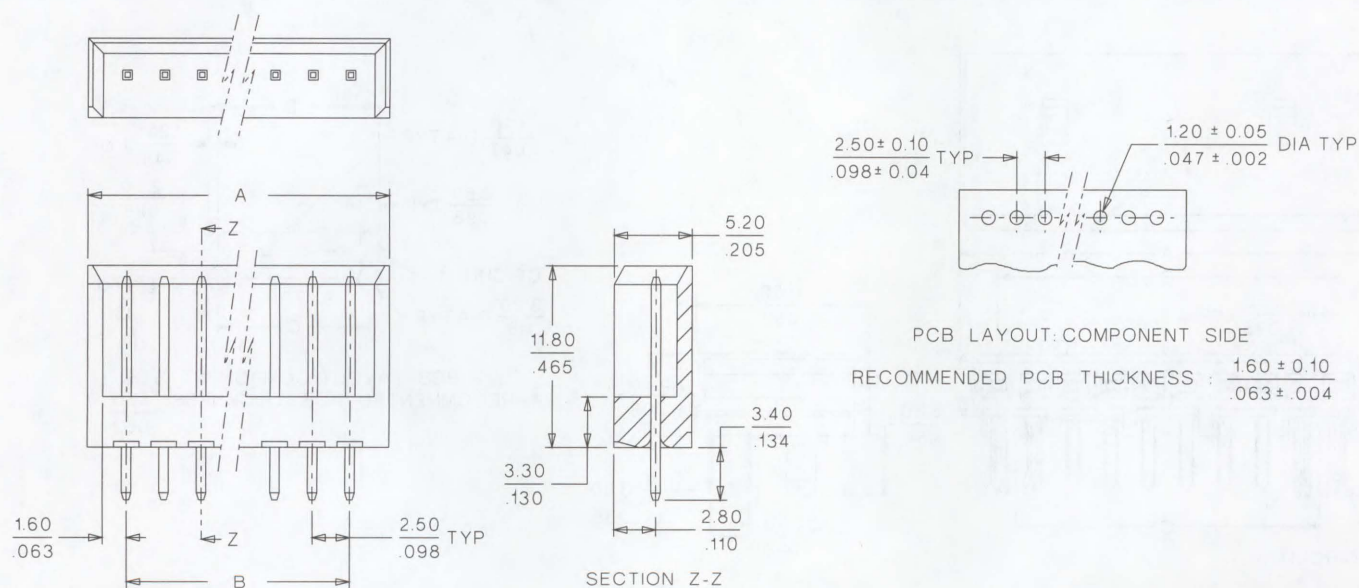
**Single Row**



2.00 to 2.50mm (.079 to .098") Pitch

**B**

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 3        | 22-03-5034 | 10.20 (.401)  | 5.00 (.196)   |
| 4        | 22-03-5044 | 12.70 (.499)  | 7.50 (.295)   |
| 5        | 22-03-5054 | 15.20 (.598)  | 10.00 (.393)  |
| 6        | 22-03-5064 | 17.70 (.696)  | 12.50 (.492)  |
| 7        | 22-03-5074 | 20.20 (.795)  | 15.00 (.590)  |
| 8        | 22-03-5084 | 22.70 (.893)  | 17.50 (.688)  |
| 9        | 22-03-5094 | 25.20 (.992)  | 20.00 (.787)  |
| 10       | 22-03-5104 | 27.70 (1.090) | 22.50 (.885)  |
| 11       | 22-03-5114 | 30.20 (1.188) | 25.00 (.984)  |
| 12       | 22-03-5124 | 32.70 (1.287) | 27.50 (1.082) |
| 13       | 22-03-5134 | 35.20 (1.385) | 30.00 (1.181) |
| 14       | 22-03-5144 | 37.70 (1.484) | 32.50 (1.279) |
| 15       | 22-03-5154 | 40.20 (1.582) | 35.00 (1.377) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 10 to 20 circuits
- 2 friction locks
- Fork-style PCB peg with friction lock

### Reference Information

Mates With: 53421 header  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3.0A max.  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

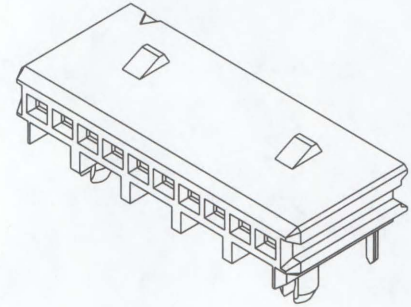
Housing: 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C



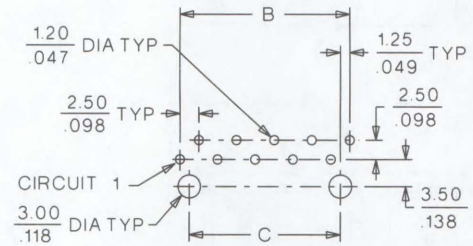
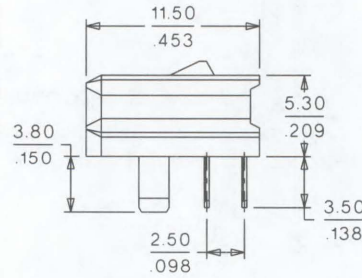
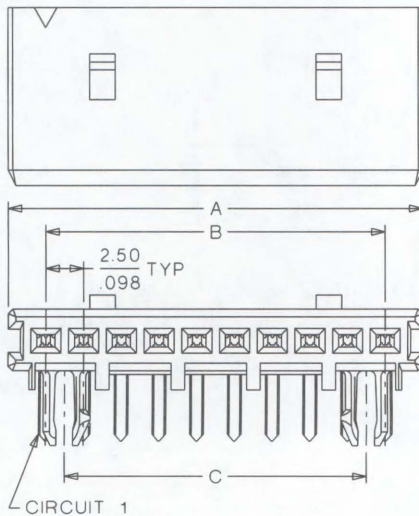
## 2.50mm (.098") Pitch Board-to-Board Receptacle

**52668**

### Right Angle



## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: 1.60  
.063

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 10       | 52668-1017 | 27.50 (1.083) | 22.50 (.886)  | 20.00 (.787)  |
| 11       | 52668-1117 | 30.00 (1.181) | 25.00 (.984)  | 22.50 (.886)  |
| 12       | 52668-1217 | 32.50 (1.280) | 27.50 (1.083) | 25.00 (.984)  |
| 13       | 52668-1317 | 35.00 (1.378) | 30.00 (1.181) | 27.50 (1.083) |
| 14       | 52668-1417 | 37.50 (1.476) | 32.50 (1.280) | 30.00 (1.181) |
| 15       | 52668-1517 | 40.00 (1.575) | 35.00 (1.378) | 32.50 (1.280) |
| 16       | 52668-1617 | 42.50 (1.673) | 37.50 (1.476) | 35.00 (1.378) |
| 17       | 52668-1717 | 45.00 (1.772) | 40.00 (1.575) | 37.50 (1.476) |
| 18       | 52668-1817 | 47.50 (1.870) | 42.50 (1.673) | 40.00 (1.575) |
| 19       | 52668-1917 | 50.00 (1.969) | 45.00 (1.772) | 42.50 (1.673) |
| 20       | 52668-2017 | 52.50 (2.067) | 47.50 (1.870) | 45.00 (1.772) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 10 to 20 circuits
- Polarizing wall
- Fork-style PCB locking pegs

### Reference Information

Mates With: 52668 receptacle  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3.0A max.  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

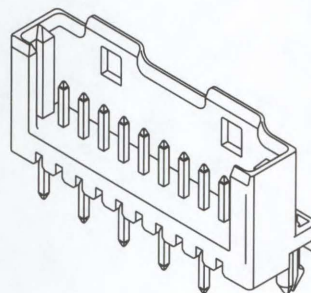
Housing: 6/6 nylon, UL 94V-0  
Contact: Brass, 0.65mm (.026") square  
Plating: Tin  
Operating Temperature: -40 to +105°C



## 2.50mm (.098") Pitch Board-to-Board Header

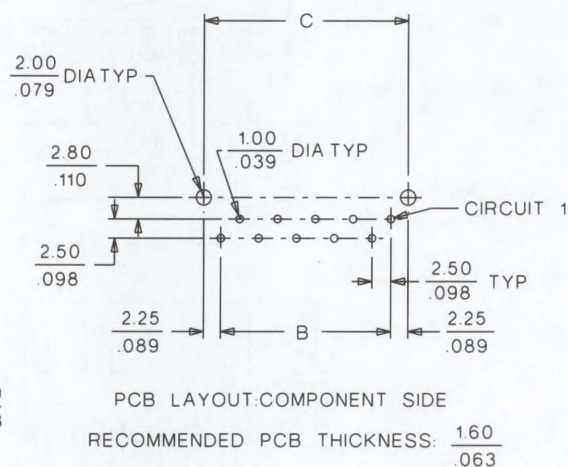
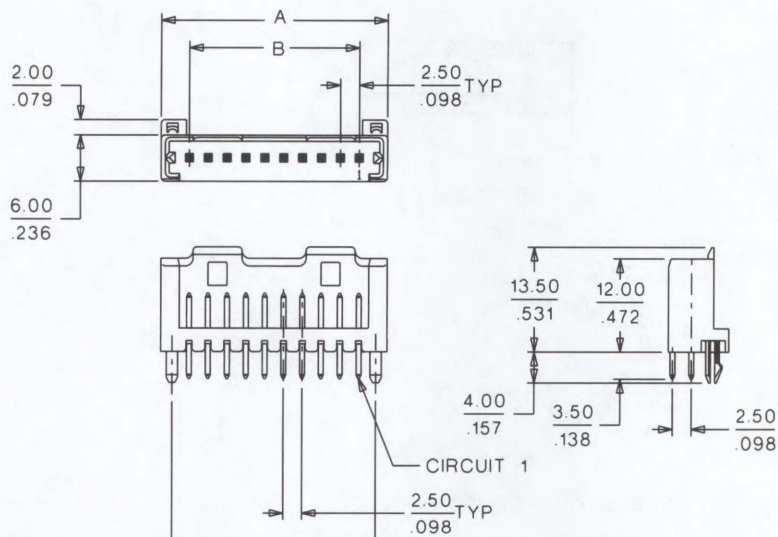
**53421**

**Vertical**



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |               |
|----------|------------|---------------|---------------|---------------|
|          |            | A             | B             | C             |
| 10       | 53421-1017 | 30.00 (1.181) | 22.50 (.886)  | 27.00 (1.063) |
| 11       | 53421-1117 | 32.50 (1.280) | 25.00 (.984)  | 29.50 (1.161) |
| 12       | 53421-1217 | 35.00 (1.378) | 27.50 (1.083) | 32.00 (1.260) |
| 13       | 53421-1317 | 37.50 (1.476) | 30.00 (1.181) | 34.50 (1.358) |
| 14       | 53421-1417 | 40.00 (1.575) | 32.50 (1.280) | 37.00 (1.457) |
| 15       | 53421-1517 | 42.50 (1.673) | 35.00 (1.378) | 39.50 (1.555) |
| 16       | 53421-1617 | 45.00 (1.772) | 37.50 (1.476) | 42.00 (1.654) |
| 17       | 53421-1717 | 47.50 (1.870) | 40.00 (1.575) | 44.50 (1.752) |
| 18       | 53421-1817 | 50.00 (1.969) | 42.50 (1.673) | 47.00 (1.850) |
| 19       | 53421-1917 | 52.50 (2.067) | 45.00 (1.772) | 49.50 (1.949) |
| 20       | 53421-2017 | 55.00 (2.165) | 47.50 (1.870) | 52.00 (2.047) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 3 to 15 circuits

### Reference Information

Packaging: Tray  
Mates With: 3022-NA  
Mated Height: 11.90mm (.469")  
Mated Width: 4.70mm (.185")  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

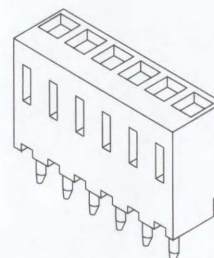
### Physical

Housing: 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C

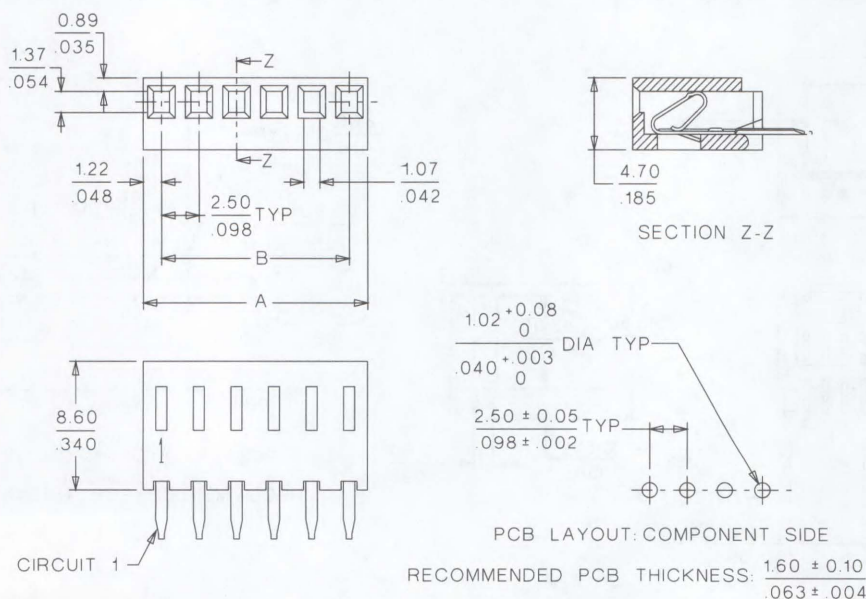
## molex® 2.50mm (.098") Pitch Board-to-Board Receptacle

**5224-NCHPB**

**Single Row**



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 3        | 22-02-3034 | 7.44 (.293)   | 5.00 (.196)   |
| 4        | 22-02-3044 | 9.94 (.391)   | 7.50 (.295)   |
| 5        | 22-02-3054 | 12.44 (.490)  | 10.00 (.393)  |
| 6        | 22-02-3064 | 14.94 (.588)  | 12.50 (.492)  |
| 7        | 22-02-3074 | 17.44 (.687)  | 15.00 (.590)  |
| 8        | 22-02-3084 | 19.94 (.785)  | 17.50 (.688)  |
| 9        | 22-02-3094 | 22.44 (.883)  | 20.00 (.787)  |
| 10       | 22-02-3104 | 24.94 (.982)  | 22.50 (.885)  |
| 11       | 22-02-3114 | 27.44 (1.080) | 25.00 (.984)  |
| 12       | 22-02-3124 | 29.94 (1.179) | 27.50 (1.082) |
| 13       | 22-02-3134 | 32.44 (1.277) | 30.00 (1.181) |
| 14       | 22-02-3144 | 34.94 (1.376) | 32.50 (1.279) |
| 15       | 22-02-3154 | 37.44 (1.474) | 35.00 (1.377) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 3 to 15 circuits

### Reference Information

Packaging: Tray  
UL File No.: E29179  
Mates With: 3022-NA  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

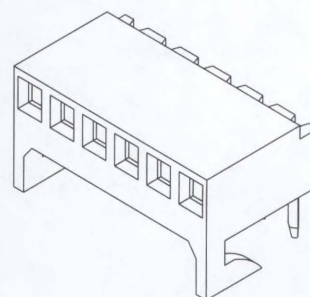
Housing: 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C



## 2.50mm (.098") Pitch Board-to-Board Receptacle

**3024-NAHPB**

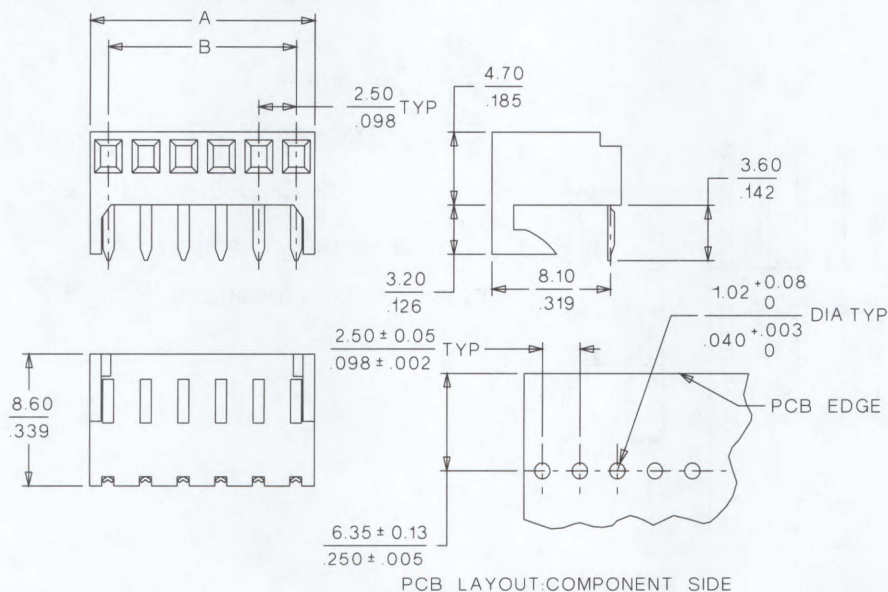
**Single Row  
Right Angle**



2.00 to 2.50mm (.079 to .098") Pitch

**B**

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 3        | 22-15-1032 | 7.44 (.293)   | 5.00 (.196)   |
| 4        | 22-15-1042 | 9.94 (.391)   | 7.50 (.295)   |
| 5        | 22-15-1052 | 12.44 (.490)  | 10.00 (.393)  |
| 6        | 22-15-1062 | 14.94 (.588)  | 12.50 (.492)  |
| 7        | 22-15-1072 | 17.44 (.687)  | 15.00 (.590)  |
| 8        | 22-15-1082 | 19.94 (.785)  | 17.50 (.688)  |
| 9        | 22-15-1092 | 22.44 (.883)  | 20.00 (.787)  |
| 10       | 22-15-1102 | 24.94 (.982)  | 22.50 (.885)  |
| 11       | 22-15-1112 | 27.44 (1.080) | 25.00 (.984)  |
| 12       | 22-15-1122 | 29.94 (1.179) | 27.50 (1.082) |
| 13       | 22-15-1132 | 32.44 (1.277) | 30.00 (1.181) |
| 14       | 22-15-1142 | 34.94 (1.376) | 32.50 (1.279) |
| 15       | 22-15-1152 | 37.44 (1.474) | 35.00 (1.377) |

B  
2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 3 to 15 circuits

### Reference Information

Packaging: Bulk

UL File No.: E29179

CSA File No.: LR19980

Mates With: 3024-NAHPB and 5224-NCHPB

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0

Contact: Brass

Plating: Tin

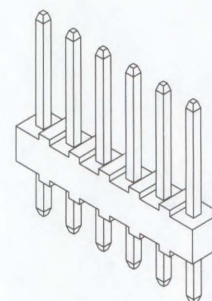
Operating Temperature: -40 to +105°C



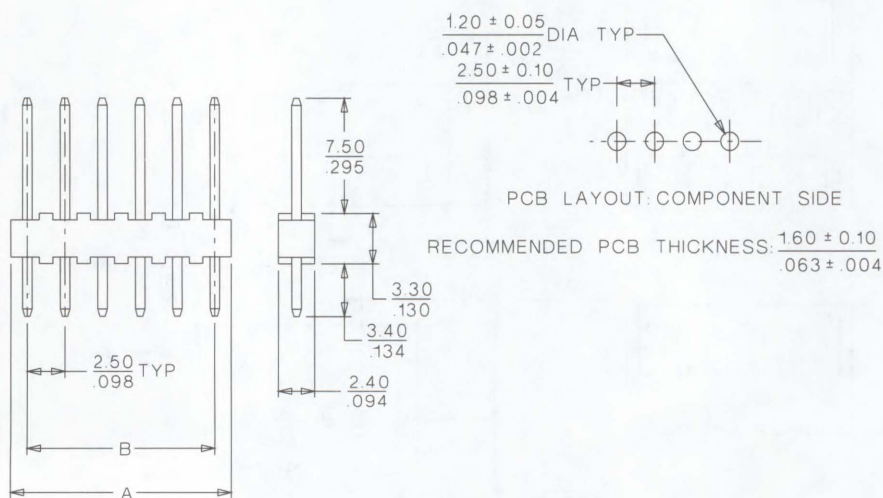
## 2.50mm (.098") Pitch Board-to-Board Header

3022-NA

Single Row



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 3        | 22-03-1031 | 7.20 (.283)   | 5.00 (.196)   |
| 4        | 22-03-1041 | 9.70 (.382)   | 7.50 (.295)   |
| 5        | 22-03-1051 | 12.20 (.480)  | 10.00 (.393)  |
| 6        | 22-03-1061 | 14.70 (.579)  | 12.50 (.492)  |
| 7        | 22-03-1071 | 17.20 (.677)  | 15.00 (.590)  |
| 8        | 22-03-1081 | 19.70 (.776)  | 17.50 (.688)  |
| 9        | 22-03-1091 | 22.20 (.874)  | 20.00 (.787)  |
| 10       | 22-03-1101 | 24.70 (.972)  | 22.50 (.885)  |
| 11       | 22-03-1111 | 27.20 (1.071) | 25.00 (.984)  |
| 12       | 22-03-1121 | 29.70 (1.169) | 27.50 (1.082) |
| 13       | 22-03-1131 | 32.20 (1.268) | 30.00 (1.181) |
| 14       | 22-03-1141 | 34.70 (1.366) | 32.50 (1.279) |
| 15       | 22-03-1151 | 37.20 (1.465) | 35.00 (1.377) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 3 to 15 circuits

### Reference Information

Packaging: Bulk or tray  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 3022-NB  
Mated Height: 14.40mm (.567")  
Mated Width: 7.90mm (.311")  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

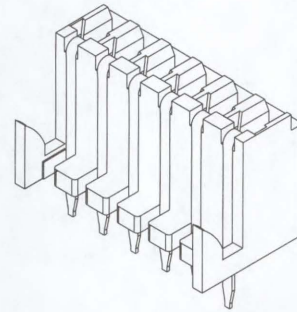
Housing: 6/6 nylon, UL 94V-0  
Contact: Phosphor Bronze  
Plating: Tin  
Operating Temperature: -40 to +105°C



## 2.50mm (.098") Pitch Board-to-Board Connector

**5124-NBHPB**

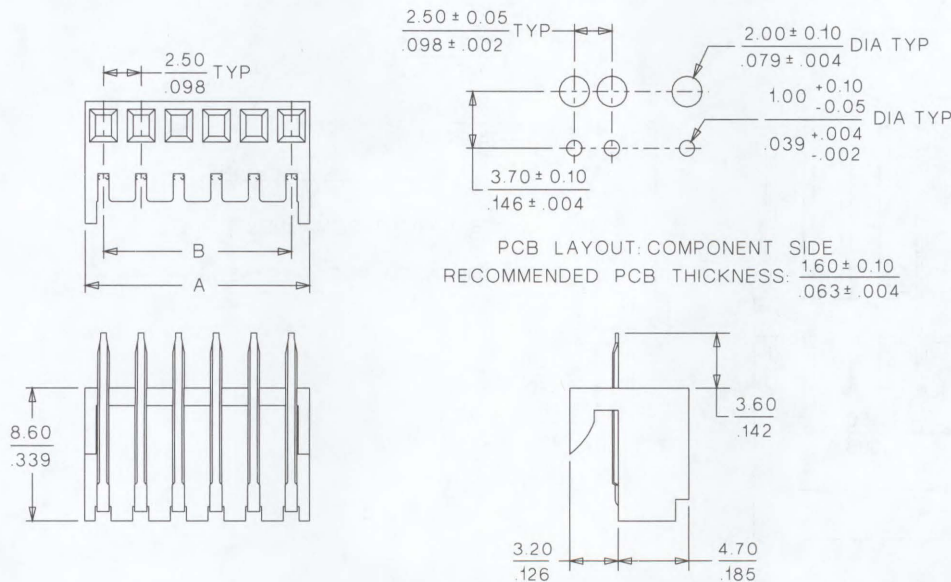
## Bottom Entry Single Row



**B**

2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 3        | 10-07-2035 | 7.44 (.293)   | 5.00 (.196)   |
| 4        | 10-07-2045 | 9.94 (.391)   | 7.50 (.295)   |
| 5        | 10-07-2055 | 12.44 (.490)  | 10.00 (.393)  |
| 6        | 10-07-2065 | 14.94 (.588)  | 12.50 (.492)  |
| 7        | 10-07-2075 | 17.44 (.687)  | 15.00 (.590)  |
| 8        | 10-07-2085 | 19.94 (.785)  | 17.50 (.688)  |
| 9        | 10-07-2095 | 22.44 (.883)  | 20.00 (.787)  |
| 10       | 10-07-2105 | 24.94 (.982)  | 22.50 (.885)  |
| 11       | 10-07-2115 | 27.44 (1.080) | 25.00 (.984)  |
| 12       | 10-07-2125 | 29.94 (1.179) | 27.50 (1.082) |
| 13       | 10-07-2135 | 32.44 (1.277) | 30.00 (1.181) |
| 14       | 10-07-2145 | 34.94 (1.376) | 32.50 (1.279) |
| 15       | 10-07-2155 | 37.44 (1.474) | 35.00 (1.377) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 3 to 15 circuits

### Reference Information

Packaging: Bulk  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 5124-NBHPB  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC/1 min.  
Insulation Resistance: 1000 MΩ min.

### Physical

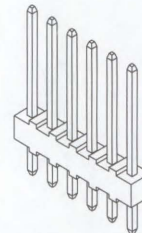
Housing: 6/6 nylon, UL 94V-0  
Contact: Brass  
Plating: Tin  
Operating Temperature: -40 to +105°C



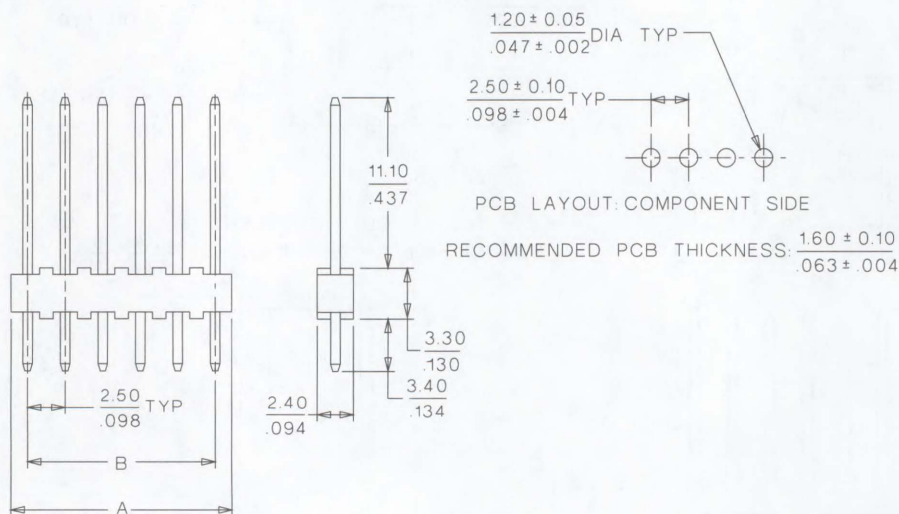
## 2.50mm (.098") Pitch Board-to-Board Header

**3022-NB**

## Single Row



### CATALOG DRAWING (FOR REFERENCE ONLY)



### ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension     |               |
|----------|------------|---------------|---------------|
|          |            | A             | B             |
| 3        | 22-03-1032 | 7.20 (.283)   | 5.00 (.196)   |
| 4        | 22-03-1042 | 9.70 (.382)   | 7.50 (.295)   |
| 5        | 22-03-1052 | 12.20 (.480)  | 10.00 (.393)  |
| 6        | 22-03-1062 | 14.70 (.579)  | 12.50 (.492)  |
| 7        | 22-03-1072 | 17.20 (.677)  | 15.00 (.590)  |
| 8        | 22-03-1082 | 19.70 (.776)  | 17.50 (.688)  |
| 9        | 22-03-1092 | 22.20 (.874)  | 20.00 (.787)  |
| 10       | 22-03-1102 | 24.70 (.972)  | 22.50 (.885)  |
| 11       | 22-03-1112 | 27.20 (1.071) | 25.00 (.984)  |
| 12       | 22-03-1122 | 29.70 (1.169) | 27.50 (1.082) |
| 13       | 22-03-1132 | 32.20 (1.268) | 30.00 (1.181) |
| 14       | 22-03-1142 | 34.70 (1.366) | 32.50 (1.279) |
| 15       | 22-03-1152 | 37.20 (1.465) | 35.00 (1.377) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 20 circuits
- 0.64 mm (.025") square wire pins
- Stackable side-to-side and end-to-end

### Reference Information

Packaging: Bulk  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 5051 and 7534  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 1000V AC  
Insulation Resistance: 1000 MΩ min.

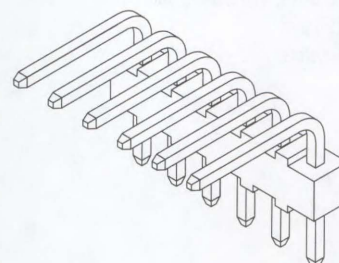
### Physical

Housing: 6/6 nylon, UL 94V-0  
Contact: Brass  
Plating: Tin  
Operating Temperature: -40 to +105°C

**molex®** 2.50mm (.098") Pitch  
Header

**3094-NA**

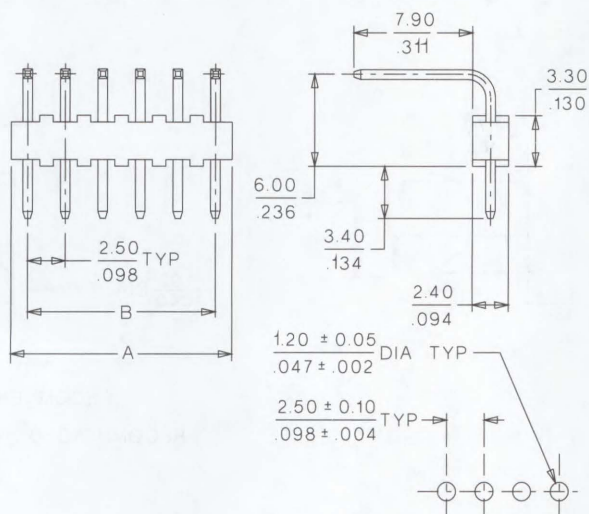
**Right Angle  
Square Pin**



2.00 to 2.50mm (.079 to .098") Pitch

**B**

## CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS: 1.60 ± 0.10  
0.063 ± .004

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  |            | Dimension     |              |
|----------|------------|------------|---------------|--------------|
|          | Tin        | Gold       | A             | B            |
| 2        | 22-05-1021 | 22-12-1021 | 4.90 (.192)   | 2.50 (.098)  |
| 3        | 22-05-1031 | 22-12-1031 | 7.20 (.284)   | 5.00 (.196)  |
| 4        | 22-05-1041 | 22-12-1041 | 9.70 (.382)   | 7.50 (.295)  |
| 5        | 22-05-1051 | 22-12-1051 | 12.20 (.480)  | 10.00 (.393) |
| 6        | 22-05-1061 | 22-12-1061 | 14.70 (.578)  | 12.50 (.492) |
| 7        | 22-05-1071 | 22-12-1071 | 17.20 (.677)  | 15.00 (.590) |
| 8        | 22-05-1081 | 22-12-1081 | 19.70 (.776)  | 17.50 (.688) |
| 9        | 22-05-1091 | 22-12-1091 | 22.20 (.874)  | 20.00 (.787) |
| 10       | 22-05-1101 | 22-12-1101 | 24.70 (.972)  | 22.50 (.885) |
| 11       | 22-05-1111 | 22-12-1111 | 27.20 (1.071) | 25.00 (.984) |

| Circuits | Order No.  |            | Dimension     |               |
|----------|------------|------------|---------------|---------------|
|          | Tin        | Gold       | A             | B             |
| 12       | 22-05-1121 | 22-12-1121 | 29.70 (1.169) | 27.50 (1.082) |
| 13       | 22-05-1131 | 22-12-1131 | 32.20 (1.268) | 30.00 (1.181) |
| 14       | 22-05-1141 | 22-12-1141 | 34.70 (1.367) | 32.50 (1.279) |
| 15       | 22-05-1151 | 22-12-1151 | 37.20 (1.462) | 35.00 (1.377) |
| 16       | 22-05-1161 | 22-12-1161 | 39.70 (1.563) | 37.50 (1.476) |
| 17       | 22-05-1171 | 22-12-1171 | 42.20 (1.662) | 40.00 (1.574) |
| 18       | 22-05-1181 | 22-12-1181 | 44.70 (1.760) | 42.50 (1.673) |
| 19       | 22-05-1191 | 22-12-1191 | 47.20 (1.858) | 45.00 (1.771) |
| 20       | 22-05-1201 | 22-12-1201 | 49.70 (1.957) | 47.50 (1.870) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 20 circuits
- PC board locking hooks and standoffs

### Reference Information

Product Specification: PS-10-07

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

Mates With: 3022, 3094, 3202, 6494 and

0.64mm (.025") pins

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 2.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 500K MΩ min.

### Mechanical

Mating Force: 199g max.

Unmating Force: 57g min.

Normal Force: 300g

Durability: 50 cycles Gold and 25 cycles Tin

### Physical

Housing: White nylon, UL 94V-0

Contact: Phosphor Bronze

Plating: 1.00μ (40μ") Tin/Lead and 2.00μ (80μ") Copper  
min. or 0.50μ (20μ") Gold and 0.75μ (30μ") Nickel min.

Operating Temperature: 0 to +75°C



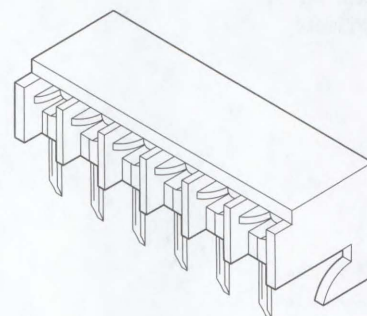
2.50mm (.098") Pitch

KK®

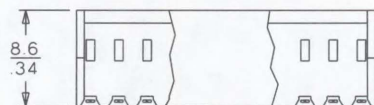
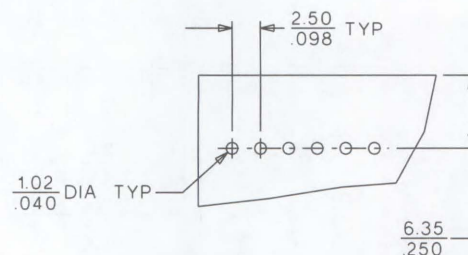
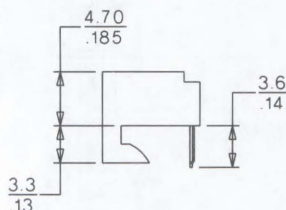
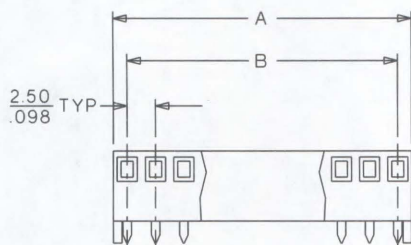
PC Board Connector

7534

Right Angle



## CATALOG DRAWING (FOR REFERENCE ONLY)



RECOMMENDED PCB LAYOUT

RECOMMENDED PCB THICKNESS:  $\frac{1.58}{.062}$

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  |            | Dimension     |              |
|----------|------------|------------|---------------|--------------|
|          | Tin        | Gold       | A             | B            |
| 2        | 22-02-1024 | 22-16-1023 | 4.94 (.194)   | 2.50 (.098)  |
| 3        | 22-02-1034 | 22-16-1033 | 7.44 (.293)   | 5.00 (.197)  |
| 4        | 22-02-1044 | 22-16-1043 | 9.94 (.392)   | 7.50 (.295)  |
| 5        | 22-02-1054 | 22-16-1053 | 12.44 (.490)  | 10.00 (.394) |
| 6        | 22-02-1064 | 22-16-1063 | 14.94 (.589)  | 12.50 (.492) |
| 7        | 22-02-1074 | 22-16-1073 | 17.44 (.687)  | 15.00 (.591) |
| 8        | 22-02-1084 | 22-16-1083 | 19.94 (.785)  | 17.50 (.689) |
| 9        | 22-02-1094 | 22-16-1093 | 22.44 (.884)  | 20.00 (.787) |
| 10       | 22-02-1104 | 22-16-1103 | 24.94 (.982)  | 22.50 (.886) |
| 11       | 22-02-1114 | 22-16-1113 | 27.44 (1.081) | 25.00 (.984) |

| Circuits | Order No.  |            | Dimension     |               |
|----------|------------|------------|---------------|---------------|
|          | Tin        | Gold       | A             | B             |
| 12       | 22-02-1124 | 22-16-1123 | 29.94 (1.179) | 27.50 (1.083) |
| 13       | 22-02-1134 | 22-16-1133 | 32.44 (1.278) | 30.00 (1.180) |
| 14       | 22-02-1144 | 22-16-1143 | 34.94 (1.376) | 32.50 (1.280) |
| 15       | 22-02-1154 | 22-16-1153 | 37.44 (1.475) | 35.00 (1.378) |
| 16       | 22-02-1164 | 22-16-1163 | 39.94 (1.572) | 37.50 (1.477) |
| 17       | 22-02-1174 | 22-16-1173 | 42.44 (1.672) | 40.00 (1.575) |
| 18       | 22-02-1184 | 22-16-1183 | 44.94 (1.769) | 42.50 (1.674) |
| 19       | 22-02-1194 | 22-16-1193 | 47.44 (1.860) | 45.00 (1.772) |
| 20       | 22-02-1204 | 22-16-1203 | 49.94 (1.966) | 47.50 (1.870) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 20 circuits
- PC board locking hooks and standoffs

### Reference Information

Product Specification: PS-10-07

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

Mates With: 3022, 3094, 3202 and 0.64mm (.025") pins

Designed In: Millimeters

### Electrical

Voltage: 250V

Current: 2.5A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 500K MΩ min.

### Mechanical

Mating Force: 199g max.

Unmating Force: 57g min.

Normal Force: 300g

Durability: 50 cycles Gold and 25 cycles Tin

### Physical

Housing: White nylon, UL 94V-0

Contact: Phosphor Bronze

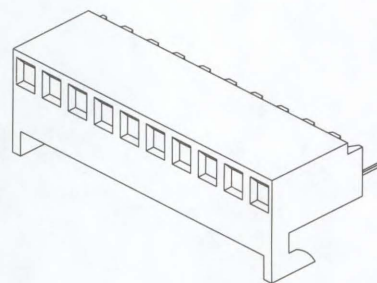
Plating: 1.00μ (40μ") Tin/Lead and  
2.00μ (80μ") Copper min.

Operating Temperature: 0 to +75°C

# molex® 2.50mm (.098") Pitch KK® PC Board Connector

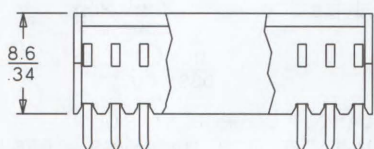
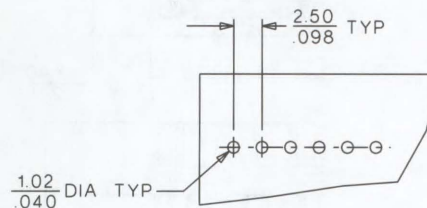
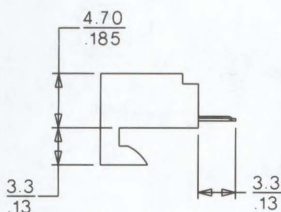
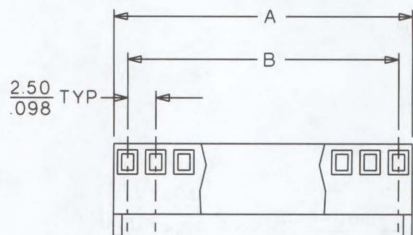
## 7534

## Top Entry



2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



RECOMMENDED PCB LAYOUT

RECOMMENDED PCB THICKNESS: 1.58  
.062

## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Tin Order No. | Dimension     |              |
|----------|---------------|---------------|--------------|
|          |               | A             | B            |
| 2        | 22-02-1025    | 4.94 (.194)   | 2.50 (.098)  |
| 3        | 22-02-1035    | 7.44 (.293)   | 5.00 (.197)  |
| 4        | 22-02-1045    | 9.94 (.392)   | 7.50 (.295)  |
| 5        | 22-02-1055    | 12.44 (.490)  | 10.00 (.394) |
| 7        | 22-02-1075    | 17.44 (.687)  | 15.00 (.591) |
| 8        | 22-02-1085    | 19.94 (.785)  | 17.50 (.689) |
| 9        | 22-02-1095    | 22.44 (.884)  | 20.00 (.787) |
| 10       | 22-02-1105    | 24.94 (.982)  | 22.50 (.886) |
| 11       | 22-02-1115    | 27.44 (1.081) | 25.00 (.984) |

| Circuits | Tin Order No. | Dimension     |               |
|----------|---------------|---------------|---------------|
|          |               | A             | B             |
| 12       | 22-02-1125    | 29.94 (1.179) | 27.50 (1.083) |
| 13       | 22-02-1135    | 32.44 (1.278) | 30.00 (1.181) |
| 14       | 22-02-1145    | 34.94 (1.376) | 32.50 (1.280) |
| 15       | 22-02-1155    | 37.44 (1.475) | 35.00 (1.378) |
| 16       | 22-02-1165    | 39.94 (1.572) | 37.50 (1.477) |
| 17       | 22-02-1175    | 42.44 (1.672) | 40.00 (1.575) |
| 18       | 22-02-1185    | 44.94 (1.769) | 42.50 (1.674) |
| 19       | 22-02-1195    | 47.44 (1.860) | 45.00 (1.772) |
| 20       | 22-02-1205    | 49.94 (1.966) | 47.50 (1.870) |

## FEATURES AND SPECIFICATIONS

## Features and Benefits

- Radial taping

## Reference Information

Packaging: Radial taping  
 Mates With: 53699 and 53704  
 Designed In: Millimeters

## Electrical

Voltage: 250V  
 Current: 3.0A  
 Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 500V  
 Insulation Resistance: 1000 MΩ min.

## Physical

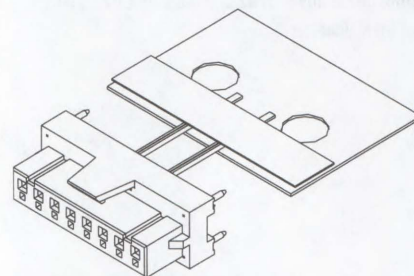
Housing: 6/6 nylon, UL 94V-0  
 Contact: Phosphor Bronze  
 Plating: Tin  
 Operating Temperature: -40 to +105°C



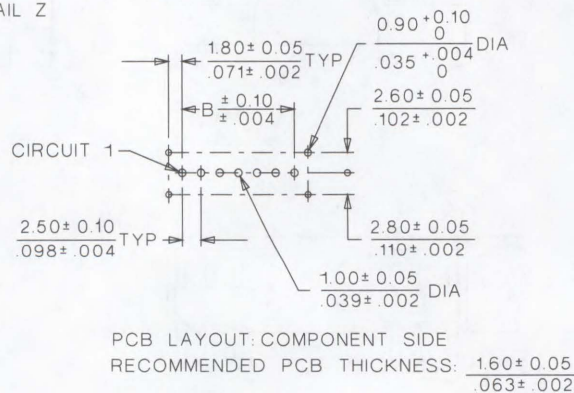
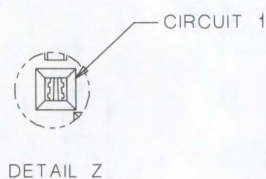
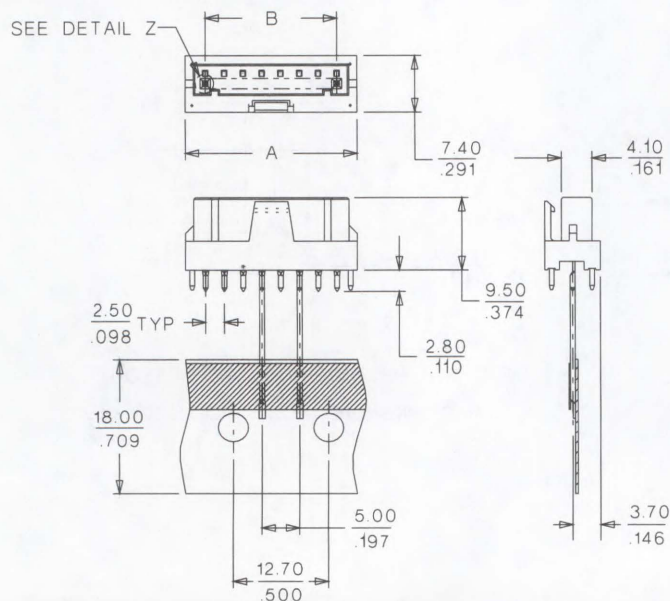
# 2.50mm (.098") Pitch Board-to-Board Receptacle

52945

Vertical



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |              |
|----------|------------|--------------|--------------|
|          |            | A            | B            |
| 8        | 52945-0890 | 22.90 (.900) | 17.50 (.680) |



## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Positive lock

### Reference Information

Packaging: Tray  
Mates With: 52945  
Designed In: Millimeters

### Electrical

Voltage: 250V  
Current: 3.0A  
Contact Resistance: 20mΩ max.  
Dielectric Withstanding Voltage: 500V  
Insulation Resistance: 1000 MΩ min.

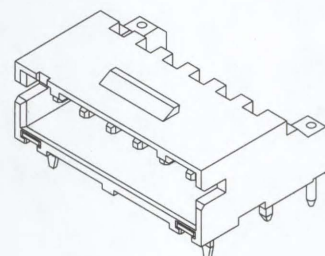
### Physical

Housing: 6/6 nylon, UL 94V-0  
Contact: Brass  
Plating: Tin/Lead  
Operating Temperature: -40 to +105°C

## molex® 2.50mm (.098") Pitch Board-to-Board Header

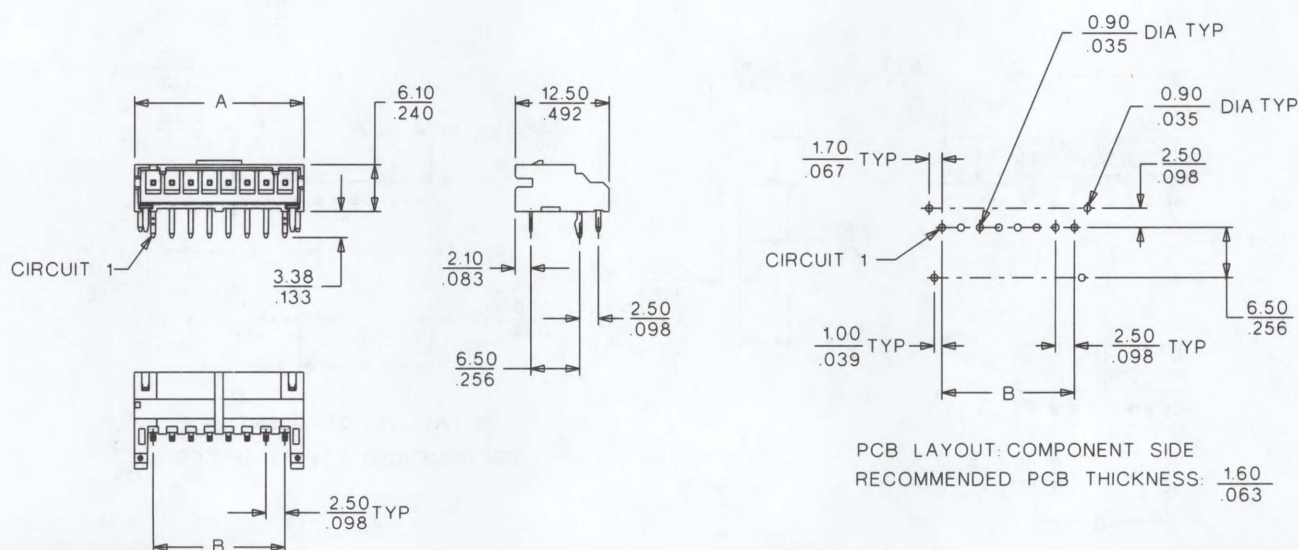
**53699**

**Right Angle**



**B**  
2.00 to 2.50mm (.079 to .098") Pitch

## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |              |
|----------|------------|--------------|--------------|
|          |            | A            | B            |
| 8        | 53699-0812 | 22.90 (.902) | 17.50 (.689) |

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Friction lock

### Reference Information

**Packaging:** Tray

Mates With: 52945

Designed In: Millimeters

## Electrical

Voltage: 250V

Current: 3.0A

**Contact Resistance:** 20mΩ max.

**Dielectric Withstanding Voltage: 500V**

Insulation Resistance: 1000 MΩ min.

### Physical

Housing: 6/6 nylon, UL 94V-0

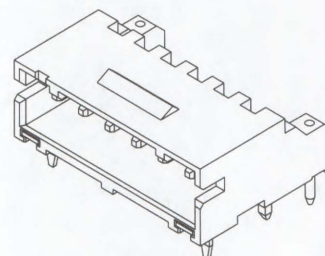
**Contact: Brass**

Plating: Tin/Lead

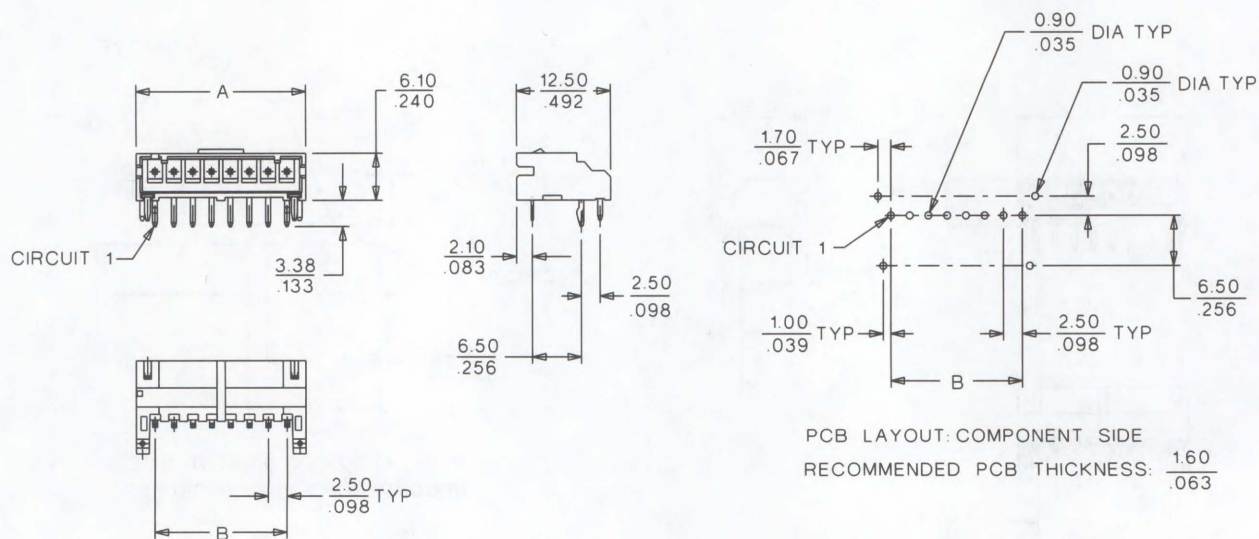
Operating Temperature: -40 to +105°C

53704

## Right Angle



**CATALOG DRAWING (FOR REFERENCE ONLY)**



## ORDERING INFORMATION AND DIMENSIONS

| Circuits | Order No.  | Dimension    |              |
|----------|------------|--------------|--------------|
|          |            | A            | B            |
| 8        | 53704-0815 | 22.50 (.880) | 17.50 (.680) |



## FEATURES AND SPECIFICATIONS

### Features

- Terminates Milligrid 2.0MM dual row connectors
- Full cycle ratchet
- Provides easy termination of flat ribbon cable
- Adjustable for circuit sizes from 10 to 50
- Adjustable cable stop
- Designed to produce feed-to or feed-through harnesses
- For low volume, prototype and field repair

### Specifications

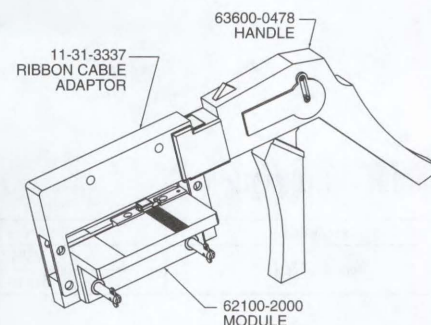
Rate: Approximately 150 terminations per hour, dependent on operator skill and application.

Wire: Accepts 1mm pitch, flat cable

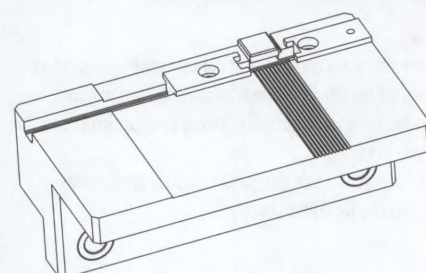


## Application Tooling

### Manual Hand Tool Handle for Milligrid 2.0



### Manual Hand Tool Module for Milligrid 2.0



62100-2000 HAND TOOL MODULE

2.00 to 2.50mm (.079 to .098") Pitch

## ORDERING INFORMATION

| Description                | Order No.  | Used with Molex Connectors |
|----------------------------|------------|----------------------------|
| Hand Tool Module           | 62100-2000 | 87568                      |
| Hand Tool Handle           | 63600-0478 | 87568                      |
| Ribbon Cable Power Adapter | 11-31-3337 | 87568                      |

If a complete tool is required, both of the parts above must be ordered.

## FEATURES AND SPECIFICATIONS

### Features

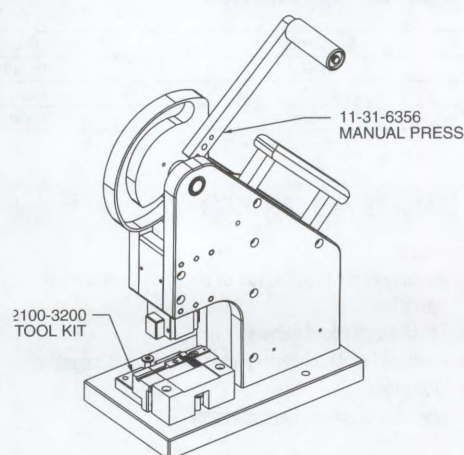
- Terminates Milligrid 2.0MM dual row connectors
- Full cycle ratchet
- Provides easy termination of flat ribbon cable
- Accommodates both left and right handed operators
- Designed to produce feed-to or feed-through harnesses
- For medium volume applications
- Tool kit used in standard press (11-31-6356)

### Specifications

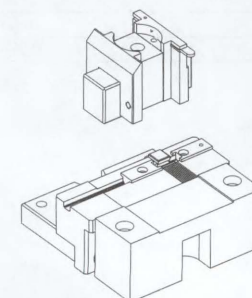
Rate: Approximately 250 terminations per hour, dependent on operator skill and application.

Wire: Accepts 1mm pitch, flat cable

### Manual Standard Press



### Tool Kit for Manual Standard Press for Milligrid 2.0



## ORDERING INFORMATION

| Description           | Order No.  | Used with Molex Connectors |
|-----------------------|------------|----------------------------|
| Standard Manual Press | 11-31-6356 | 87568                      |
| Tool Kit Only         | 62100-3200 | 87568                      |

If a complete tool is required, both of the parts above must be ordered.



## FEATURES

### Features and Benefits

- Manually terminates discrete wire into Mi II IDT terminals
- Primarily for prototype work
- Tool complete with change parts for three connector styles

## Manual IDT Hand Tool for Mi II



## ORDERING INFORMATION

| Description     | Order No.  | Product No.         |
|-----------------|------------|---------------------|
| Manual IDT Tool | 57325-5000 | 52484, 52478, 52693 |
|                 | 57834-5000 | 54596               |

## FEATURES AND SPECIFICATIONS

### Features

- Pneumatic press coupled with die set for specific product designed for low to medium volume IDT terminations
- Nest holds up to 30 circuits allowing smaller circuit sizes to be run in multiples
- Best for ribbon cable and jacketed cable applications
- Die sets are field interchangeable

### Specifications

Size: Width—390mm (15.3")  
 Depth—435mm (17.1")  
 Height—424mm (16.7")  
 Weight—60kg (132.2 lb)  
 Electrical: Voltage—110V AC, 50 or 60 Hz  
 Current—1A at 110V AC  
 Pneumatics: 4.4 BAR (71psi) at 10L per minute (.35 CFM)  
 Rate: 2 Circuit—Approximately 150 assemblies per hour depending on operator skill  
 15 Circuit—Approximately 200 assemblies per hour depending on operator skill

## Semi-Automatic Pneumatic Bench Top Machine for Mi II



## ORDERING INFORMATION

| Description | Order No.     | Product No.         |
|-------------|---------------|---------------------|
| Press       | Contact Molex |                     |
| Die Set     | Contact Molex | 52691               |
| Die Set     | Contact Molex | 52484, 52478, 52693 |

## FEATURES AND SPECIFICATIONS

### Features

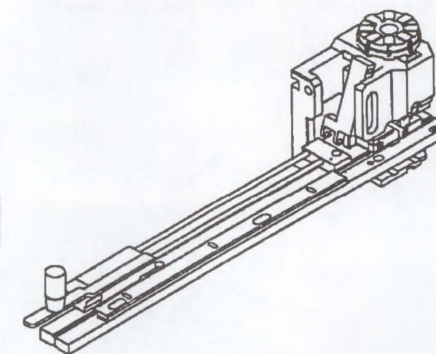
- No services are required (air or electricity), mechanical operation
- Fits into a standard universal press
- Hand loading of connectors into spring loaded magazine
- Wire guide
- Assembly of jumper harnesses only

### Specifications

Size: Width—155mm  
 Depth—110mm  
 Height—90mm  
 Weight—5kg

*Preferred Version in Europe—Not available in the US*

## Semi-Automatic IDT Mini-Mac for 54148 and 52484 Series Connectors



## ORDERING INFORMATION

| Description                   | Order No.  | Product No.  |
|-------------------------------|------------|--------------|
| Mini-Mac for 2 to 32 circuits | 69053-1003 | 54148, 52484 |



## FEATURES AND SPECIFICATIONS

### Features

- Semiautomatic machine for terminating discrete wires
- Interchangeable tooling for all connector styles listed
- Program features—Connector combination, multi-pitched feeding, void (empty) circuit, wire end detection, connector positioning to circuit, origin returning after completion of termination

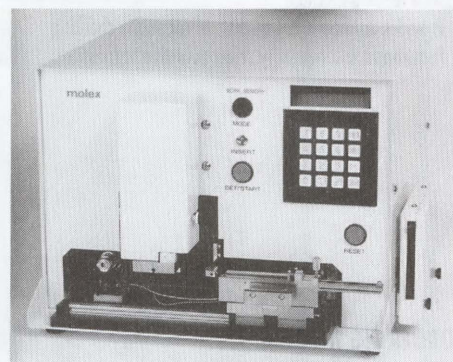
### Specifications

Size: Width—390mm (15.3")  
 Depth—390mm (15.4")  
 Height—424mm (16.7")  
 Weight: 60kg (132.2 lb)  
 Electrical: Voltage—110V AC, 50 or 60 Hz  
 Current—1A at 110V AC  
 Rate: Approximately 2000 terminations per hour depending on operator skill

## ORDERING INFORMATION

| Description                     | Order No.     | Product No.                |
|---------------------------------|---------------|----------------------------|
| Electrical Bench Top Terminator | Contact Molex | 52478, 52484, 52691, 52693 |

## Semi-Automatic Electrical Bench Top Machine for Mi II



**B**

2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features

- Designed for medium to high volume applications
- Operator load and unload
- Capable of producing complex harnesses

### Specifications

Size (Machine): Width—1200mm (47.2")  
 Depth—800mm (31.5")  
 Height—1270mm (50")  
 Weight (Machine): 200kg (440.8 lb)  
 Size (Reel Stand): Width—1230mm (48.4")  
 Depth—830mm (33.9")  
 Height—1460mm (57.5")  
 Weight (Reel Stand): 30kg (66 lb), without wire  
 Electrical: Voltage—110V AC, 50 or 60 Hz  
 Current—10A at 110V AC  
 Pneumatics: 4.4 BAR (71psi) at 100L per minute (3.5 CFM)  
 Capacity: 10 to 25 million+ terminations per year (single shift)  
 Rate: 10 to 15 seconds per cycle depending on harness length and complexity

## Semi-Automatic Harness Machine for Mi II



## ORDERING INFORMATION

| Description                   | Order No.     | Product No.         |
|-------------------------------|---------------|---------------------|
| Semiautomatic Harness Machine | Contact Molex | 52484, 52691, 52693 |

## FEATURES AND SPECIFICATIONS

### Features

- Fully automatic machine
- Automatically measures discrete wire to specified length and terminates both ends of wire
- Provides automatic IDT depth and continuity checking
- Automatically rejects defective harness

### Specifications

Size (Machine): Width—3505mm (11'6")  
 Depth—2800mm (9'2")  
 Height—2000mm (6'6.7")  
 Weight (Machine): 2945kg (6940 lb)  
 Size (Reel Stand): Width—2100mm (6'11")  
 Depth—1100mm (43.3")  
 Height—1700mm (66.9")  
 Weight (Reel Stand): 500kg (1102 lb)  
 Electrical: Voltage—220V AC, 50 or 60 Hz, 3-Phase  
 Current—20A at 220V AC  
 Pneumatics: 4.4 BAR (71psi) at 495L per minute (17.5 CFM)  
 Capacity: 50 to 100 million terminations per year (single shift)  
 Rate: 4 to 9 seconds per cycle depending on harness length

## XELOM Automatic Jumper Harness Machine for Mi II



## ORDERING INFORMATION

| Description | Order No.     | Product No.         |
|-------------|---------------|---------------------|
| XELOM       | Contact Molex | 52484, 52691, 52693 |



B  
2.00 to 2.50mm (.079 to .098") Pitch

## FEATURES AND SPECIFICATIONS

### Features

- Similar to XELOM, but includes added features
- Feeds and measures each wire individually to a specific pre-programmed length
- Equipped with an automated free standing combination wire feeding mechanism
- Provides automatic IDT depth and continuity checking
- Function to automatically reject defective harness

### Specifications

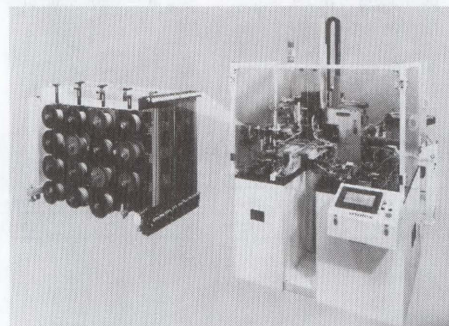
Size (Machine): Width—1260mm (50.8")  
Depth—1150mm (45.3")  
Height—1500mm (59.1")  
Weight (Machine): 1500kg (3306 lb)  
Size (Reel Stand): Width—1230mm (48.4")  
Depth—830mm (32.7")  
Height—1460mm (57.5")  
Weight (Reel Stand): 800kg (1760 lb)  
Electrical:  
Voltage—220V AC, 50 or 60Hz, 3-Phase  
Current—50A at 220V AC  
Pneumatics: 4.4 BAR (71psi) at 500L per minute (17.7 CFM)  
Capacity: 50 to 100 million terminations per year (single shift)  
Rate: 5 to 7 seconds per cycle depending on harness length and complexity

## ORDERING INFORMATION

| Description | Order No.     | Product No.         |
|-------------|---------------|---------------------|
| XELOM PLUS  | Contact Molex | 52484, 52691, 52693 |

## molex® Application Tooling

### Fully Automated XELOM Plus Machine for Mi II





## FEATURES

- Full cycle ratchet to assure complete termination
- For prototype and repair
- Automatic indexing to next position after insertion of discrete wire

## molex® Application Tooling

### Manual IDT Discrete Wire Hand Tool for Spox™ and User Friendly 2.50mm Pitch Connectors

B

## ORDERING INFORMATION

| Description                       | Order No.  | Use with Molex Connector |
|-----------------------------------|------------|--------------------------|
| Pistol                            | 63600-0478 |                          |
| Module for 2.50mm SPOX            | 69008-0290 | 42219, 42254             |
| Module for 2.50mm "User Friendly" | 69008-0290 | 90650, 90652             |



Pistol



Module

## FEATURES

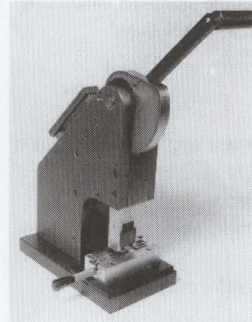
- Full cycle ratchet to assure complete termination
- For low-volume requirements
- Manual index to next position after termination

### Manual IDT Discrete Wire Standard Press for Spox™ and User Friendly 2.50mm Pitch Connectors

2.00 to 2.50mm (.079 to .098") Pitch

## ORDERING INFORMATION

| Description                             | Order No.      |              | Use with Molex Connector |
|-----------------------------------------|----------------|--------------|--------------------------|
|                                         | Press Assembly | Tooling Only |                          |
| Manual Press for 2.50mm SPOX            | 11-20-1278     | 11-39-0001   | 42219, 42254             |
| Manual Press for 2.50mm "User Friendly" | 11-21-9963     | 11-21-9998   | 90650, 90652             |



## FEATURES

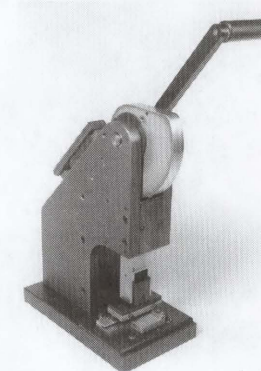
- Full cycle ratchet to assure complete termination
- For low- to mid-volume needs
- Mass termination of prepared cable-to-connector

### Manual IDT Ribbon Cable Standard Press for Spox™ and User Friendly 2.50mm Pitch Connectors

## ORDERING INFORMATION

| Description                             | Order No.      |              | User with Molex Connector |
|-----------------------------------------|----------------|--------------|---------------------------|
|                                         | Press Assembly | Tooling Only |                           |
| Manual Press for 2.50mm SPOX            | 11-21-9757     | 11-32-1956   | 42219, 42254              |
| Manual Press for 2.50mm "User Friendly" | 11-20-1277     | 11-39-0002   | 90650, 90652              |

\* See Application Tooling section for additional information on these tools





## FEATURES AND SPECIFICATIONS

### Features

- Assembles either discrete wire or cable
- Connector packaged in "Ammo-Pak" and linked together by terminal carrier strips
- Automatic connector loading
- Automatic carrier break off
- Programmable void capability
- Foot-pedal operated
- Tooled for 2 through 15 circuits
- Discrete wire and cable tooling come with the machine
- "CE" certified

### Specifications

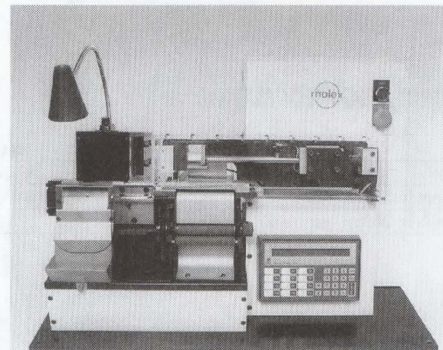
Size: Width—760mm (30")  
 Depth—480mm (19")  
 Height—480mm (19")  
 Weight: 70kg (150 lb)  
 Pneumatics: Pressure—5 BAR (80psig)  
 Consumption—5.6L per minute (0.2 CFM)  
 Electrical: Voltage—120V, 60 Hz or 220V, 50 Hz  
 Current—2A at 120V or 1A at 220V  
 Rate: Up to 1200 terminations per hour (discrete) and 350 assemblies per hour (cable), dependent on operator speed and wire length

## ORDERING INFORMATION

| Description                                                  | Order No.  | Use with Molex Connector |
|--------------------------------------------------------------|------------|--------------------------|
| Semi-Automatic Terminator for Discrete Wire and Ribbon Cable | 62300-0700 | 42219, 42254             |
| Semi-Automatic Terminator for Discrete Wire and Ribbon Cable | 62300-0500 | 90650, 90652             |

## molex® Application Tooling

### Semi-Automatic IDT Machine for Spox™ and User Friendly 2.50mm Pitch Connector



## FEATURES AND SPECIFICATIONS

### Features

- Dereel system for discrete wire or cable available
- Double- or single-ended harness capabilities without strip
- Single-ended harness capabilities with strip (38.00mm/1.5" max.)
- Full strip for discrete wire
- Strip and retain for cable
- Discrete wire with variable-wire length capability (Harness length of 152mm/6" min. to 2400mm/95" max.)
- Missing wire and splice detector
- Welded-film unloader for mylar ammo pack
- Carrier strip break off
- Continuity testing (double-ended assemblies)
- Hot stamp marking
- Reject station to segregate rejected assemblies
- "CE" certified

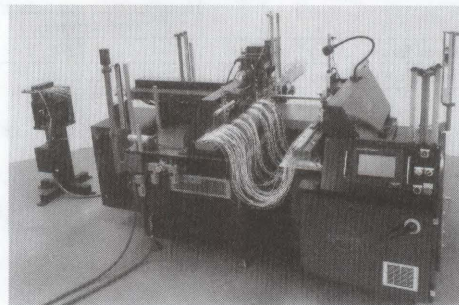
### Specifications

Pneumatics: Pressure—5 BAR (80psig)  
 Consumption—142L per minute (5 CFM)  
 Electrical: Voltage—120V AC, 60 Hz or 220V AC, 50 Hz  
 Current—30A at 120V or 15A at 220V  
 Rate: 300 cycles per hour average, dependent on harness length, up to 60 terminations per cycle, dependent on circuit size

## ORDERING INFORMATION

| Description                                                        | Order No.     | Use with Molex Connector |
|--------------------------------------------------------------------|---------------|--------------------------|
| Fully Automatic Mass Terminator for Discrete Wire and Ribbon Cable | Contact Molex | 42219, 42254             |
| Fully Automatic Mass Terminator for Discrete Wire and Ribbon Cable | Contact Molex | 90650, 90652             |

### Fully Automatic IDT Harness Assembly Machine for Spox™ and User Friendly 2.50mm Pitch Connectors†



\* See Application Tooling section for additional information on these tools

† Due to the special nature of these machines, contact Molex for information related to specific harness requirements

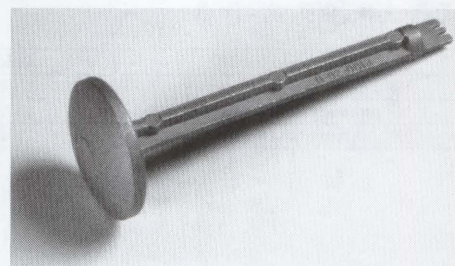


## FEATURES

- For prototype and repair

**molex®** Application Tooling

## Manual IDT Discrete Wire "T" Handle Hand Tool for PCB Connectors



## ORDERING INFORMATION

| Description                                                                     | Order No.  | Connector                      |
|---------------------------------------------------------------------------------|------------|--------------------------------|
| "T" Tool for 2.50mm (.098") and 2.54mm (.100") pitch connectors                 | 11-02-0016 | 7720, 7720S, 7795, 40555, 8160 |
| "T" Tool for 3.96mm (.156"), 5.00mm (.197") and 5.08mm (.200") pitch connectors | 11-02-0015 | 6952, 7674, 7675               |

## FEATURES

- For prototype and repair
- Auto indexing to next position after insertion of discrete wire

## ORDERING INFORMATION

| Description                                                                 | Order No.  | Connector                 |
|-----------------------------------------------------------------------------|------------|---------------------------|
| Pistol                                                                      | 63800-0478 |                           |
| Module for 5.08mm (.200") pitch connectors, feed-to only                    | 69008-0270 | 6952                      |
| Module for 3.96mm (.156") pitch connectors, feed-to only                    | 11-21-5196 | 7674, 7675, 8160          |
| Module for 3.96mm (.156") pitch connectors, feed-to or feed-through         | 62100-0400 | 7674, 7675                |
| Module for 2.50mm (.098") and 2.54mm (.100") pitch connectors, feed-to only | 11-21-5197 | 7720, 7720S, 7795S, 40555 |

## Manual IDT Discrete Wire Hand Tool for PCB Connectors

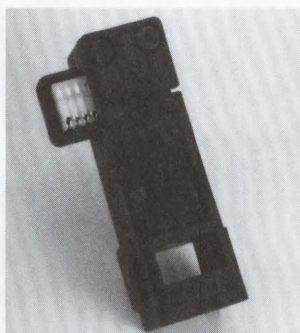


## FEATURES AND SPECIFICATIONS

- For prototype and repair
- Automatically indexes to the next position after previous wire termination

*Preferred Version in Europe—Not available in US*

## Manual IDT Discrete Wire Hand Tool for PCB Connectors

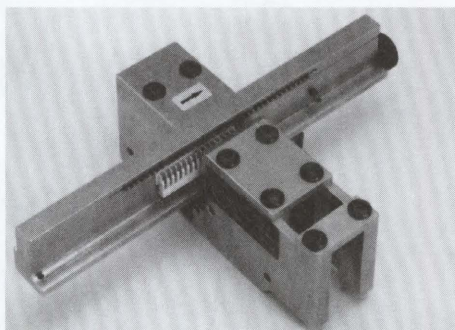


## ORDERING INFORMATION

| Description | Order No.   | Type | For Connector Series                        |
|-------------|-------------|------|---------------------------------------------|
| Pistol      | 690058-0949 |      | Required for all modules and all connectors |

| Description                                                   | Order No.  | Type | For Connector Series                  |
|---------------------------------------------------------------|------------|------|---------------------------------------|
| Module for 2.50mm (.098") and 2.54mm (.100") pitch connectors | 69008-0225 | B    | 7720, 7720S, 7795S, 40555             |
| "User Friendly"                                               | 69008-0290 | C    | 90650, 90652                          |
| Module for 3.96mm (.156") pitch connector                     | 69008-0240 | B    | 7674, 7675, 7720, 7720S, 7795S, 40555 |
| Module for 5.00mm (.197") pitch connector                     | 69008-0270 | B    | 6952                                  |



2.00 to 2.50mm (.079 to .098") Pitch

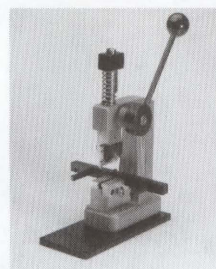
**B**



## FEATURES

- For low-volume requirements
- Feed-through or feed-to assembly

# molex® Manual Ribbon Cable Press for PCB Connectors



B

## ORDERING INFORMATION

| Description                         | Order No.  | Connector   |
|-------------------------------------|------------|-------------|
| .156" pitch manual press terminator | 11-20-0314 | 7674, 7675  |
| .100" pitch manual press terminator | 11-20-0179 | 7720, 7720S |
| .098" pitch manual press terminator | 11-20-0436 | 8160        |

## FEATURES AND SPECIFICATIONS

### Features

- Terminates pre-notched cable to pre-assembled connectors
- Bench mounted and operator controlled
- Feed-through and feed-to capabilities
- Connector magazine for increased output

### Specifications

Size: Width—152mm (6")  
 Depth—305mm (12")  
 Weight: 13.5kg (30 lb)  
 Pneumatics: Pressure—5 BAR (80-100psig) at 5.6L per minute (0.2 CFM)  
 Rate: Up to 350 assemblies per hour dependent on operator speed and application

## Application Tooling

## Semi-Automatic Ribbon Cable Terminator for PCB Connectors

## ORDERING INFORMATION

| Description                                                | Order No.  | Connector  |
|------------------------------------------------------------|------------|------------|
| .156" pitch cable terminator                               | 11-20-0418 | 7674, 7675 |
| .100" pitch cable terminator                               | 11-20-0412 | 7720       |
| .100" pitch cable terminator for connectors with backwalls | 11-20-0771 | 7720       |
| Terminator for 7795 connector                              | 11-20-0435 | 7795S      |
| Terminator for 8160 connector                              | 11-20-0498 | 8160       |

