



Power Connectors

High Power Connector Systems (15 to 50A)

Mini-Fit, Sr. TM	F-4 to F12
5.00mm (.197") Pitch Connectors	F-13 to F-16
HCS-125	F-17 to F-20
Sabre TM	F-21 to F-27

Medium to High Power Connector Systems (6 to 14A)

MLX.	F-28 to F-33
Mini-Fit TM Family Terminals and Grounding Pin	F-37 to F-40
Mini-Fit, Jr. TM	F-41 to F-55
Mini-Fit, IDT TM	F-56 to F-61
Mini-Fit, BMI TM	F-62 to F-67
Mini-Fit, TPA TM	F-68 to F-73
Mini-Fit, HCS TM	F-74 to F-80
Mini-Fit, SMC TM	F-81 to F-89
Mini-Fit, CPI TM	F-90
Mini-Fit Test Plug.	F-91
Standard .093" and 3191 Pin and Socket	F-92 to F-99
8.00mm (.315") Pitch Connectors	F-100 to F-102
Disk Drive Power Connection System	F-103 to F-111
Claspcon TM	F-112 to F-113

Low Power Connector Systems (3 to 5A)

Micro-Fit 3.0 TM	F-114 to F-133
Micro-Fit 3.0, BMI TM	F-134 to F-135
Standard .062" Pin and Socket	F-136 to F-139
5.00mm (.197") Pitch Connectors	F-140 to F-142
3.96mm (.156") Pitch Connectors	F-143 to F-144
2.50mm (.098") Pitch Connectors	F-145 to F-146

Specialty Power Connectors

1.80mm (.070") Width Connectors	F-148 to F-162
3.96mm (.156") Pitch Connectors	F-163 to F-169
6.50mm (.256") Pitch Connectors	F-163 and F-170 to F-173
3.90mm (.153") Pitch Battery Connectors	F-174 to F-175
Wire-to-Board Crimp Terminals, Strain Relief and PCB Terminals	F-176
Panel Grounding Clip	F-177
Range Receptacles, Terminals and Mounting Clips	F-178 to F-179
Cluster Block Connectors for Magnet Wire	F-180 to F-185

Mixed Layout Connectors

COMPODRE TM	F-186 to F-197
DPS Power Receptacle and Header	F-198 to F-199
MPS Power Receptacle and Header	F-200 to F-201
3-in-1 Combo Connectors	F-202 to F-205

Application Tooling F-206 to F-208



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

REFERENCE CHART

APPLICATIONS

	Description	Current Ratings at Smallest/ Largest Circuit Size	Operating Voltage	Housing Lock Method	Configurations Available	Connector Engaging Force Per Circuit	Fully Isolated Contacts	Agency Ratings	Circuit Sizes Available	Wire Gauge	Flammability Rating	Home Appliance	Home Entertainment	Tele-Communications	Medical Industry	Marine Industry	Office Equipment	Automobile Aftermarket	Computer Industry	Communication Equipment	Industrial Equipment	Game Industry	Automation Merchandise	Security Systems
Mini-Fit, Sr.™	Mini-Fit Sr. is Molex's most robust power connector capable of carrying up to 49 amperes per circuit using 8 AWG wire	49/23A	600V	Pos.	W-W, W-B	1.0 lbs.	Yes	UL CSA TUV	2, 3, 4, 5, 6, 8, 10, 12, 14	8, 10, 12	94V-0	X	X		X	X	X	X	X	X	X		X	X
HCS-125	HCS-125 is our high current, economical power connector capable of carrying up to 20 amperes per circuit in a wire-to-wire configuration	20/20A	600V	Pos.	W-W	5.75 lbs.	Yes	UL CSA	1, 2, 3, 4	10-14 16-18	94V-2			X	X		X		X		X	X	X	
Sabre™	Sabre's current carrying capability fits between the Mini-Fit Jr. and Mini-Fit Sr. offering up to 18 amperes per circuit at 1000 volts	18/18A	1000V	Pos.	W-W, W-B	3.0 lbs.	Yes	UL CSA TUV	2, 3, 4, 5, 6	14-18	94V-0	X	X			X		X	X	X	X	X	X	X
.093" 3191	Our Standard .093" and 3191 product has become an industry standard being utilized in many different power applications	12/7.5A	600V	Pos.	W-W	3.5 lbs.	Yes	UL CSA TUV	1, 2, 3, 4, 5, 6, 9, 12, 15	14-20, 18-22, 22-24, 24-30	94V-2	X	X	X	X			X	X		X	X	X	X
Mini-Fit, HCS™	Mini-Fit HCS (high current density) is capable of carrying up to 12 amperes per circuit and fits into all existing Mini-Fit housing configurations (except TPA housings)	12/9A	600V	Pos.	W-W, W-B, B-B	1.54 lbs.	Yes	UL CSA TUV	2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	16, 18, 20	94V-2 94V-0	X	X	X	X			X	X		X	X	X	X
Mini-Fit, Jr.™	Mini-Fit Jr. is a high current/high density power connector offering great design flexibility for W-W and W-B housing configurations	9/6A*	600V	Pos.	W-W, W-B	1.54 lbs.	Yes	UL CSA TUV	2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	16, 18- 24, 22- 28	94V-2 94V-0	X	X	X	X			X	X		X	X	X	X
Mini-Fit, SMC™	Mini-Fit SMC is made of high temperature material which allows it to withstand the wave/IR soldering processes	9/6A*	600V	Pos.	W-W, W-B, B-B	1.54 lbs.	Yes	UL CSA TUV	2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	16, 18- 24, 22- 28	94V-2 94V-0	X	X	X	X			X	X		X	X	X	X
Mini-Fit, TPA™	Mini-Fit, TPA allows terminals to be fully seated in the housing assuring that they will not back out, providing added security with a secondary locking mechanism	9/6A*	600V	Pos.	W-W, W-B	1.54 lbs.	Yes	UL CSA TUV	2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	16, 18- 24, 22- 28	94V-2 94V-0	X	X	X	X	X	X	X	X	X	X	X	X	X
Mini-Fit, BMI™	Mini-Fit BMI (Blind Mate Interface) power connectors are designed for applications requiring the blind mating of modules, subassemblies, or printed circuit boards	9/6A*	600V	Pos.	W-W, W-B, B-B	1.54 lbs.	Yes	UL CSA TUV	2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	16, 18- 24, 22- 28	94V-2 94V-0	X	X	X	X	X	X	X	X	X	X	X	X	X
KK®-156 KK-100	Molex KK is a complete interconnection system for W-W and B-B applications in .100", .156" and .200" centerlines	7/5A	250V	Pos.	W-W, W-B	2.25 lbs.	Yes	UL CSA TUV	2-20	18-22	94V-2 94V-0	X	X	X	X	X	X	X	X	X	X	X		X
Mini-Fit, CPI™	Mini-Fit, CPI offers a unique compliant pin design which requires no soldering	6A	600V	Pos.	W-W, W-B, B-B	1.54 lbs.	Yes	UL CSA TUV	2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	16, 18- 24, 22- 28	94V-2 94V-0	X	X	X	X			X	X		X	X	X	X
Micro-Fit 3.0™	Micro-Fit 3.0 is a unique interconnect system designed to meet the need for a rugged signal connector and incorporates many of the features previously found only on larger power connectors	5/1A	250V	Pos.	W-W, W-B	2.2 lbs.	Yes	UL CSA TUV	2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	22, 24, 26, 28, 30	94V-0	X	X	X	X	X	X	X	X	X	X	X	X	X
Micro-fit 3.0, BMI	Micro-Fit 3.0, BMI (Blind Mate Interface) features a self guiding funnel, allowing connections in those hard to reach applications.	5/1A	250V	Pos.	W-W, W-B, B-B	2.2 lbs.	Yes	Pen ding	2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	20, 22, 24, 26, 28, 30	94V-0	X	X	X	X	X	X	X	X	X	X	X	X	X
0.062"	The .062" is a durable and economical power or signal connector, capable carrying of up to 5.0 amperes per circuit	5/4A	250V	Pos.	W-W	2.3 lbs.	No	UL CSA	1, 2, 3, 4, 5, 6, 9, 12, 15, 24, 36	18, 24, 24-30	94V-2	X	X	X	X	X	X	X	X	X	X		X	

* 3 additional amperes per circuit can be achieved when used with Mini-Fit, HCS

FEATURES AND SPECIFICATIONS

Molex has taken power to an even higher level with the development of the Sabre™, HCS-125, and the Mini-Fit, Sr.™ power connector systems. Sabre is designed to carry up to 18.0A per circuit, HCS-125 20.0A per circuit, and Mini-Fit, Sr.'s robust design is capable of handling up to 50.0A* per circuit using 8 AWG wire.

Configurations and Circuits

Both Sabre and Mini-Fit, Sr. are offered in a single row configuration with 2 through 6 circuits. The HCS-125 is offered in a single row configuration with 1 through 4 circuits. The single row versions for Sabre and Mini-Fit, Sr. are available in wire-to-wire and wire-to-board vertical and right angle configurations and the HCS-125 is available in wire-to-wire applications. The newest addition to the Molex power connector family is the Dual Row Mini-Fit, Sr. offered in 6 through 14 circuits, wire-to-wire and wire-to-board vertical.

Sabre is designed on 7.50mm (.295") pitch, HCS-125 on 8.38mm (.330"), and Mini-Fit, Sr. on a 10.00mm (.393") pitch center spacing.

Materials and Plating

Sabre and Mini-Fit, Sr. receptacle and plug housings are molded in a high strength nylon UL 94V-0 material, and the HCS-125 in UL 94V-2. All housings are able to withstand high operating temperatures of -40 to +105°C. Header housings on the Sabre and Mini-Fit, Sr. allow surface mount compatibility since header housings are molded in a glass-filled nylon UL 94V-0 material.

Four points of electrical contact on both the Sabre and Mini-Fit, Sr. terminals provide a more reliable electrical connection. The Sabre terminals are stamped in a Brass material with Tin plating, assuring strength and high current carrying capability. Mini-Fit, Sr. terminals use a Copper Alloy with Tin/Lead over Nickel plating, including the PC tails on the vertical and right angle header assemblies. For your design flexibility, Sabre accommodates board thicknesses of .062", .093", and .125", and Mini-Fit, Sr. accommodates board thicknesses of .062", .093", .125", and .250".

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.

High Current Systems

Eliminating Terminal Backout with Molex's Terminal Position Assurance

Both Sabre and Mini-Fit, Sr. offer a robust primary locking mechanism. In addition, a secondary locking mechanism provides Terminal Position Assurance (TPA). The unique TPA feature virtually eliminates terminal backout and butting by ensuring the terminal is locked into the housing. The Sabre TPA feature is integrally stamped on both the female and male terminals. When activated, the TPA tabs are twisted in the housing, locking the terminal inside the housing.

On Mini-Fit, Sr. single row, the TPA feature is integrally molded on the housing. To activate, crimped wires are inserted into the housing. The plastic TPA locking mechanism is detached from the back of the housing and inserted into the body of the housing. The TPA feature on the dual row is a secondary piece that is applied in the same manner as the single row. (Activation of the TPA feature is required on the Mini-Fit, Sr. Power Connector System.) The Molex advantage is that when you activate the TPA feature, you have the reassurance of knowing that there will be no terminal backouts.

Additional Design Features

Sabre, HCS-125 and Mini-Fit, Sr. are all designed with positive mechanical locking latches on the receptacle housing to prevent accidental disengagement. The isolated towers on the receptacles provide polarization and terminal protection. In addition, HCS-125 and Mini-Fit, Sr. are available with panel mounting ears on the plug housing.

Higher voltage ratings are possible with the fully isolated contacts. Sabre is UL approved at 1000V. Mini-Fit, Sr. has been approved for both wire-to-wire and wire-to-board single or dual row applications at 600V. HCS-125 has been approved for wire-to-wire applications at 600V.

For additional information, please refer to the Sabre, HCS-125 and Mini-Fit, Sr. catalog pages or the individual product specifications.

FEATURES AND SPECIFICATIONS

Features and Benefits

- High current
- Low engagement force
- Wire-to-wire, wire-to-board
- Four points of electrical contact

Reference Information

Product Specification: PS-42815-0001
 Packaging: Reel
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R9751144
 Use With: 42816 and 43914 receptacle housings
 Designed In: Millimeters

Electrical

Voltage: 600V
 Current: 50.0A max.*
 Contact Resistance: 1.5mΩ max.
 Dielectric Withstanding Voltage: 2200V
 Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 29.4N max.
 Contact Retention to Housing: 98.1N min.
 Wire Pull-Out Force: 12 AWG—304.0N
 Mating Force: 29.4N max.
 Unmating Force: 4.9N min.
 Normal Force: 1.96N min.
 Durability: 30 cycles

Physical

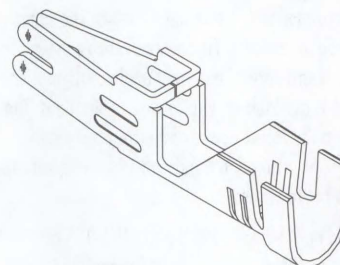
Contact: Copper Alloy, UL 94V-0
 Plating: Tin/Lead over Nickel
 Operating Temperature: -40 to +105°C
 Wire gauge: 8, 10, 12 AWG
 Insulation Diameter:
 10 to 12 AWG—3.50 to 5.50mm (.138 to .209")
 † 8 AWG—5.00 to 6.75mm (.197 to .266")

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.

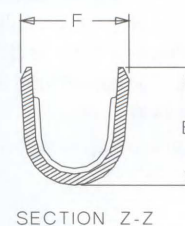
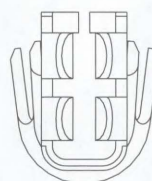
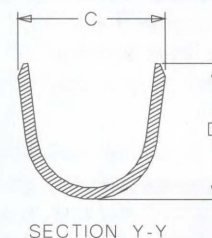
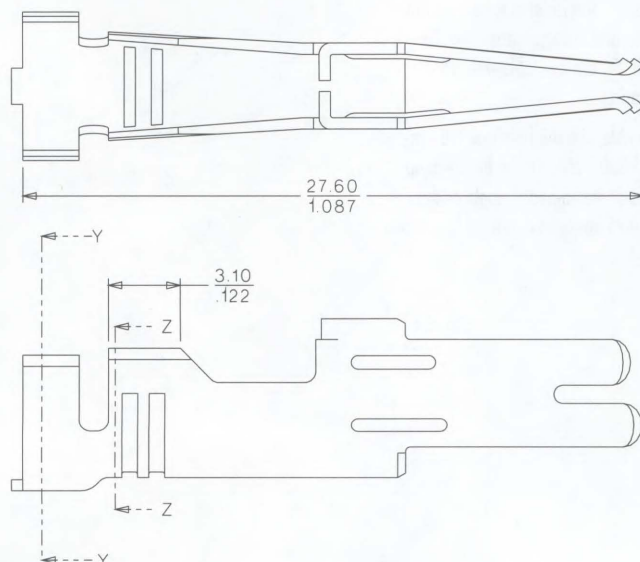
† Wire insulation not to be crimped and insulation grip area should be formed to certain wire strands only.



10.00mm (.393") Pitch Mini-Fit, Sr.TM Terminal 42815 Female



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Wire Size (AWG)	Dimension			
		C	D	E	F
42815-0011	12 and 10	5.90 (.232)	6.60 (.260)	6.10 (.240)	5.40 (.213)
42815-0031	8	6.00 (.236)	5.50 (.216)	7.42 (.292)	5.83 (.229)

FEATURES AND SPECIFICATIONS

Features and Benefits

- High current
- Fully polarized
- Positive locks
- Low engagement force
- Wire-to-wire
- Grounding contacts available

Reference Information

Product Specification: PS-42815-0001
 Packaging: Reel
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R9751144
 Use With: 42818 and 43938 plug housings
 Designed In: Millimeters

Electrical

Voltage: 600V
 Current: 50.0A max.*
 Contact Resistance: 1.5mΩ max.
 Dielectric Withstanding Voltage: 2200V
 Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 29.4N max.
 Contact Retention to Housing: 98.1N min.
 Wire Pull-Out Force: 12 AWG—304.0N
 Mating Force: 29.4N max.
 Unmating Force: 4.9N min.
 Normal Force: 1.96N min.
 Durability: 30 cycles

Physical

Contact: Copper Alloy, UL 94V-0
 Plating: Tin/Lead over Nickel
 Operating Temperature: -40 to +105°C
 Wire gauge: 8, 10, 12 AWG
 Insulation Diameter:
 10 to 12 AWG—3.50 to 5.50mm (.138 to .209")
 † 8 AWG—5.00 to 6.75mm (.197 to .266")

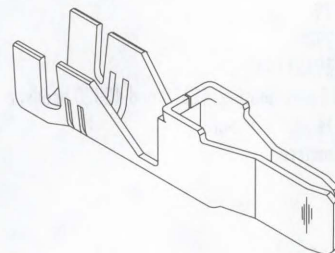
* Depending on circuit size and wire gauge. Please refer to product specification.

† Wire insulation not to be crimped and insulation grip area should be formed to certain wire strands only.



10.00mm (.393") Pitch
Mini-Fit, Sr.™
Terminal

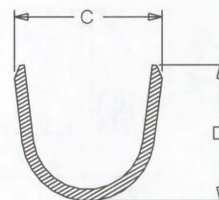
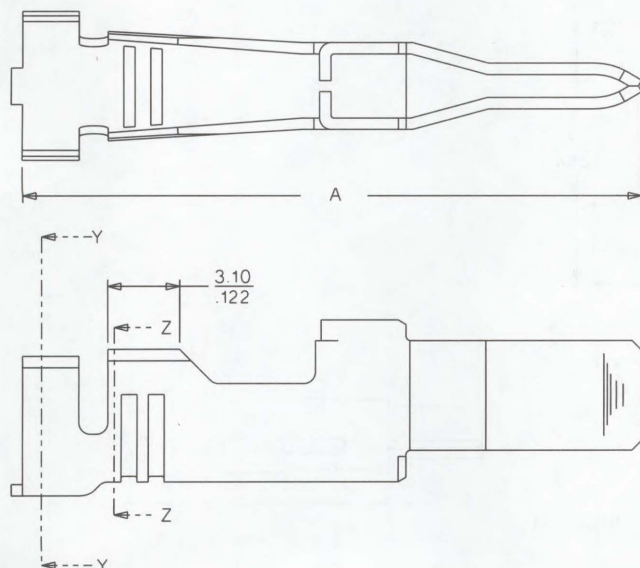
42817
Male



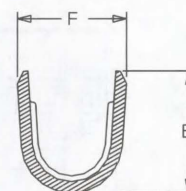
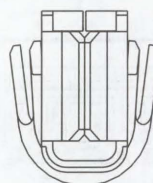
Power Connectors

F

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SECTION Y-Y



SECTION Z-Z

ORDERING INFORMATION AND DIMENSIONS

Type	Order No.	Wire Gauge	Dimension				
			A	C	D	E	F
Standard Contacts	42817-0011	10 and 12 AWG	1.087 (27.60)	5.90 (.232)	6.60 (.260)	6.40 (.240)	5.40 (.213)
Standard Contacts	42817-0031	8 AWG	1.087 (27.60)	6.00 (.236)	5.50 (.216)	7.42 (.292)	5.83 (.229)
Grounding Contacts	42817-0111	10 and 12 AWG	1.165 (29.60)	5.90 (.232)	6.60 (.260)	6.40 (.240)	5.40 (.213)
Grounding Contacts	42817-0131	8 AWG	1.165 (29.60)	6.00 (.236)	5.50 (.216)	7.42 (.292)	5.83 (.229)

FEATURES AND SPECIFICATIONS

Features and Benefits

- High current
- Fully polarized
- Positive locks
- Low engagement force
- Wire-to-wire, wire-to-board
- Mandatory Terminal Position Assurance (TPA) clip

Reference Information

Product Specification: PS-42815-0001

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R9751144

Mates With: 42818 plug housing, 42819 and 42820 headers

Use With: 42815 female terminal

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 50.0A max.*

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 29.4N max.

Contact Retention to Housing: 98.1N min.

Physical

Housing: Polyester, UL 94V-0

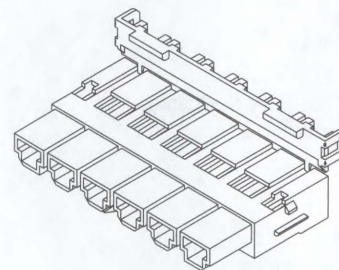
Operating Temperature: -40 to +105°C

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.

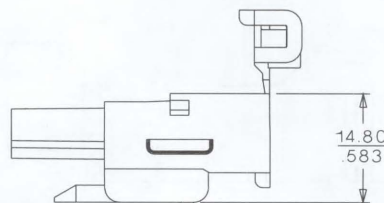
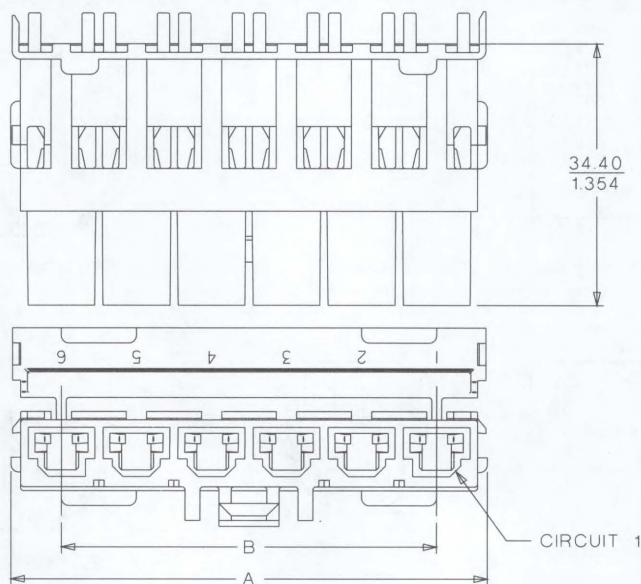


10.00mm (.393") Pitch Mini-Fit, Sr.TM Receptacle Housing

42816 Single Row



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ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	42816-0212	23.50 (.925)	10.00 (.393)
3	42816-0312	33.50 (1.318)	20.00 (.787)
4	42816-0412	43.50 (1.712)	30.00 (1.181)
5	42816-0512	53.50 (2.106)	40.00 (1.574)
6	42816-0612	63.50 (2.499)	50.00 (1.968)

FEATURES AND SPECIFICATIONS

Features and Benefits

- High current
- Fully polarized
- Positive locks
- Low engagement force
- Wire-to-wire
- Panel Mountable
- Mandatory Terminal Position Assurance (TPA) clip

Reference Information

Product Specification: PS-42815-001

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R9751144

Mates With: 42816 receptacle housing

Use With: 42817 male terminal

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 50.0A max.*

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 29.4N max.

Contact Retention to Housing: 98.1N min.

Physical

Housing: Polyester, UL 94V-0

Operating Temperature: -40 to +105°C

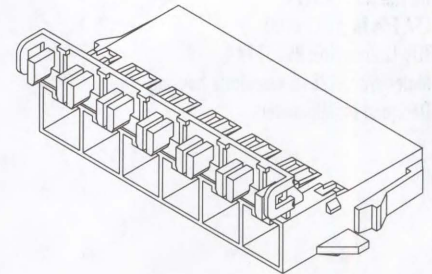
* Depending on circuit size and wire gauge. Please refer to product specification.



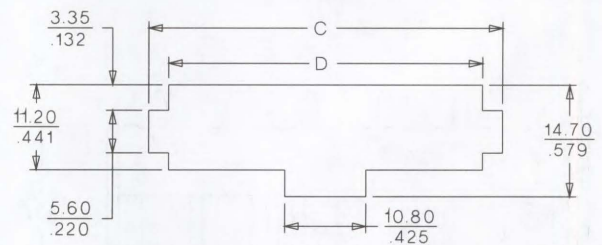
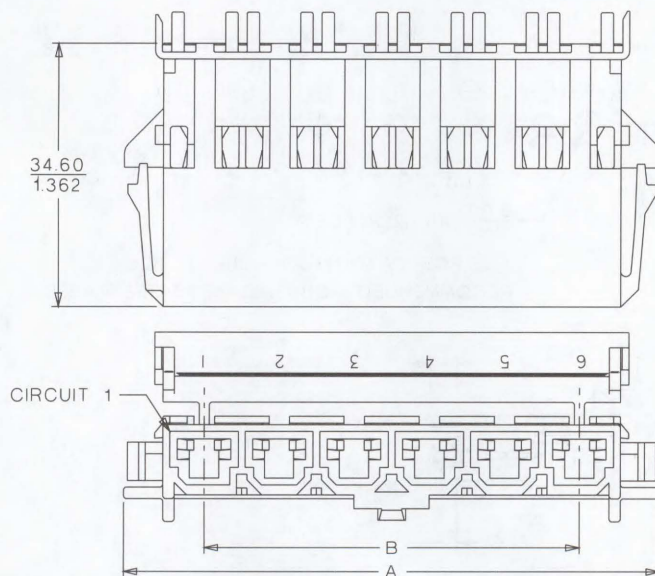
10.00mm (.393") Pitch
Mini-Fit, Sr.™
Plug Housing

42818

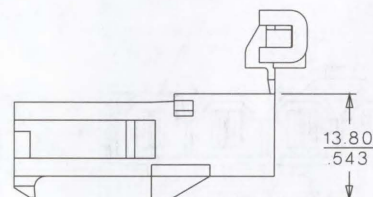
Panel Mount
Single Row



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PANEL OPENING: FROM OUTSIDE THE BOX
 RECOMMENDED PANEL THICKNESS: 1.80 MAX



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	C	D
2	42818-0212	31.30 (1.232)	10.00 (.393)	27.50 (1.083)	21.70 (.854)
3	42818-0312	41.30 (1.625)	20.00 (.787)	37.50 (1.476)	31.70 (1.248)
4	42818-0412	51.30 (2.019)	30.00 (1.181)	47.50 (1.870)	41.70 (1.642)
5	42818-0512	61.30 (2.413)	40.00 (1.574)	57.50 (2.264)	51.70 (2.036)
6	42818-0612	71.30 (2.807)	50.00 (1.968)	67.50 (2.657)	61.70 (2.429)

FEATURES AND SPECIFICATIONS

Features and Benefits

- High current
- Fully polarized
- Positive locks
- Low engagement force
- Wire-to-board
- Metal board retention clip
- Surface Mount Compatible

Reference Information

Product Specification: PS-42815-0001

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R9751144

Mates With: 42816 receptacle housing

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 48.0A max.*

Contact Resistance: 1.5mΩ max.

Dielectric Withstanding Voltage: 2200V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 19.6N max.

Normal Force: 1.96N min.

Durability: 30 cycles

Physical

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

Contact: Copper Alloy

Plating: Tin/Lead over Nickel

Operating Temperature: -40 to +105°C

PCB Thickness: 1.57, 2.36, 3.17, or 6.35mm
(.062, .093, .125, or .250")

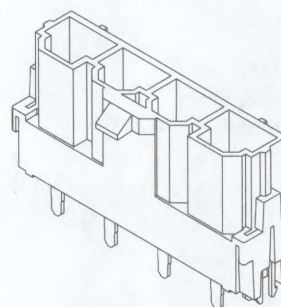
* Depending on circuit size, wire gauge and PCB. Please refer to product specification.



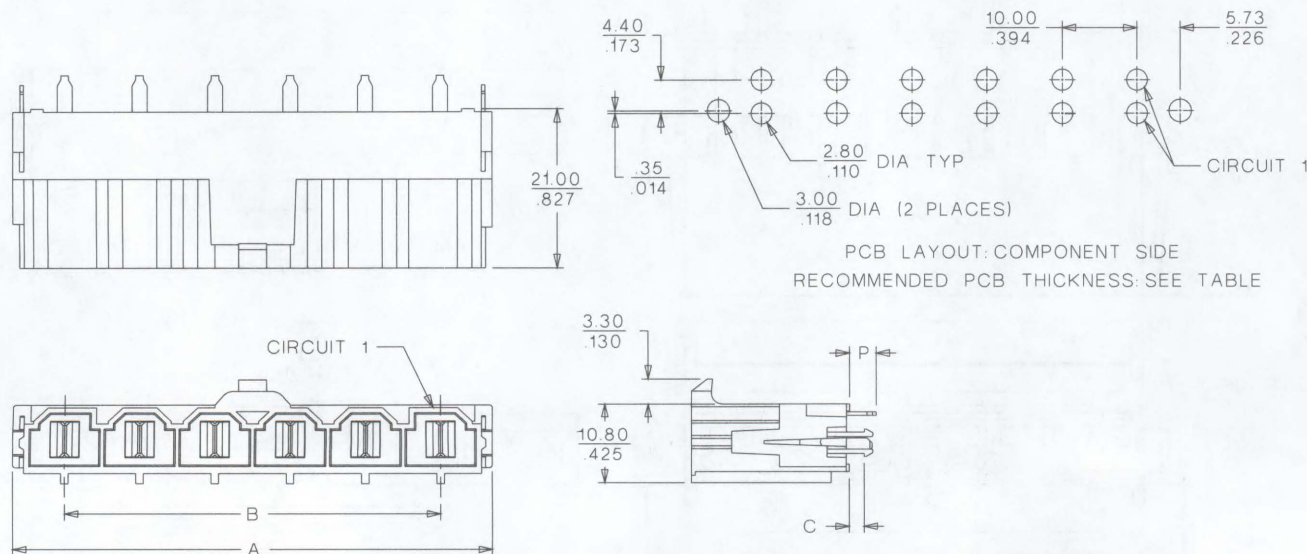
10.00mm (.393") Pitch
Mini-Fit, Sr.TM
Header

42819

Vertical, Single Row
Metal Clip Mount
SMC



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ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	PCB Thickness	Dimension			
			A	B	C	P
2	42819-2212	1.57 (.062)	23.82 (.937)	10.00 (.393)	1.80 (.070)	3.50 (.137)
	42819-2222	2.36 (.093)			2.60 (.102)	5.10 (.200)
	42819-2232	3.18 (.125)			3.40 (.133)	5.10 (.200)
	42819-2242	6.35 (.250)			3.40 (.133)	8.30 (.327)
3	42819-3212	1.57 (.062)	33.82 (1.331)	20.00 (.787)	1.80 (.070)	3.50 (.137)
	42819-3222	2.36 (.093)			2.60 (.102)	5.10 (.200)
	42819-3232	3.18 (.125)			3.40 (.133)	5.10 (.200)
	42819-3242	6.35 (.250)			3.40 (.133)	8.30 (.327)
4	42819-4212	1.57 (.062)	43.82 (1.725)	30.00 (1.181)	1.80 (.070)	3.50 (.137)
	42819-4222	2.36 (.093)			2.60 (.102)	5.10 (.200)
	42819-4232	3.18 (.125)			3.40 (.133)	5.10 (.200)
	42819-4242	6.35 (.250)			3.40 (.133)	8.30 (.327)

Circuits	Order No.	PCB Thickness	Dimension			
			A	B	C	P
5	42819-5212	1.57 (.062)	53.82 (2.118)	40.00 (1.574)	1.80 (.070)	3.50 (.137)
	42819-5222	2.36 (.093)			2.60 (.102)	5.10 (.200)
	42819-5232	3.18 (.125)			3.40 (.133)	5.10 (.200)
	42819-5242	6.35 (.250)			3.40 (.133)	8.30 (.327)
6	42819-6212	1.57 (.062)	63.82 (2.512)	50.00 (1.968)	1.80 (.070)	3.50 (.137)
	42819-6222	2.36 (.093)			2.60 (.102)	5.10 (.200)
	42819-6232	3.18 (.125)			3.40 (.133)	5.10 (.200)
	42819-6242	6.35 (.250)			3.40 (.133)	8.30 (.327)

FEATURES AND SPECIFICATIONS

Features and Benefits

- High current
- Fully polarized
- Positive locks
- Low engagement force
- Wire-to-board
- Metal board retention clip
- Surface Mount Compatible

Reference Information

Product Specification: PS-42815-0001
 Packaging: Tray
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R9751144
 Mates With: 42816 receptacle housing
 Designed In: Millimeters

Electrical

Voltage: 600V
 Current: 48.0A max.*
 Contact Resistance: 1.5mΩ max.
 Dielectric Withstanding Voltage: 2200V
 Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 19.6N max.
 Normal Force: 1.96N min.
 Durability: 30 cycles

Physical

Housing: Glass-filled, 4/6 nylon, UL 94V-0
 Contact: Copper Alloy
 Plating: Tin/Lead over Nickel
 Operating Temperature: -40 to +105°C
 PCB Thickness: 1.57, 2.36, 3.18, or 6.35mm
 (.062, .093, .125, or .250")

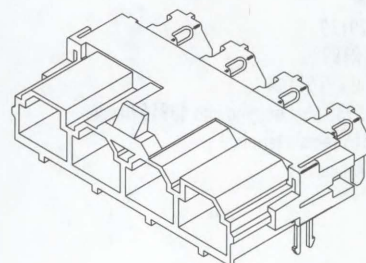
* Depending on circuit size, wire gauge and PCB. Please refer to product specification.



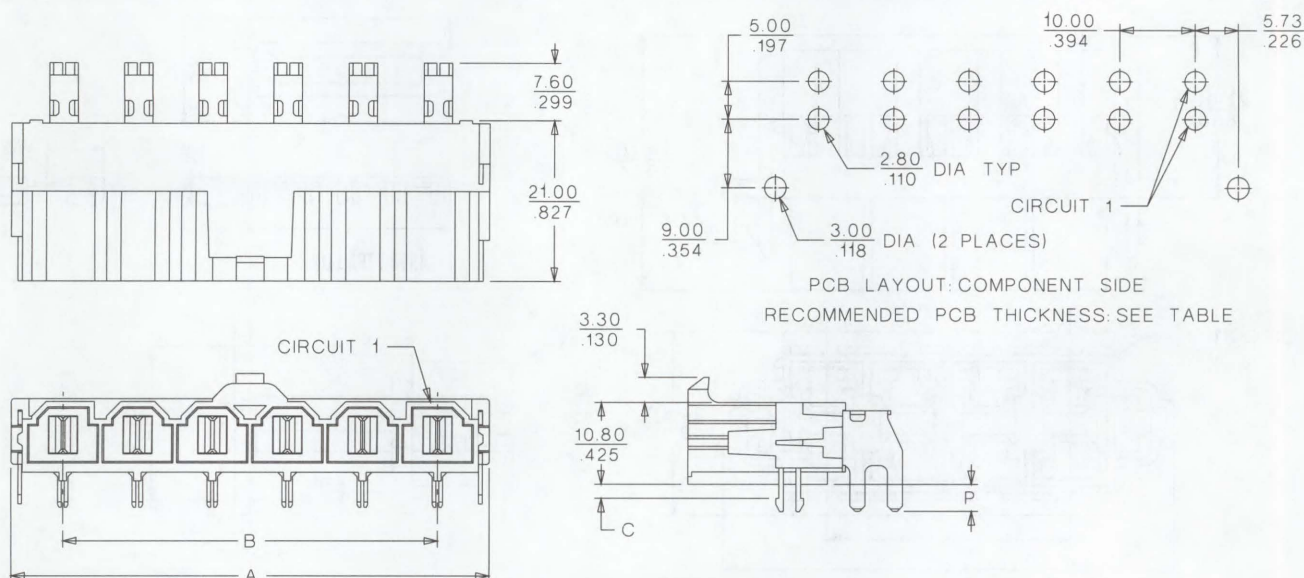
10.00mm (.393") Pitch
Mini-Fit, Sr.™
Header

42820

Right Angle, Single Row
Metal Clip Mount



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	PCB Thickness	Dimension			
			A	B	C	P
2	42820-2212	1.57 (.062)	23.82 (.937)	10.00 (.393)	1.80 (.070)	3.50 (.137)
	42820-2222	2.36 (.093)			2.60 (.102)	5.10 (.200)
	42820-2232	3.18 (.125)			3.40 (.133)	5.10 (.200)
	42820-2242	6.35 (.250)			3.40 (.133)	8.30 (.327)
3	42820-3212	1.57 (.062)	33.82 (1.331)	20.00 (.787)	1.80 (.070)	3.50 (.137)
	42820-3222	2.36 (.093)			2.60 (.102)	5.10 (.200)
	42820-3232	3.18 (.125)			3.40 (.133)	5.10 (.200)
	42820-3242	6.35 (.250)			3.40 (.133)	8.30 (.327)
4	42820-4212	1.57 (.062)	43.82 (1.725)	30.00 (1.181)	1.80 (.070)	3.50 (.137)
	42820-4222	2.36 (.093)			2.60 (.102)	5.10 (.200)
	42820-4232	3.18 (.125)			3.40 (.133)	5.10 (.200)
	42820-4242	6.35 (.250)			3.40 (.133)	8.30 (.327)

Circuits	Order No.	PCB Thickness	Dimension			
			A	B	C	P
5	42820-5212	1.57 (.062)	53.82 (2.118)	40.00 (1.574)	1.80 (.070)	3.50 (.137)
	42820-5222	2.36 (.093)			2.60 (.102)	5.10 (.200)
	42820-5232	3.18 (.125)			3.40 (.133)	5.10 (.200)
	42820-5242	6.35 (.250)			3.40 (.133)	8.30 (.327)
6	42820-6212	1.57 (.062)	63.82 (2.512)	50.00 (1.968)	1.80 (.070)	3.50 (.137)
	42820-6222	2.36 (.093)			2.60 (.102)	5.10 (.200)
	42820-6232	3.18 (.125)			3.40 (.133)	5.10 (.200)
	42820-6242	6.35 (.250)			3.40 (.133)	8.30 (.327)

FEATURES AND SPECIFICATIONS

Features and Benefits

- High current
- Fully polarized
- Positive locks
- Low engagement force
- Wire-to-wire, wire-to-board (vertical only)
- Mandatory 43980 Series Terminal Position Assurance (TPA) clip

Reference Information

Product Specification: PS-42815-001

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No: R9751144

Mates With: 43938 plug housing and 43915 header

Use With: 42815 female terminal

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 43.0A max*

Insulation Resistance: 1000M Ω min.

Dielectric withstanding voltage: 2200V

Mechanical

Contact Insertion Force: 29.4N max.

Contact Retention to Housing: 98.1N min.

Physical

Housing: Polyester, UL 94V-0

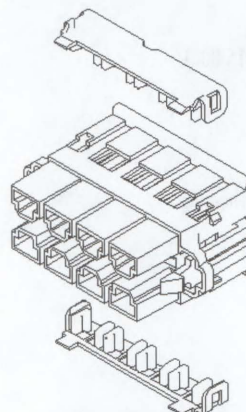
Operating Temperature: -40 to +105°C

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.

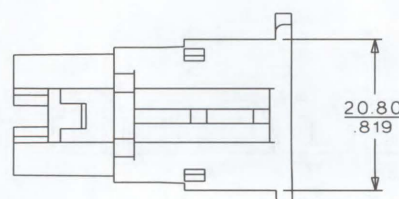
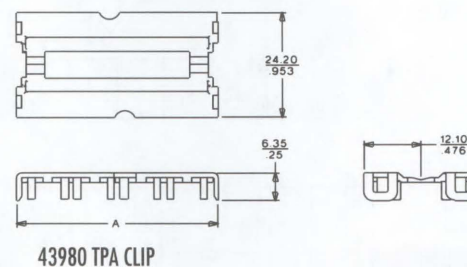
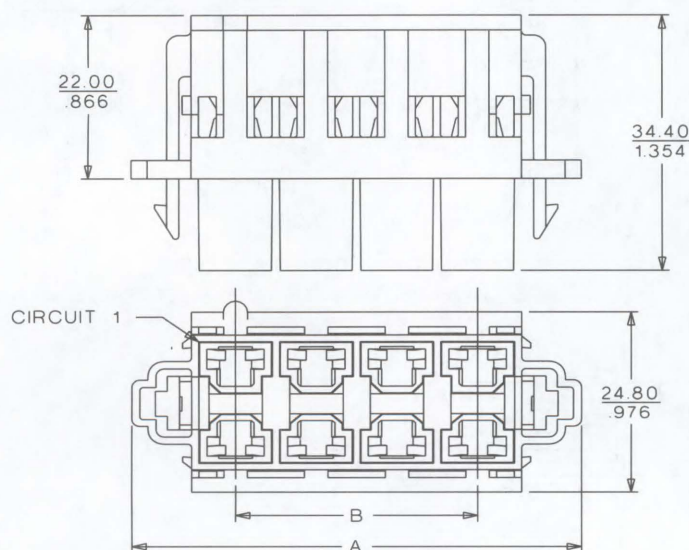
molex® 10.00mm (.393") Pitch Mini-Fit, Sr.™ Receptacle and TPA Clip

43914/43980

Dual Row



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Dual Row Receptacles			
Circuits	Order No.	Dimension	
		A	B
6	43914-1101	45.70 (1.799)	20.00 (.787)
8	43914-1102	55.70 (2.193)	30.00 (1.181)
10	43914-1103	65.70 (2.587)	40.00 (1.575)
12	43914-1104	75.70 (2.980)	50.00 (1.969)
14	43914-1105	85.70 (3.374)	60.00 (2.362)

TPA		
Circuits	Order No.	Dimension A
6	43980-1001	31.30 (1.232)
8	43980-1002	41.30 (1.626)
10	43980-1003	51.30 (2.020)
12	43980-1004	61.30 (2.413)
14	43980-1005	71.30 (2.807)

FEATURES AND SPECIFICATIONS

Features and Benefits

- High current
- Fully polarized
- Positive locks
- Low engagement force
- Wire-to-wire
- Mandatory 43980 series Terminal Position Assurance (TPA) clip

Reference Information

Product Specification: PS-42815-001
 Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No: R9751144
 Mates With: 43914 Receptacle housing
 Use With: 42817 male terminal
 Designed In: Millimeters

Electrical

Voltage: 600V
 Current: 43.0A max.*
 Insulation Resistance: 1000MΩ min.
 Dielectric withstanding voltage: 2200V

Mechanical

Contact Insertion Force: 29.4N max.
 Contact Retention to Housing: 98.1N min.

Physical

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

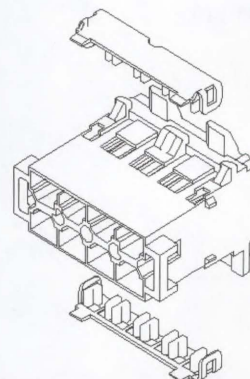
* Depending on circuit size and wire gauge. Please refer to product specification.



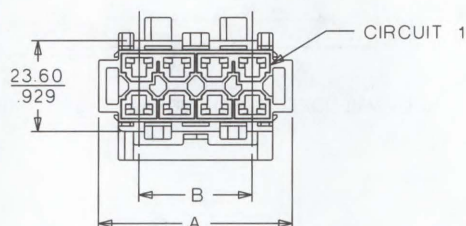
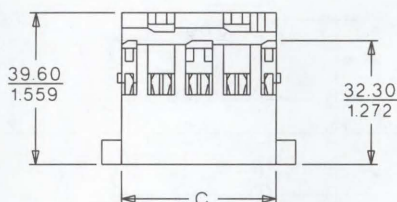
10.00mm (.393") Pitch
Mini-Fit, Sr.™
Plug and TPA Clip

43938/43980

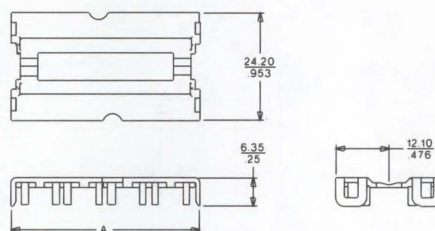
Dual Row
Panel Mount



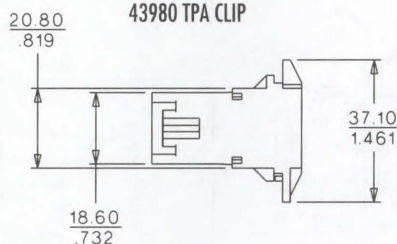
CATALOG DRAWING (FOR REFERENCE ONLY)



PANEL OPENING: SEE SALES DRAWING



43980 TPA CLIP



RECOMMENDED PANEL THICKNESS: 1.80/2.00
 .071/.079

ORDERING INFORMATION AND DIMENSIONS

Dual Row Plug				
Circuits	Order No.	Dimension		
		A	B	C
6	43938-2101	41.30 (1.835)	20.00 (.787)	30.90 (1.216)
8	43938-2102	51.30 (2.020)	30.00 (1.181)	40.90 (1.610)
10	43938-2103	61.30 (2.413)	40.00 (1.575)	50.90 (2.004)
12	43938-2104	71.30 (2.807)	50.00 (1.968)	60.90 (2.398)
14	43938-2105	81.30 (3.201)	60.00 (2.362)	70.90 (2.791)

TPA		
Circuits	Order No.	Dimension A
6	43980-1001	31.30 (1.232)
8	43980-1002	41.30 (1.626)
10	43980-1003	51.30 (2.020)
12	43980-1004	61.30 (2.413)
14	43980-1005	71.30 (2.807)

FEATURES AND SPECIFICATIONS

Features and Benefits

- High current
- Fully polarized
- Positive locks
- Low engagement force
- Surface Mount Compatible
- Metal board retention clips
- Wire-to-Board

Reference Information

Product Specification: PSX-42815-0001

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

TUV License No: R9751144

Mates With: 43914 receptacle housing

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 37.0A max.*

Contact Resistance: 1.5mΩ max.

Dielectric Withstanding Voltage: 2200V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 2.0kg max.

Normal Force: 200g min.

Durability: 30 cycles

Physical

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

Contact: Copper Alloy

Plating: Tin/Lead over Nickel

Operating Temperature: -40 to +105°C

PCB Thickness:

1.57, 2.36, 3.18, or 6.35mm
(.062, .093, .125 or .250)

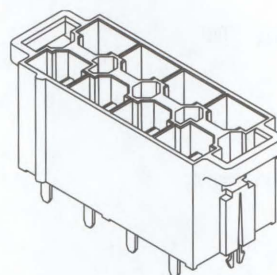
* Depending on circuit size, wire gauge and PCB. Please refer to product specification.



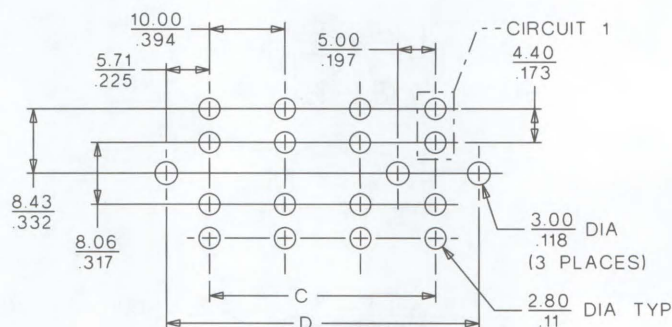
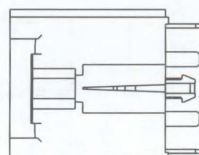
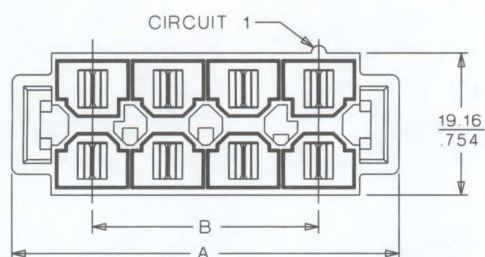
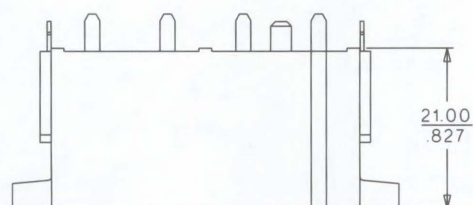
10.00mm (.393") Pitch Mini-Fit, Sr.TM Header

43915

Vertical, Dual Row



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PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: SEE TABLE

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension			
	PCB Thickness				A	B	C	D
	1.57mm (.062")	2.36mm (.093")	3.18mm (.125")	6.35mm (.250")				
6	43915-1101	43915-1106	43915-1111	43915-1116	41.30 (1.626)	20.00 (.787)	20.00 (.787)	31.41 (1.237)
8	43915-1102	43915-1107	43915-1112	43915-1117	51.30 (2.020)	30.00 (1.181)	30.00 (1.181)	41.41 (1.630)
10	43915-1103	43915-1108	43915-1113	43915-1118	61.30 (2.413)	40.00 (1.575)	40.00 (1.575)	51.41 (2.024)
12	43915-1104	43915-1109	43915-1114	43915-1119	71.30 (2.807)	50.00 (1.969)	50.00 (1.969)	61.41 (2.418)
14	43915-1105	43915-1110	43915-1115	43915-1120	81.30 (3.201)	60.00 (2.362)	60.00 (2.362)	71.41 (2.811)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Rast 5 crimping technology
- Used for domestic appliances
- Secondary locking
- Designed for high currents

Reference Information

Packaging: Box

Use With: 94518 Terminal

Designed In: Millimeters

Mechanical

Contact Insertion Force: 20N (4.50 lb) max.

Contact Retention to Housing: 100N (22.48 lb) min.

Durability: 100 cycles

Physical

Housing: White PA 66, UL 94V-2

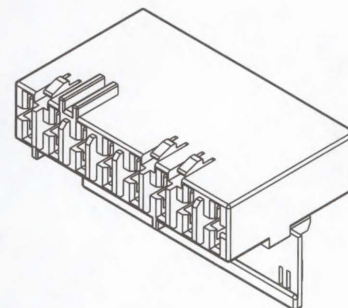
Operating Temperature: -40 to +105°C



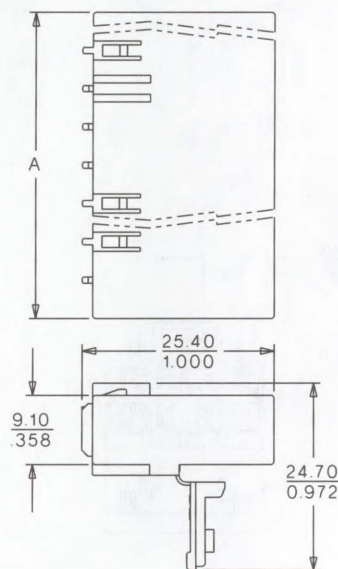
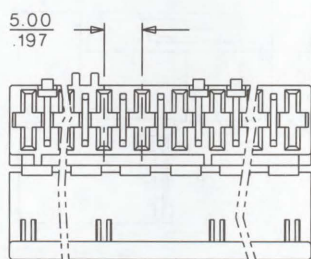
5.00mm (.197") Pitch
Wire-to-Wire/Wire-to-Tab
Receptacle Housing

94535

Female
With Secondary Lock



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
2	94535-7002
4	94535-7004
8	94535-7008

FEATURES AND SPECIFICATIONS

Features and Benefits

- Used for domestic appliances
- Secondary locking
- Designed for high currents

Reference Information

Packaging: Box
 Use With: 94518 Terminal
 Mates With: 94213 and 94532
 Designed In: Millimeters

Mechanical

Contact Insertion Force: 20N (4.50 lb) max.
 Contact Retention to Housing: 100N (22.48 lb) min.
 Durability: 100 cycles

Physical

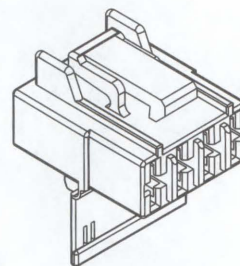
Housing: PA 66, UL 94V-2
 Operating Temperature: -40 to +85°C



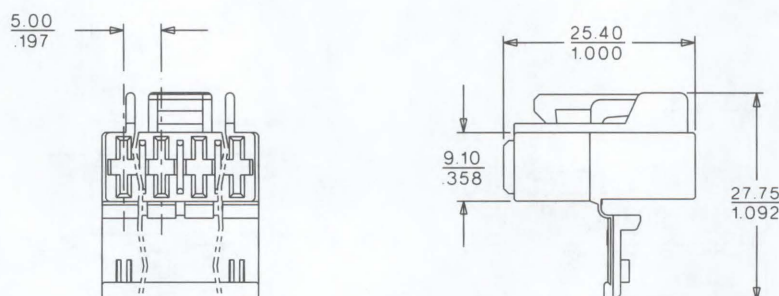
5.00mm (.197") Pitch Wire-to-Wire/Wire-to-Tab Housing

94540

Female, Single Row with Secondary Lock and Latch



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.	Color
4	94540-7004	White
4	94540-7014	Black
8	94540-7008	White

FEATURES AND SPECIFICATIONS

Features and Benefits

- Rast 5 technology
- Used for domestic appliances

Reference Information

Packaging: Box
Mates With: 94213
Designed In: Millimeters

Electrical

Voltage: 250V
Current: 25.0A max.
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 5000 MΩ min.

Mechanical

Contact Insertion Force: 6N (1.35 lb) max.
Mating Force: 30N (6.74 lb) max.
Unmating Force: 8N (1.80 lb) min.
Durability: 100 cycles

Physical

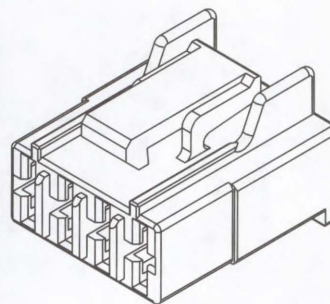
Housing: PA 66, UL 94V-2
Contact: Brass
Plating: Tin
PCB Thickness: 1.50mm (.059")
Operating Temperature: -40 to +85°C



**5.00mm (.197") Pitch
Header**

94213

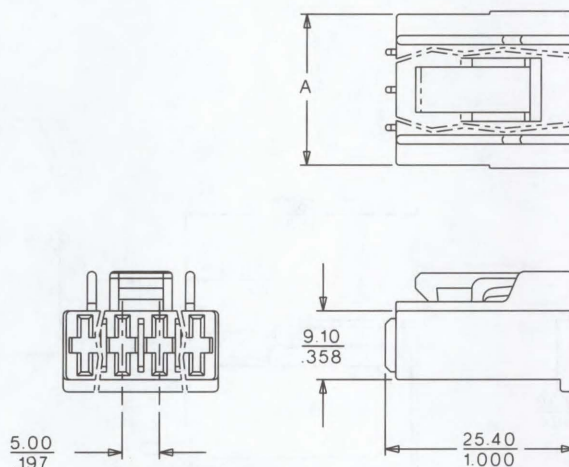
**4 Circuit
Vertical**



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Color
94213-2004	White
94213-2014	Black

FEATURES AND SPECIFICATIONS

Features and Benefits

- Rast 5 technology
- Used for domestic appliances

Reference Information

Packaging: Box
 Mates With: 94213
 Designed In: Millimeters

Electrical

Voltage: 250V
 Current: 25.0A max.
 Contact Resistance: $30\text{m}\Omega$ max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 5000 $\text{M}\Omega$ min.

Mechanical

Contact Insertion Force: 6N (1.35 lb) max.
 Mating Force: 30N (6.74 lb) max.
 Unmating Force: 8N (1.80 lb) min.
 Durability: 100 cycles

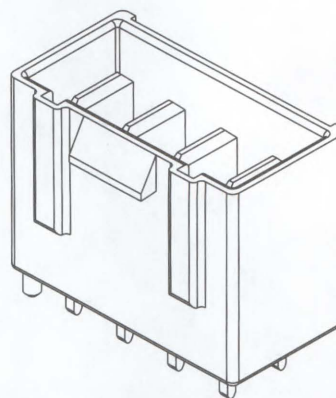
Physical

Housing: PA 66, UL 94V-2
 Contact: Brass
 Plating: Tin
 PCB Thickness: 1.50mm (.059")
 Operating Temperature: -40 to +85°C

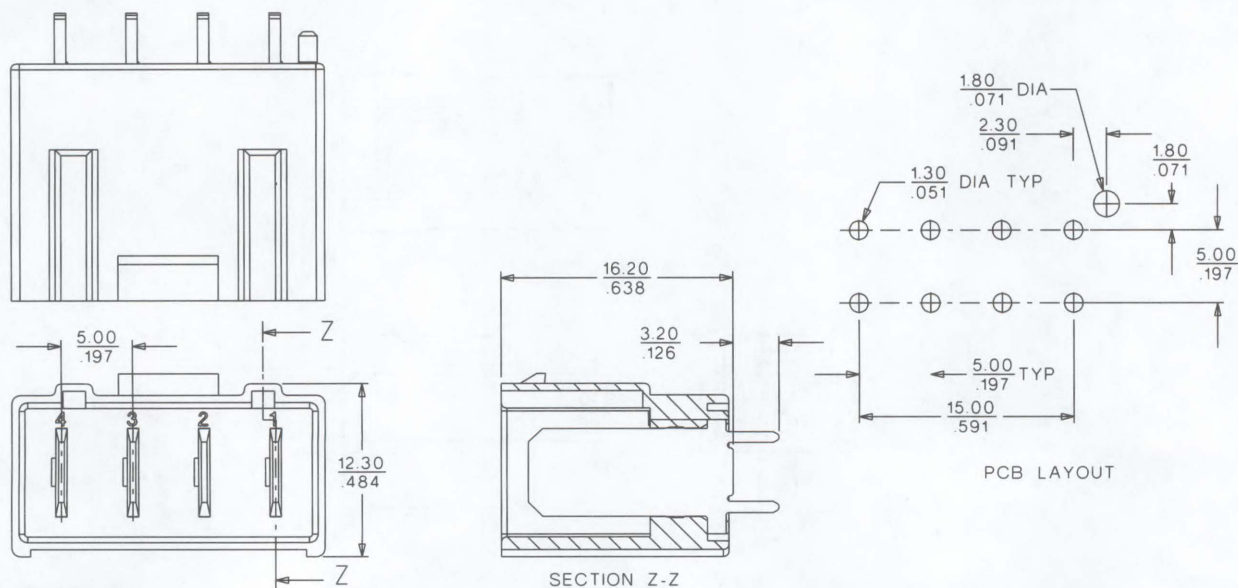
molex® 5.00mm (.197") Pitch
 Header

94213

**4 Circuit
 Right Angle**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Color
94213-1004	White
94213-1014	Black

FEATURES AND SPECIFICATIONS

Reference Information

Packaging: Chain or bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: HCS-125 and standard .125" housings
Designed In: Inches

Electrical

Current: 20A max.
Contact Resistance: 10mΩ max.

Mechanical

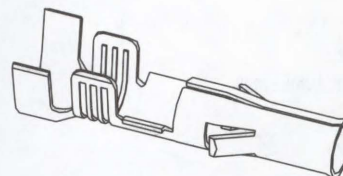
Contact Insertion Force: 4.20kg (9.25 lb) max.
Contact Retention to Housing: 9.09kg (20 lb) min.
Wire Pull-Out Force: 10 AWG—35.45kg (78 lb)
12 AWG—31.81kg (70 lb)
Mating Force: 2.61kg (5.75 lb) max.
Unmating Force: 0.90kg (2.0 lb) min.
Durability: 25 mating/unmating cycles max.

Physical

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



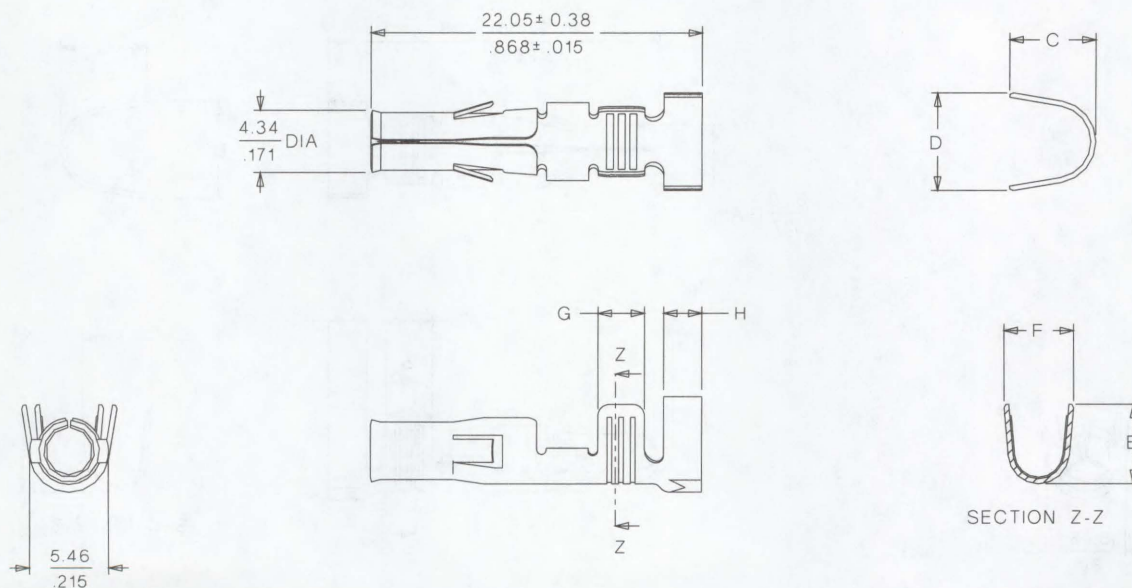
3.18mm (.125") Pin Diameter HCS-125 Pin and Socket Female Terminals



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Type	Wire Size AWG	Maximum Insulation Diameter	Series	Order No.		Dimension					
				Chain	Loose	C	D	E	F	G	H
Brass	10-14	4.57 (.180)	1901	18-12-1601	18-12-1602	5.71 (.225)	6.35 (.250)	5.21 (.205)	4.57 (.180)	3.10 (.122)	2.54 (.100)
	16-18	3.04 (.120)	2047	18-12-1221	18-12-1222	4.83 (.190)	5.33 (.210)	3.18 (.125)	3.08 (.120)	3.10 (.122)	2.54 (.100)
	16-18	4.57 (.180)	42555	18-12-1605		5.71 (.225)	6.35 (.250)	3.18 (.125)	3.05 (.120)	3.10 (.122)	2.54 (.100)
Phosphor Bronze	10-14	4.57 (.180)	42547	18-12-1603	18-12-1604	5.71 (.225)	6.35 (.250)	5.21 (.205)	3.08 (.180)	3.10 (.122)	2.54 (.100)
	16-18	3.04 (.120)	8947			4.83 (.190)	5.33 (.210)	3.18 (.125)	3.05 (.120)	3.10 (.122)	2.54 (.100)

FEATURES AND SPECIFICATIONS

Reference Information

Packaging: Chain or bulk

UL File No.: E29179

CSA File No.: LR19980

Mates With: HCS-125 and standard .125" housings

Designed In: Inches

Electrical

Current: 20A max.

Contact Resistance: 10mΩ max.

Mechanical

Contact Insertion Force: 4.20kg (9.25 lb) max.

Contact Retention to Housing: 9.09kg (20 lb) min.

Wire Pull-Out Force: 10 AWG—35.45kg (78 lb)

12 AWG—31.81kg (70 lb)

Mating Force: 2.61kg (5.75 lb) max.

Unmating Force: 0.90kg (2.0 lb) min.

Durability: 25 mating/unmating cycles max.

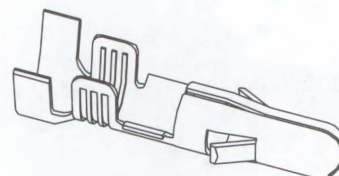
Physical

Contact: Brass or Phosphor Bronze

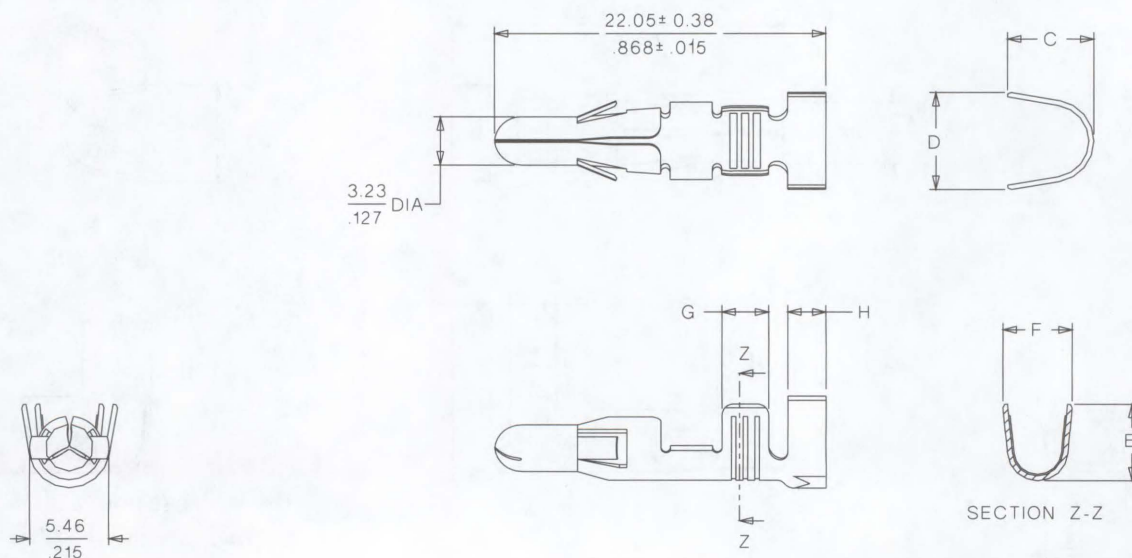
Plating: Tin

Operating Temperature: -40 to +105°C

molex® 3.18mm (.125") Pin Diameter HCS-125 Pin and Socket Male Terminals



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Type	Wire Size AWG	Maximum Insulation Diameter	Series	Order No.		Dimension					
				Chain	Loose	C	D	E	F	G	H
Brass	10-14	4.57 (.180)	1900	18-12-2601	18-12-2602	5.71 (.225)	6.35 (.250)	5.21 (.205)	4.57 (.180)	3.10 (.122)	2.54 (.100)
	16-18	3.04 (.120)	2046	18-12-2221	18-12-2222	4.83 (.190)	5.33 (.210)	3.18 (.125)	3.08 (.180)	3.10 (.122)	2.54 (.100)
	16-18	4.57 (.180)	42554	18-12-2405		5.71 (.225)	6.35 (.250)	3.18 (.125)	3.05 (.120)	3.10 (.122)	2.54 (.100)
Phosphor Bronze	10-14	4.57 (.180)	42546	18-12-1607		5.71 (.225)	6.35 (.250)	5.21 (.205)	3.08 (.180)	3.10 (.122)	2.54 (.100)
	16-18	3.04 (.120)	8946			4.83 (.190)	5.33 (.210)	3.18 (.125)	3.08 (.120)	3.10 (.122)	2.54 (.100)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Meets the need for a connector system rated at greater than the industry-standard 12.0A per circuit. The HCS-125 is an enhanced version of Molex's proven .125" system
- Positive locks prevent accidental unmating
- Fully isolated terminals protect terminals
- Pull tabs
- 1, 2, 3 and 4 circuit housings

Reference Information

Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
TUV License No.: R9151436
Use With: .125" terminals
Designed In: Inches

Electrical

Voltage: 600V
Current: 20.0A
Dielectric Withstanding Voltage: 1500V AC rms

Mechanical

Contact Retention to Housing: 20 lb min.

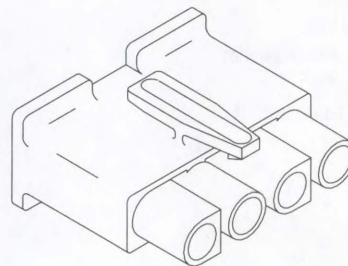
Physical

Housing: Nylon, UL 94V-2
Operating Temperature: -40 to +105°C
Wire Accommodation: 10 to 18 AWG

molex® 8.38mm (.330") Pitch HCS-125 Pin and Socket Receptacle

42179

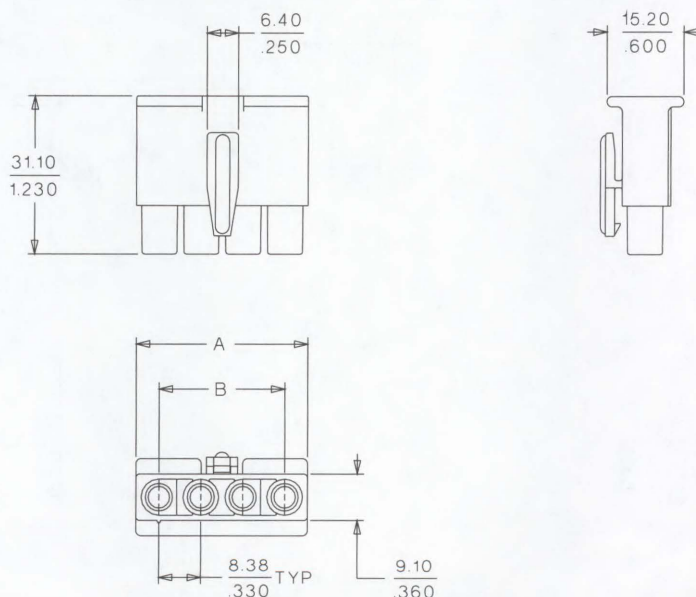
Single Row



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
1	03-12-1016	9.10 (.360)	
2	03-12-1026	17.50 (.690)	8.38 (.330)
3	03-12-1036	25.90 (1.020)	16.76 (.660)
4	03-12-1046	34.30 (1.350)	25.14 (.990)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Meets the need for a connector system rated at greater than the industry-standard 12.0A per circuit; the HCS-125 is an enhanced version of Molex's proven .125" system
- Positive locks prevent accidental unmating
- Fully isolated terminals protect terminals
- Pull tabs
- 1, 2, 3 and 4 circuit housings

Reference Information

Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: HCS-125 receptacles
 TUV License No.: R9151436
 Use With: .125" terminals
 Designed In: Inches

Electrical

Voltage: 600V
 Current: 20.0A max.
 Dielectric Withstanding Voltage: 1500V AC rms

Mechanical

Contact Retention to Housing: 20 lb min.

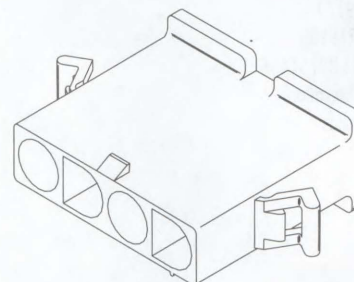
Physical

Housing: Nylon, UL 94V-2
 Operating Temperature: -40 to +105°C
 Wire Accommodation: 10 to 18 AWG

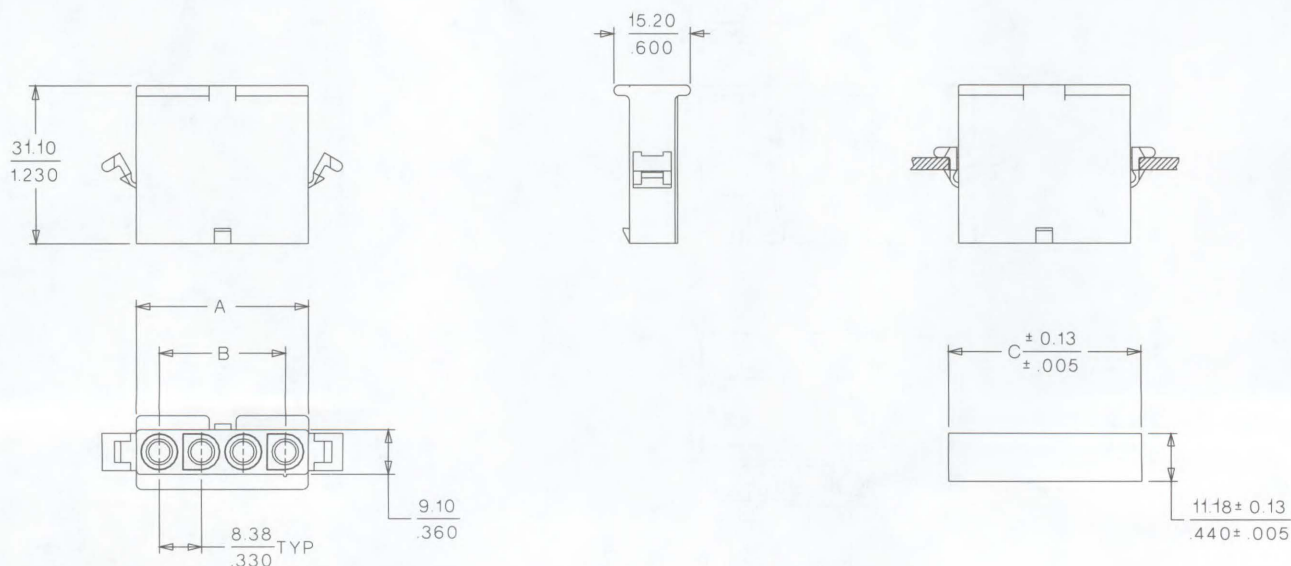
molex® 8.38mm (.330") Pitch
HCS-125
Pin and Socket
Plug

42179

Single Row



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	Panel Mount	Free Hanging	A	B	C
1	03-12-2015	03-12-2016	9.10 (.360)		13.23 (.521)
2	03-12-2025	03-12-2026	17.50 (.690)	8.38 (.330)	21.62 (.851)
3	03-12-2035	03-12-2036	25.90 (1.020)	16.76 (.660)	30.00 (1.181)
4	03-12-2045	03-12-2046	34.30 (1.350)	25.14 (.990)	38.38 (1.511)



7.50mm (.295") Pitch

Sabre™

Introduction

Today's manufacturing environment demands constant improvements in quality standards, increased productivity and lower production costs. With the Sabre power connector system these challenges can be met.

The Sabre system is a robust power connector supplying up to 18 amperes for high current applications. Designed and patented by Molex engineers, Sabre standardizes manufacturing footprints by offering both wire-to-wire and wire-to-board configurations. Whether your design requires 18 AWG or 14 AWG wire, the Sabre power connector system provides the flexibility of accepting a wide range of wire gauges and insulation thicknesses.

Sabre connectors offer other benefits to successfully fit the needs of your power connector applications. A primary locking feature designed on the Sabre terminal locks the terminal in place in the housing. In addition, the terminal is designed with a Terminal Position Assurance (TPA) feature that virtually eliminates terminal backout. Activation of the TPA feature is optional. The positive locking latch on the receptacle housing prevents accidental disconnection. This anti-tangle designed latch also ensures ease of handling during production. Made of high strength nylon V-0 material, the housings are impact resistant and withstand rough treatment during assembly.

THE SABRE ADVANTAGE

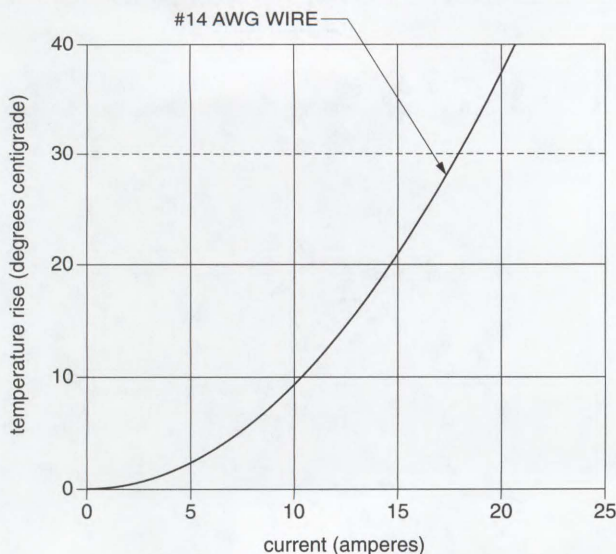
Features

- Ideal for 14 to 18 AWG wire range
- Fully isolated terminals
- Positive thumb latch
- Audible click when latched
- Four points of electrical contact
- Terminal base material of Brass with Tin plating
- Anti-tangle latch on receptacle housing
- Plug and receptacle housing molded in
high-temperature 94V-0 material
- Integral Terminal Position Assurance (TPA)
- No secondary plastic locking parts
- Dual truss-style locking device on female terminal
- Surface mount compatible headers
- Solder tail lengths of .150 and .210" dimensions
- Optional board lock feature offered in
.062, .093 and .125" lengths

Benefits

- Accommodates wide range of wire insulation thicknesses and double wire crimps
- Provide terminal protection and polarization
- Prevents accidental disengagement
- Reassures operators latch is engaged
- Provide more reliable electrical connection
- Cost effective base material
- Prevents breakage and makes production handling easy
- Withstands operating temperature ranges from -40 to +75°C
- Virtually eliminates terminal backout
- Eliminate costs of handling and inventory of secondary parts
- Provides more robust primary locking mechanism of terminal in housing
- Enable assembly to PCB prior to the infrared process
- Fit a wide range of PC board thicknesses
- For most popular PC board thicknesses

TEMPERATURE RISE vs CURRENT



FEATURES AND SPECIFICATIONS

Features and Benefits

- Patented new integral Terminal Position Assurance (TPA) on female and male terminal
- Virtually eliminates terminal backout
- Four points of electrical contact
- Wire to wire; wire-to-board

Reference Information

Product Specification: PS-44441-9999
 Packaging: Chain
 UL File No.: E29179
 CSA File No.: LR19980
 Use With: 44441 housing
 Designed In: Inches

Electrical

Voltage: 1000V
 Current: 18.0A max.*
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 5000V
 Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 2 lb max.
 Contact Retention to Housing: 20 lb min.
 Wire Pull-Out Force: 20 lb min.
 Normal Force: 3 lb nominal
 Durability: 25 cycles

Physical

Contact: Brass
 Plating: Tin
 Operating Temperature: -40 to +75°C
 Wire Gauge: 14, 16, 18 AWG
 Insulation Diameter: 4.57mm (.180") max

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.



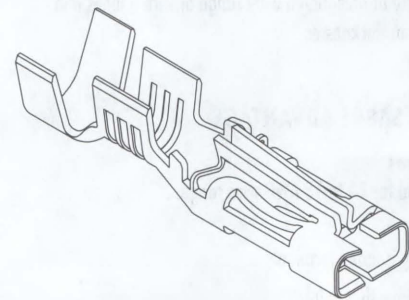
7.50mm (.295") Pitch

Sabre™

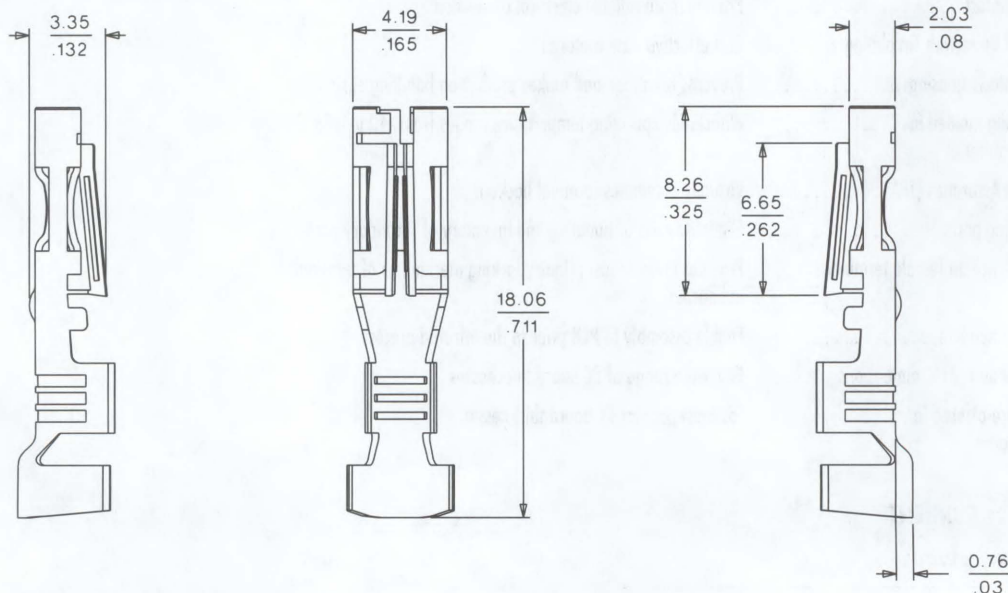
**Wire-to-Wire or
Wire-to-Board
Terminal**

43375

Female



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Plating	Wire Size AWG	Maximum Insulation Diameter
43375-0001	Tin	14-18	3.30 (.130)
*43375-1001	Tin	14-18	4.57 (.180)

* Accommodates single or double wire crimps

FEATURES AND SPECIFICATIONS

Features and Benefits

- Patented new integral Terminal Position Assurance (TPA) on male and female terminal
- Virtually eliminates terminal backout
- Accommodates 14 to 18 gauge wire
- Four points of electrical contact
- Wire-to-wire

Reference Information

Product Specification: PS-44441-9999
 Packaging: Chain
 UL File No.: E29179
 CSA File No.: LR19980
 Use With: 43680 housing
 Designed In: Inches

Electrical

Voltage: 1000V
 Current: 18.0A max.*
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 5000V
 Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 2 lb max.
 Contact Retention to Housing: 20 lb min.
 Wire Pull-Out Force: 20 lb min.
 Normal Force: 3 lb nominal
 Durability: 25 cycles

Physical

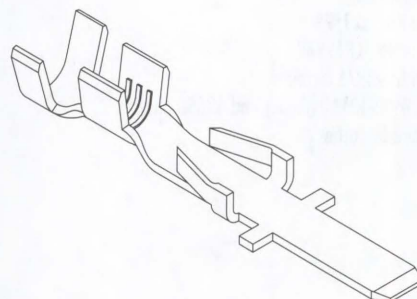
Contact: Brass
 Plating: Tin
 Operating Temperature: -40 to +75°C
 Wire Gauge: 14, 16, 18 AWG
 Insulation Diameter: 4.57mm (.180") max.

* Depending on circuit size and wire gauge. Please refer to product specification.



7.50mm (.295") Pitch Sabre™ Wire-to-Wire Terminal

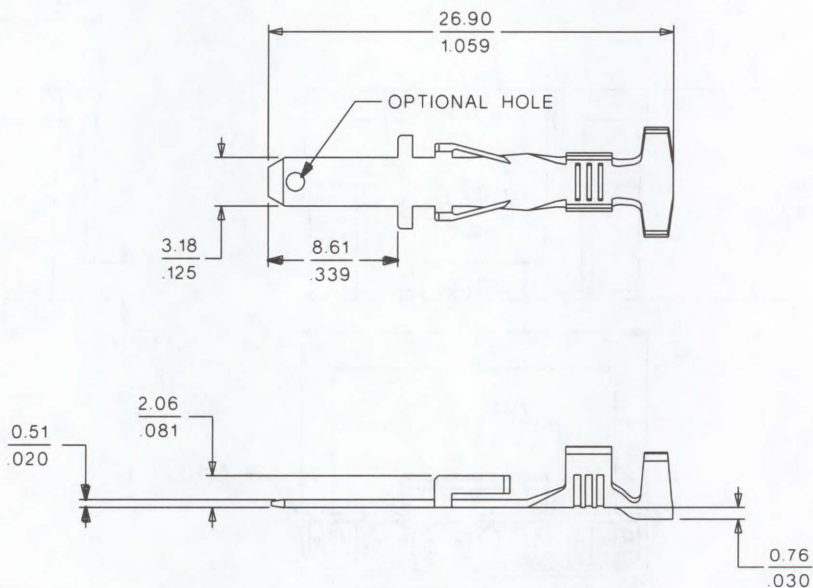
43178
Male



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Wire Size AWG	Maximum Insulation Diameter
43178-1002	18	3.30 (.130)
*43178-2002	14-18	4.57 (.180)

* Accommodates single 14, 16, or 18 AWG wire crimps, or double 18 AWG wire crimps

FEATURES AND SPECIFICATIONS

Features and Benefits

- Patented new integral Terminal Position Assurance (TPA) on mated male and female terminal
- Virtually eliminates terminal backout
- Wire-to-wire and wire-to-board connector system
- Polarized housing assures proper mating
- Terminals are fully isolated in housing
- Positive latch reduces accidental disengagement from plug

Reference Information

Product Specification: PS-44441-9999

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Use With: 43375 terminal

Mates With: 43160 header and 43680 plug

Designed In: Inches

Electrical

Voltage: 1000V

Current: 18.0A*

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 2 lb max.

Contact Retention to Housing: 20 lb min.

Physical

Housing: Nylon, 94V-0

Operating Temperature: -40 to +75°C

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.



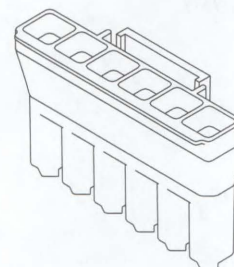
7.50mm (.295") Pitch

Sabre™

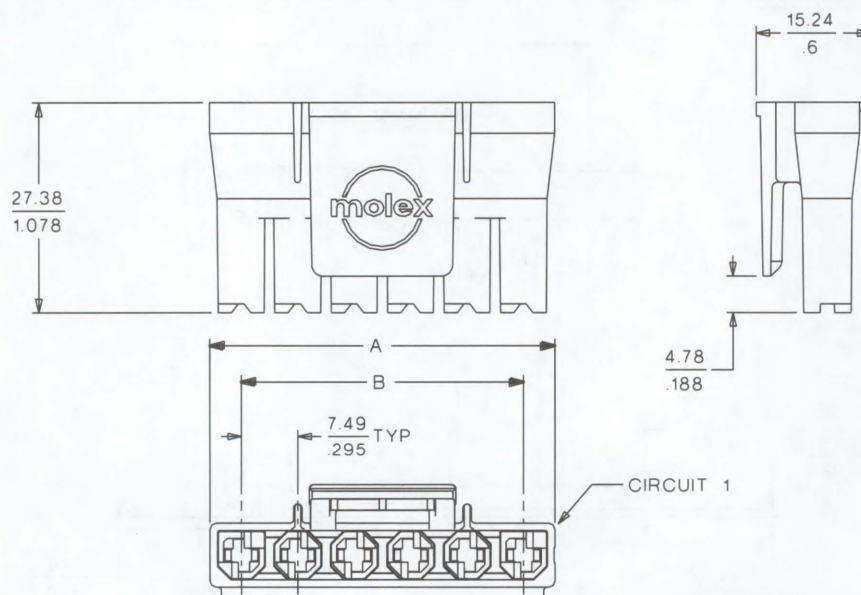
Receptacle

44441

Single Row



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	44441-2002	15.82 (.623)	7.49 (.295)
3	44441-2003	23.32 (.918)	14.99 (.590)
4	44441-2004	30.81 (1.213)	22.48 (.885)
5	44441-2005	38.30 (1.508)	29.97 (1.180)
6	44441-2006	45.80 (1.803)	37.47 (1.475)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Patented new integral Terminal Position Assurance (TPA) on mated male and female terminal
- Virtually eliminates terminal backout
- Polarized housing assures proper mating
- Terminals are fully isolated in housing
- Positive latch reduces accidental disengagement from receptacle

Reference Information

Product Specification: PS-44441-9999

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Use With: 43178 terminal

Mates With: 44441 receptacle

Designed In: Inches

Electrical

Voltage: 1000V

Current: 18.0A*

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 2 lb max.

Contact Retention to Housing: 20 lb min.

Physical

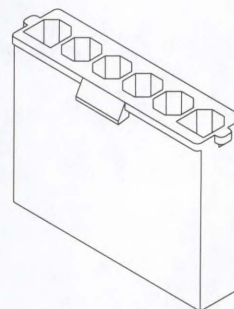
Housing: Nylon, UL 94V-0

Operating Temperature: -40 to +75°C

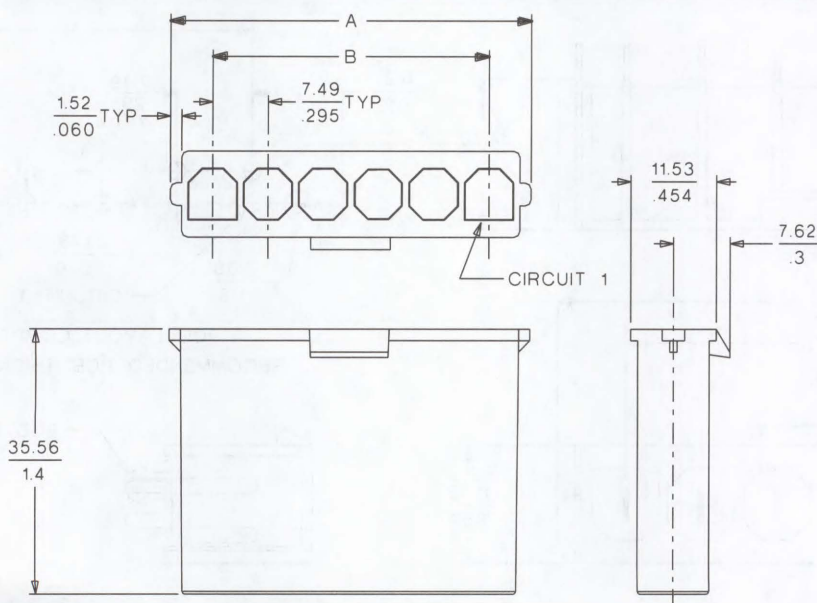
* Depending on circuit size and wire gauge. Please refer to product specification.

molex® 7.50mm (.295") Pitch Sabre™ Wire-to-Wire Plug

43680
Single Row



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	43680-2002	18.92 (.745)	7.49 (.295)
3	43680-2003	26.42 (1.040)	14.99 (.590)
4	43680-2004	33.91 (1.335)	22.48 (.885)
5	43680-2005	41.40 (1.630)	29.97 (1.180)
6	43680-2006	48.90 (1.925)	37.47 (1.475)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 6 circuits
- Surface Mount Compatible
- Optional board lock features offered in 1.57, 2.36, and 3.18mm (.062, .093, and .125) lengths
- Positive lock
- Fully polarized
- Wire-to-board

Reference Information

Product Specification: PS-44441-9999

Packaging: Bag and tray

UL File No.: E29179

CSA File No.: LR19980

Mates With: 44441 housing

Designed In: Inches

Electrical

Voltage: 1000V

Current: 18.0A max.*

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 5000V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5 lb max.

Normal Force: 3 lb nominal

Durability: 25 cycles

Physical

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

Contact: Brass

Plating: Tin

Operating Temperature: -40 to +75°C

PCB Thickness: 1.57, 2.36, 3.18mm (.062, .093 and .125")

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.

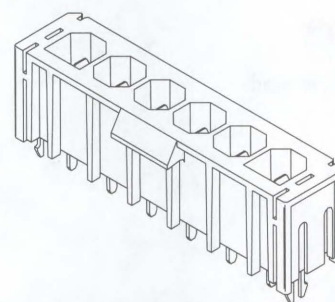


7.50mm (.295") Pitch

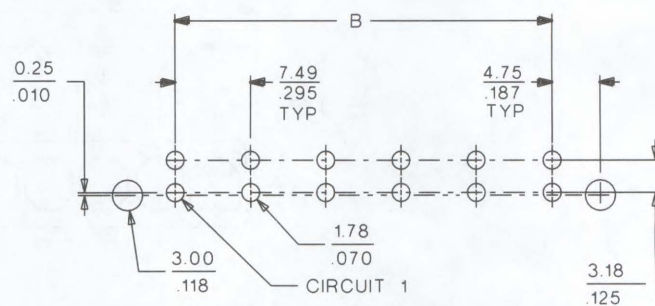
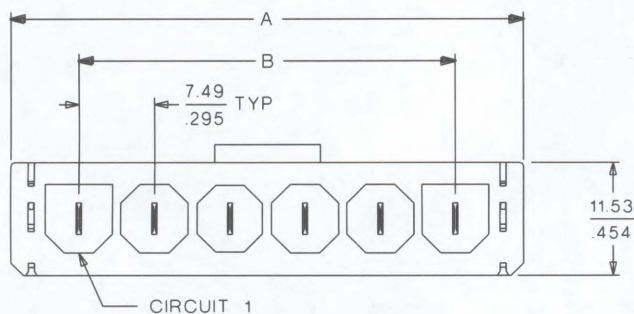
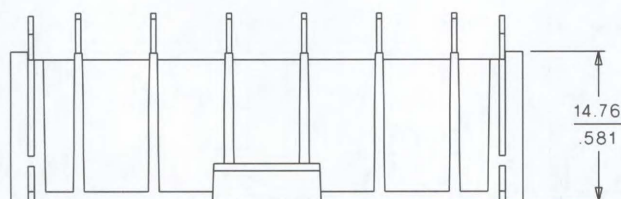
Sabre™

Wire-to-Board
Header

43160

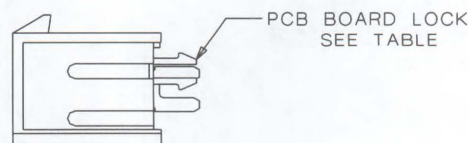
Vertical, Single Row, SMC
With and without Board Lock

CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS: SEE TABLE



ORDERING INFORMATION AND DIMENSIONS

Without Board Lock				
Circuits	Order No.	Dimension		
		A	B	C
2	43160-0102	21.08 (.830)	7.49 (.295)	3.81 (.150)
2	43160-0302	21.08 (.830)	7.49 (.295)	5.33 (.210)
3	43160-0103	28.58 (1.125)	14.99 (.590)	3.81 (.150)
3	43160-0303	28.58 (1.125)	14.99 (.590)	5.33 (.210)
4	43160-0104	36.07 (1.420)	22.48 (.885)	3.81 (.150)
4	43160-0304	36.07 (1.420)	22.48 (.885)	5.33 (.210)
5	43160-0105	43.56 (1.715)	29.97 (1.180)	3.81 (.150)
5	43160-0305	43.56 (1.715)	29.97 (1.180)	5.33 (.210)
6	43160-0106	51.05 (2.010)	37.47 (1.475)	3.81 (.150)
6	43160-0306	51.05 (2.010)	37.47 (1.475)	5.33 (.210)

With Board Lock					
Circuits	Order No.	PCB Thickness	Dimension		
			A	B	C
2	43160-2102	.062	21.08 (.830)	7.49 (.295)	3.81 (.150)
2	43160-4302	.093	21.08 (.830)	7.49 (.295)	5.33 (.210)
2	43160-6302	.125	21.08 (.830)	7.49 (.295)	5.33 (.210)
3	43160-2103	.062	28.58 (1.125)	14.99 (.590)	3.81 (.150)
3	43160-4303	.093	28.58 (1.125)	14.99 (.590)	5.33 (.210)
3	43160-6303	.125	28.58 (1.125)	14.99 (.590)	5.33 (.210)
4	43160-2104	.062	36.07 (1.420)	22.48 (.885)	3.81 (.150)
4	43160-4304	.093	36.07 (1.420)	22.48 (.885)	5.33 (.210)
4	43160-6304	.125	36.07 (1.420)	22.48 (.885)	5.33 (.210)
5	43160-2105	.062	43.56 (1.715)	29.97 (1.180)	3.81 (.150)
5	43160-4305	.093	43.56 (1.715)	29.97 (1.180)	5.33 (.210)
5	43160-6305	.125	43.56 (1.715)	29.97 (1.180)	5.33 (.210)
6	43160-2106	.062	51.05 (2.010)	37.47 (1.475)	3.81 (.150)
6	43160-4306	.093	51.05 (2.010)	37.47 (1.475)	5.33 (.210)
6	43160-6306	.125	51.05 (2.010)	37.47 (1.475)	5.33 (.210)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 6 circuits
- Wire-to-board
- Surface Mount Compatible
- Optional board lock features offered in 1.57, 2.36, and 3.18mm (.062, .093 and .125") lengths
- Positive lock
- Fully polarized

Reference Information

Product Specification: PS-44441-9999
 Packaging: Bag and tray
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: Applied for
 Mates With: 44441 housing
 Designed In: Inches

Electrical

Voltage: 1000V
 Current: 18.0A max.*
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 5000V
 Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5 lb max.
 Normal Force: 3 lb nominal
 Durability: 25 cycles

Physical

Housing: Black glass-filled nylon, UL 94V-0
 Contact: Brass
 Plating: Tin
 Operating Temperature: -40 to +75°C
 PCB Thickness: 1.57, 2.36, 3.18mm (.062, .093 and .125")

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.



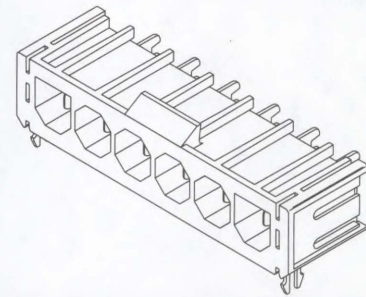
7.50mm (.295") Pitch

Sabre™

**Wire-to-Board
Header**

43160

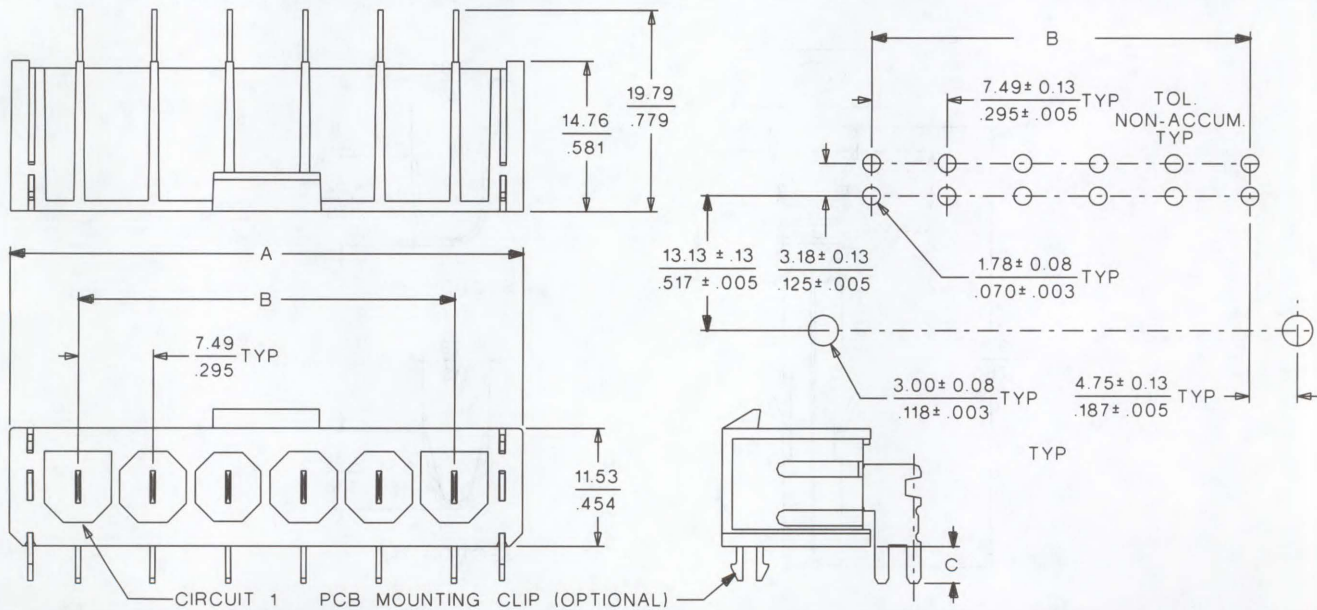
**Right Angle, Single Row, SMC
With and without Board Lock**



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Without Board Lock				
Circuits	Order No.	Dimension		
		A	B	C
2	43160-1102	21.08 (.830)	7.49 (.295)	3.81 (.150)
2	43160-1302	21.08 (.830)	7.49 (.295)	5.33 (.210)
3	43160-1103	28.58 (1.125)	14.99 (.590)	3.81 (.150)
3	43160-1303	28.58 (1.125)	14.99 (.590)	5.33 (.210)
4	43160-1104	36.07 (1.420)	22.48 (.885)	3.81 (.150)
4	43160-1304	36.07 (1.420)	22.48 (.885)	5.33 (.210)
5	43160-1105	43.56 (1.715)	29.97 (1.180)	3.81 (.150)
5	43160-1305	43.56 (1.715)	29.97 (1.180)	5.33 (.210)
6	43160-1106	51.05 (2.010)	37.47 (1.475)	3.81 (.150)
6	43160-1306	51.05 (2.010)	37.47 (1.475)	5.33 (.210)

With Board Lock					
Circuits	Order No.	PCB Thickness	Dimension		
			A	B	C
2	43160-3102	.062	21.08 (.830)	7.49 (.295)	3.81 (.150)
2	43160-5302	.093	21.08 (.830)	7.49 (.295)	5.33 (.210)
2	43160-7302	.125	21.08 (.830)	7.49 (.295)	5.33 (.210)
3	43160-3103	.062	28.58 (1.125)	14.99 (.590)	3.81 (.150)
3	43160-5303	.093	28.58 (1.125)	14.99 (.590)	5.33 (.210)
3	43160-7303	.125	28.58 (1.125)	14.99 (.590)	5.33 (.210)
4	43160-3104	.062	36.07 (1.420)	22.48 (.885)	3.81 (.150)
4	43160-5304	.093	36.07 (1.420)	22.48 (.885)	5.33 (.210)
4	43160-7304	.125	36.07 (1.420)	22.48 (.885)	5.33 (.210)
5	43160-3105	.062	43.56 (1.715)	29.97 (1.180)	3.81 (.150)
5	43160-5305	.093	43.56 (1.715)	29.97 (1.180)	5.33 (.210)
5	43160-7305	.125	43.56 (1.715)	29.97 (1.180)	5.33 (.210)
6	43160-3106	.062	51.05 (2.010)	37.47 (1.475)	3.81 (.150)
6	43160-5306	.093	51.05 (2.010)	37.47 (1.475)	5.33 (.210)
6	43160-7306	.125	51.05 (2.010)	37.47 (1.475)	5.33 (.210)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Cross tested to assure industry compatibility
- Can be terminated with Molex or commercially available terminating equipment
- Split pin (male) for reduced mating forces

Reference Information

Product Specification: PS-42022-0001

Packaging: Bag or reel

UL File No.: E29179

CSA File No.: LR19980

Use With: 42021 and 42022 housings

Designed In: Inches

Electrical

Voltage: 600V

Current: 13.5A

Contact Resistance: 3.5mΩ max.

Mechanical

Contact Insertion Force: 8.92N (2 lb)

Wire Pull-Out Force:

AWG	14	16	18	20
N (lb)	222 (50)	200 (45)	133 (30)	62 (14)

Mating Force: 6.68N (1.5 lb) max.

Unmating Force: 4.46 (0.5 lb) min.

Durability: Tin plating—25 mating/unmating cycles

Gold plating—50 mating/unmating cycles

Physical

Contact: Brass or Phosphor Bronze

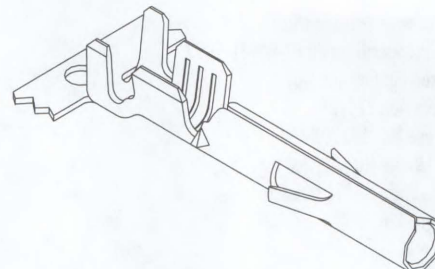
Plating: Tin

Operating Temperature: -55 to +105°C

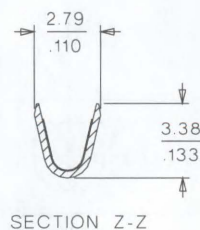
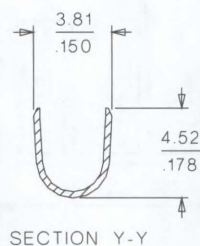
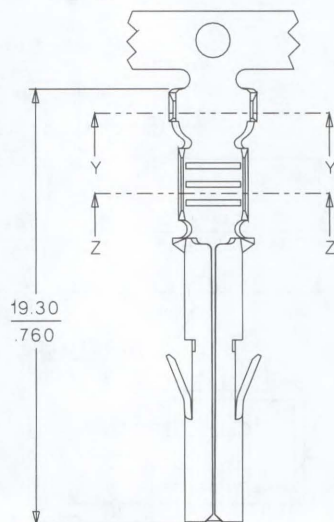


2.13mm (.084") Diameter MLX Pin and Socket Female Terminals

42024



MOUNTING HOLE DETAIL



ORDERING INFORMATION

Type	Plating	Wire Size AWG	Insulation Diameter	Series	Socket	
					Reel Form	Bag Form
Standard Brass .012"	Tin	14-20	1.52 (.060) min. 3.30 (.130) max.	42024	• 02-08-1001	• 02-08-1002
Phosphor Bronze .012"	Tin	14-20	1.52 (.060) min. 3.30 (.130) max.	42024	• 02-08-1003	• 02-08-1004

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Cross tested to assure industry compatibility
- Can be terminated with Molex or commercially available terminating equipment
- Split pin (male) for reduced mating forces

Reference Information

Product Specification: PS-42022-0001

Packaging: Bag or reel

UL File No.: E29179

CSA File No.: LR19980

Use With: 42021 and 42022 housings

Designed In: Inches

Electrical

Voltage: 600V

Current: 13.5A

Contact Resistance: 3.5mΩ max.

Mechanical

Contact Insertion Force: 8.92N (2 lb)

Wire Pull-Out Force:

AWG	14	16	18	20
N (lb)	222 (50)	200 (45)	133 (30)	62 (14)

Mating Force: 6.68N (1.5 lb) max.

Unmating Force: 4.46 (0.5 lb) min.

Durability: Tin plating—25 mating/unmating cycles

Gold plating—50 mating/unmating cycles

Physical

Contact: Brass or Phosphor Bronze

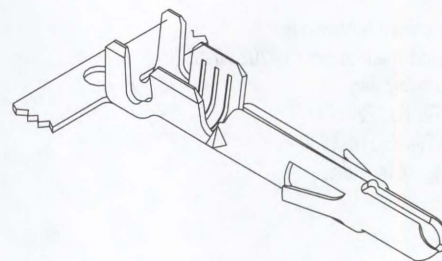
Plating: Tin

Operating Temperature: -55 to +105°C



2.13mm (.084") Diameter MLX Pin and Socket Male Terminals

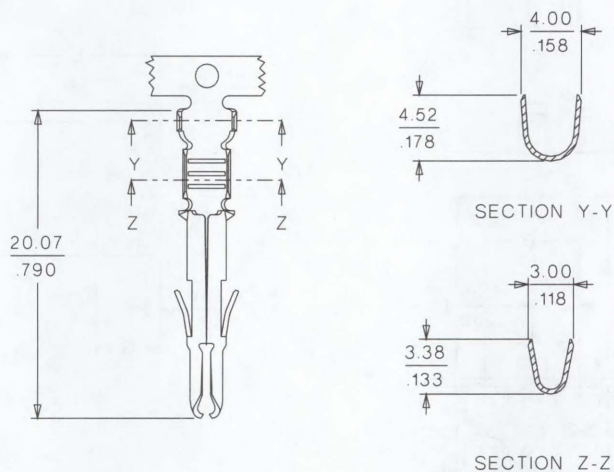
42023



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Type	Plating	Wire Size AWG	Insulation Diameter	Series	Split Pin	
					Reel Form	Bag Form
Standard Brass .012"	Tin	14-20	1.52 (.060) min. 3.30 (.130) max.	42023	• 02-08-2003	• 02-08-2004
Phosphor Bronze .012"	Tin	14-20	1.52 (.060) min. 3.30 (.130) max.	42023	• 02-08-2005	• 02-08-2006

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Intermateable, intermountable and interchangeable with industry-standard versions
- Cross tested to assure industry compatibility
- Positive locks
- Fully isolated contacts
- Circuit ID grooves to reduce assembly errors
- Anti-stress positioning tabs to reduce breakage

Reference Information

Product Specification: PS-42022-0001

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Designed In: Inches

Electrical

Voltage: 600V

Current:

Circuit	1	2	3	4	6	9	12	15
Amperes	13.5	13.5	13.5	13.5	11.0	11.0	11.0	11.0

Dielectric Withstanding Voltage: 2900V (Header),
5000V (Wire-To-Wire)

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 66.88N (15 lb)

Physical

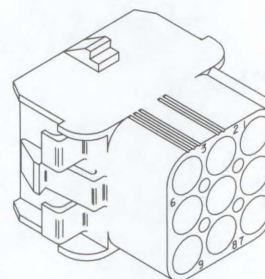
Cap Housing: Nylon, 94V-2 or 94V-0

Operating Temperature: -55 to +105°C

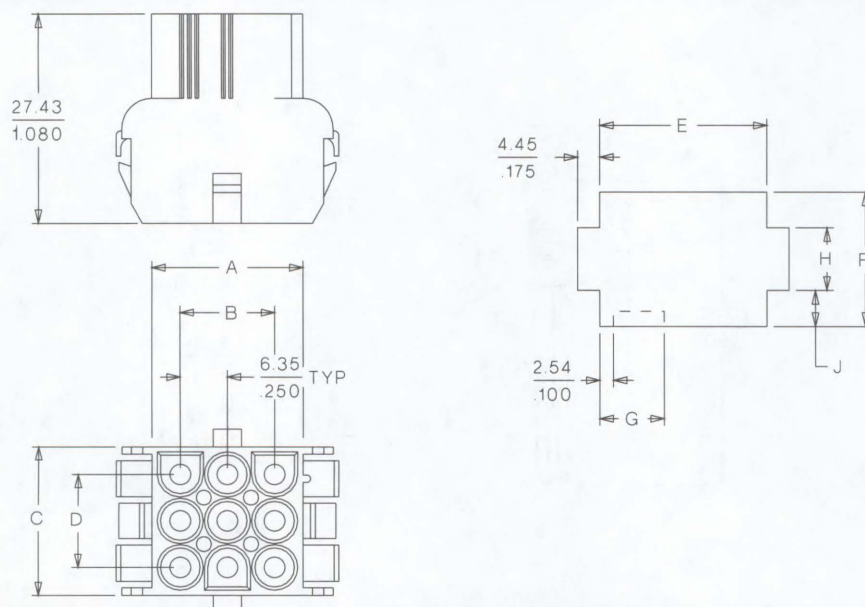


2.13mm (.084") Diameter MLX Pin and Socket Receptacle

42022



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension								
	94V-2 (White)	94V-0 (Brick Red)	94V-0 (White)	A	B	C	D	E	F	G	H	J
1	50-84-2010	50-84-2011	50-84-2012	9.65 (.380)		9.65 (.380)						
2	• 50-84-2020	• 50-84-2021	50-84-2022	7.62 (.300)		13.97 (.550)	6.35 (.250)	14.35 (.565)	13.46 (.530)	6.35 (.250)	8.64 (.340)	2.41 (.095)
3	• 50-84-2030	• 50-84-2031	50-84-2032	7.62 (.300)		20.32 (.800)	12.70 (.500)	20.70 (.815)	13.46 (.530)	6.35 (.250)	8.64 (.340)	2.41 (.095)
4	• 50-84-2040	• 50-84-2041	50-84-2042	7.62 (.300)		26.67 (1.050)	19.05 (.750)	27.05 (1.065)	13.46 (.530)	6.35 (.250)	8.64 (.340)	2.41 (.095)
6	• 50-84-2060	• 50-84-2061	50-84-2062	20.32 (.800)	12.70 (.500)	13.97 (.550)	6.35 (.250)	14.35 (.565)	26.16 (1.030)	6.35 (.250)	12.19 (.480)	6.99 (.275)
9	• 50-84-2090	• 50-84-2091	50-84-2092	20.32 (.800)	12.70 (.500)	20.32 (.800)	12.70 (.500)	20.70 (.815)	26.16 (1.030)	6.35 (.250)	12.19 (.480)	6.99 (.275)
12	50-84-2120	50-84-2121	50-84-2122	20.32 (.800)	12.70 (.500)	26.67 (1.050)	19.05 (.750)	27.05 (1.065)	26.16 (1.030)	8.89 (.350)	12.19 (.480)	6.99 (.275)
15	50-84-2150	50-84-2151	50-84-2152	20.32 (.800)	12.70 (.500)	33.02 (1.300)	25.40 (1.000)	33.40 (1.315)	26.16 (1.030)	8.89 (.350)	12.19 (.480)	6.99 (.275)

• US Standard Product, available through Molex franchised distributors

* Cap housing should be installed into panel in the same direction as the panel cutout is punched

FEATURES AND SPECIFICATIONS

Features and Benefits

- Intermateable, intermountable and interchangeable with industry-standard versions
- Cross tested to assure industry compatibility
- Positive locks
- Fully isolated contacts
- Circuit ID grooves to reduce assembly errors
- Anti-stress positioning tabs to reduce breakage

Reference Information

Product Specification: PS-42022-0001

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: 42002 header, 42022 cap and 43255 header

Designed In: Inches

Electrical

Voltage: 600V

Current:

Circuit	1	2	3	4	6	9	12	15
Amperes	13.5	13.5	13.5	13.5	11.0	11.0	11.0	11.0

Dielectric Withstanding Voltage: 2900V (Header),
5000V (Wire-To-Wire)

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 66.88N (15 lb)

Physical

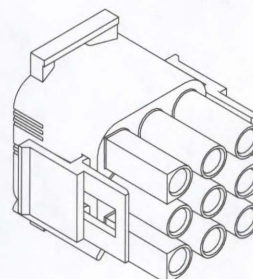
Plug Housing: Nylon, 94V-2 or 94V-0

Operating Temperature: -55 to +105°C



2.13mm (.084") Diameter MLX Pin and Socket Plug

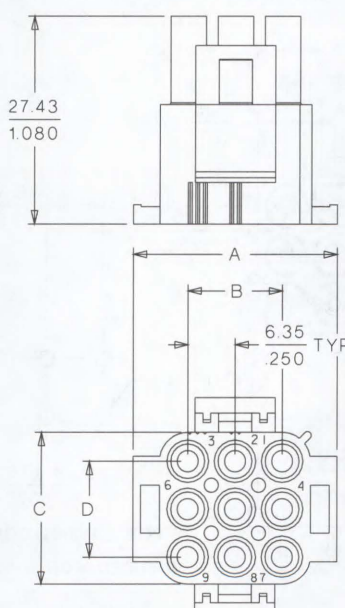
42021



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Amperes/Circuit* (Max.)	Order No.			Dimension			
		94V-2 (White)	94V-0 (Brick Red)	94V-0 (White)	A	B	C	D
1	13.5	• 50-84-1010	• 50-84-1011	50-84-1015	7.37 (.290)		7.37 (.290)	
2	13.5	• 50-84-1020	• 50-84-1021	50-84-1025	14.73 (.580)		13.97 (.550)	6.35 (.250)
3	13.5	• 50-84-1030	• 50-84-1031	50-84-1035	14.73 (.580)		20.32 (.800)	12.70 (.500)
4	13.5	• 50-84-1040	• 50-84-1041	50-84-1045	14.73 (.580)		26.67 (1.050)	19.05 (.750)
6	11	• 50-84-1060	• 50-84-1061	50-84-1065	27.43 (1.080)	12.70 (.500)	13.97 (.550)	6.35 (.250)
9	11	• 50-84-1090	• 50-84-1091	50-84-1095	27.43 (1.080)	12.70 (.500)	20.32 (.800)	12.70 (.500)
12	11	50-84-1120	50-84-1121	50-84-1125	27.43 (1.080)	12.70 (.500)	26.67 (1.050)	19.05 (.750)
15	11	50-84-1150	50-84-1151	50-84-1155	27.43 (1.080)	12.70 (.500)	33.02 (1.300)	25.40 (1.000)

* US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Intermateable, intermountable and interchangeable with industry-standard versions
- Cross tested to assure industry compatibility
- Positive locks
- Fully isolated contacts

Reference Information

Product Specification: PS-42022-0001

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

Designed In: Inches

Electrical

Voltage: 600V*

Current: 13.5A*

Circuit	2	3	4	6	9	12	15
Ampere	13.5	13.5	13.5	11.0	11.0	11.0	11.0

Contact Resistance: 3.5mΩ max.

Dielectric Withstanding Voltage: 2900V

Insulation Resistance: 1000 MΩ min.

Physical

Header Housing: See Table

Header Contact: Phosphor Bronze

Plating: Tin

Operating Temperature: -55 to +105°C



2.13mm (.084") Diameter

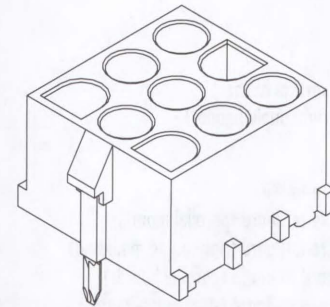
MLX

Power Connector

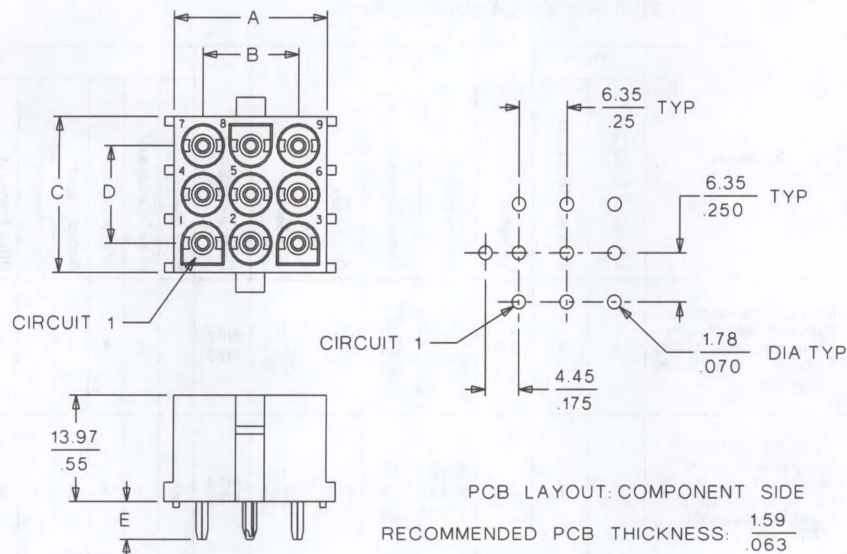
Header

43255

Vertical
Polarizing Peg



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.						Dimension				
	UL 94V-2		UL 94V-0				A	B	C	D	E
	White		White		Brick Red						
	Male	Female	Male	Female	Male	Female					
2	43255-0113	43255-0115	43255-0059	43255-0003	43255-0001	43255-0057	7.62 (.300)		13.97 (.550)	6.35 (.250)	4.30 (.170)
3	43255-0121	43255-0123	43255-0067	43255-0011	43255-0009	43255-0065	7.62 (.300)		20.32 (.800)	12.70 (.500)	4.30 (.170)
4	43255-0129	43255-0131	43255-0075	43255-0019	43255-0017	43255-0073	7.62 (.300)		26.67 (1.050)	19.05 (.750)	4.30 (.170)
6	43255-0137	43255-0139	43255-0083	43255-0027	43255-0025	43255-0081	30.32 (.800)	12.70 (.500)	13.97 (.550)	6.35 (.250)	4.30 (.170)
9	43255-0145	43255-0147	43255-0091	43255-0035	43255-0033	43255-0089	30.32 (.800)	12.70 (.500)	20.32 (.800)	12.70 (.500)	4.30 (.170)
12	43255-0153	43255-0155	43255-0099	43255-0043	43255-0041	43255-0097	30.32 (.800)	12.70 (.500)	26.67 (1.050)	19.05 (.750)	4.30 (.170)
15	43255-0161	43255-0163	43255-0107	43255-0051	43255-0049	43255-0105	30.32 (.800)	12.70 (.500)	33.02 (1.300)	25.40 (1.000)	4.30 (.170)

* US Standard Product, available through Molex franchised distributors

* Ratings are per circuit, based on fully loaded housings

Welcome to the world of Mini-Fit. The Mini-Fit Family of high current/high density power connectors is designed to meet your specific requirements by offering the broadest range of configurations and options. The Mini-Fit Family allows you the greatest design flexibility in your product's connection system, allowing you to connect by wire-to-wire, wire-to-board and board-to-board. Each Mini-Fit Family can be intermated with one another, except for the Mini-Fit, TPA, which is designed specifically for applications requiring a redundant terminal retention feature. The Mini-Fit Family allows you the greatest design flexibility in your product's interconnection system, allowing you to interconnect:

Mini-Fit, Jr.TM

- Wire-to-Wire
- Wire-to-Board (vertical header)
- Wire-to-Board (right angle header)

Mini-Fit, BMITM

- Blind Mating Wire-to-Wire
- Blind Mating Wire-to-Board (parallel mounting)
- Blind Mating Wire-to-Board (right angle mounting)
- Blind Mating Board-to-Board (parallel boards)
- Blind Mating Board-to-Board (right angle boards)

Mini-Fit, TPATM

- Wire-to-Wire with Secondary Terminal Retention (TPA)

- Wire-to-Board (vertical header) with TPA
- Wire-to-Board (right angle header) with TPA
- Secondary housing lock (CPA)

Mini-Fit, HCSTM

- High Current System
- Capable of carrying up to 12.0A per circuit
- Available in all existing Mini-Fit housing configurations

Mini-Fit, SMCTM

- Surface mount compatible connector
- Patented metal retention clip

Mini-Fit, CPITM

- Press-fit pin requires no soldering

The Mini-Fit product family accepts the same terminals and application tooling, further reducing your design and qualification effort.

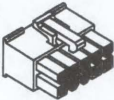
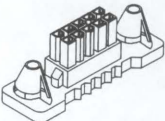
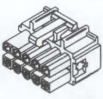
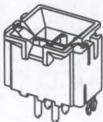
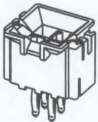
The Mini-Fit Family also features:

- Current rating up to 9.0A per circuit standard
- Capable of 12.0A per circuit with HCS
- 600V rating
- Positive housing locks
- Fully isolated terminals
- Low engagement force terminals
- Available in 94V-2 and 94V-0 materials
- UL recognized, CSA certified, TUV licensed

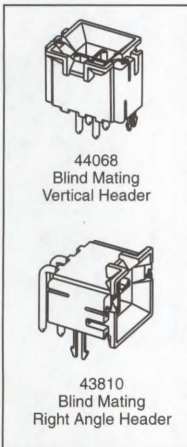


4.20mm (.165") Pitch

Mini-FitTM Family High Current/High Density Power Connector System

Product	Drawing	Description	Current		Voltage	Configurations	Agency Approvals	Circuit Sizes	Wire Gauges	Flammability Rating	Applications												
			At Smallest Circuit Size	At Largest Circuit Size							Home Appliance	Home Entertainment	Telecommunication	Medical Industry	Marine Industry	Office Equipment	Automotive Aftermarket	Computer Industry	Communications Equipment	Industrial Equipment	Game Industry	Automation Merchandise	Security Systems
Jr.		Mini-Fit, Jr. is a high-current/high-density power connector offering great design flexibility for W-to-W and W-to-B housing configurations.	9	6	600	W-to-W W-to-B	UL CSA TUV	3, 4, 5, 2-24	16, 18-24, 22-28	94V-0, 94V-2	X	X	X	X			X	X		X	X	X	X
BMI		Mini-Fit, BMI (Blind Mate Interface) connectors are designed for applications requiring the blind mating of modules, subassemblies or PCBs.	9	6	600	W-to-W W-to-B B-to-B	UL CSA TUV	4, 6, 10, 14-24, 36, 40	16, 18-24, 22-28	94V-0, 94V-2	X	X	X	X	X	X	X	X	X	X	X	X	X
TPA		Mini-Fit, TPA (Terminal Position Assurance) allows terminals to be fully seated in the housing, assuring that they will not back out, providing added security with a secondary locking mechanism.	9	6	600	W-to-W W-to-B	UL CSA TUV	2-16	16, 18-24, 22-28	94V-0	X	X	X	X	X	X	X	X	X	X	X	X	X
HCS		Mini-Fit, HCS (High Current System) is capable of carrying up to 12A per circuit and fits into all existing Mini-Fit housing configurations except TPA housings.	12	9	600	W-to-W W-to-B B-to-B	UL CSA TUV	3, 4, 5, 2-24, 36, 40	16, 18, 20	94V-0, 94V-2	X	X	X	X			X	X		X	X	X	X
SMC		Mini-Fit, SMC (Surface Mount Compatible) is made of material that resists high temperatures, which allows it to withstand the wave/IR soldering processes.	9	6	600	W-to-W W-to-B B-to-B	UL CSA TUV	4, 6, 10, 18, 24	16, 18-24, 22-28	94V-0	X	X	X	X			X	X		X	X	X	X
CPI		Mini-Fit, CPI (Compliant Pin Interface) offers a unique compliant pin design, which requires no soldering.	8	5	600	W-to-W W-to-B B-to-B	UL CSA TUV	4, 6, 10, 18, 24	16, 18-24, 22-28	94V-0	X	X	X	X			X	X		X	X	X	X

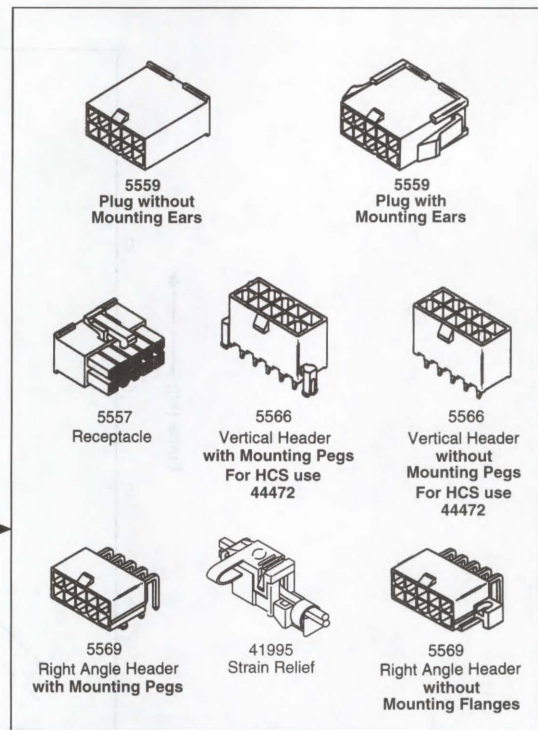
molex® Mini-Fit™ Family
High Current/High Density
Power Connector System



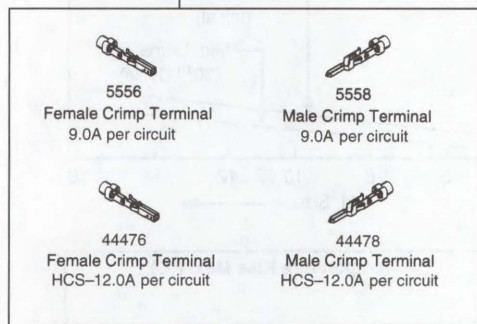
Mini-Fit, SMC™



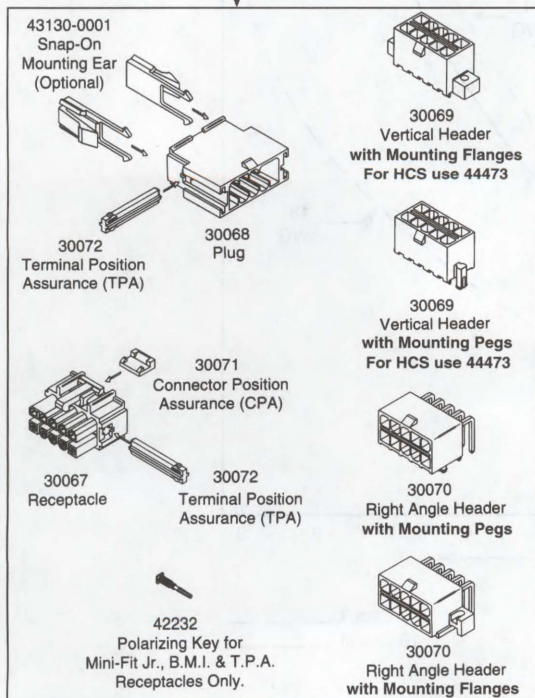
Mini-Fit, CPI™



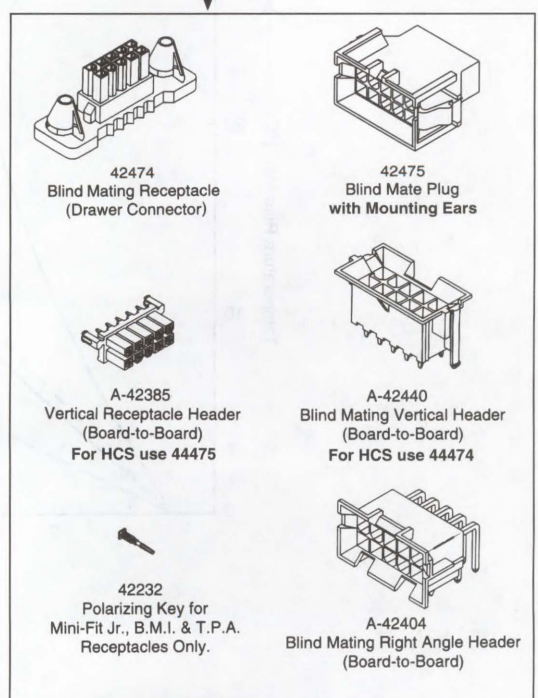
Mini-Fit, Jr.™



Terminals



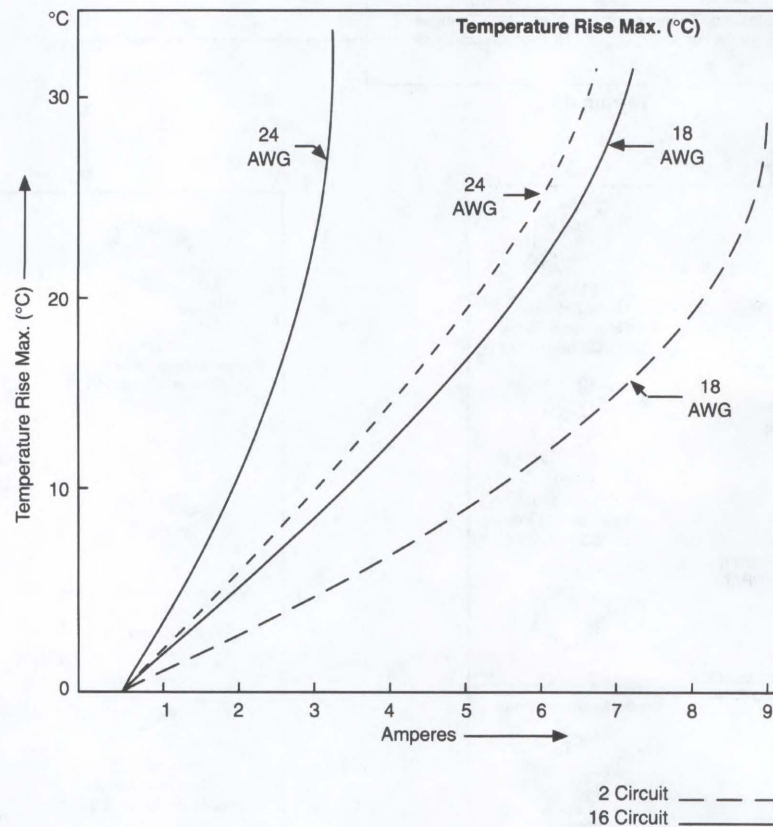
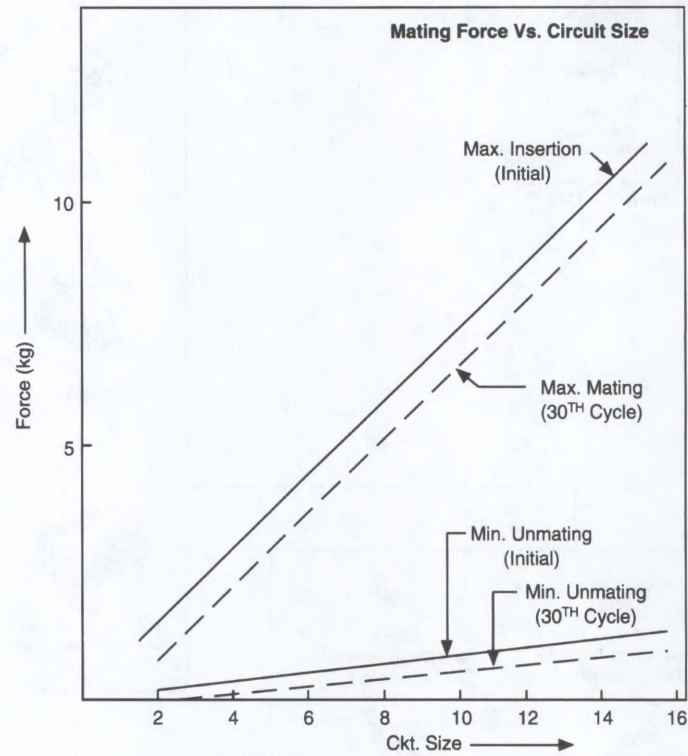
Mini-Fit, TPA™



Mini-Fit, BMI™



Mini-Fit™ Family High Current/High Density Power Connector System



FEATURES AND SPECIFICATIONS

Features and Benefits

- Crimp terminal for use in all Mini-Fit, Jr., BMI and TPA receptacle housings
- Four gas-tight points of contact on Tin-plated contacts
- HCS offers 3 additional amperes of current

Reference Information

Packaging: Reel or bag
Use With: 5557, 30067 and 42474 housings
Designed In: Millimeters

Electrical

Voltage: 600V
Current:
Standard—9.0A
HCS—12.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 1.5kg max.
Contact Retention to Housing: 3.0kg min.
Wire Pull-Out Force: 9.0kg min.
Insertion Force to PCB: 5.0kg max.
Mating Force: 0.7kg (1.54 lb) max.
Unmating Force: 0.35kg (0.7 lb) min.
Normal Force: 200g min.
Durability: 30 cycles

Physical

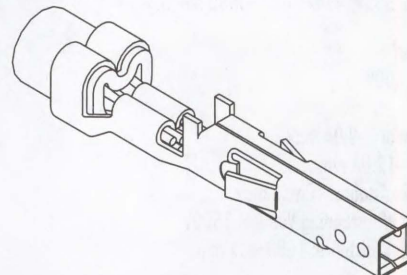
Contact: 5556—Brass or Phosphor Bronze
44476—High Copper Alloy
*Plating: See Table
Operating Temperature: -40 to 105° C
Strip Length: 3.0 (.118) to 3.5mm (.138")



4.20mm (.165") Pitch Mini-Fit™ Family Terminal

5556/44476

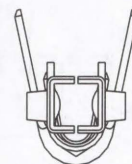
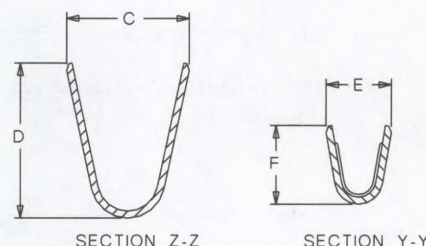
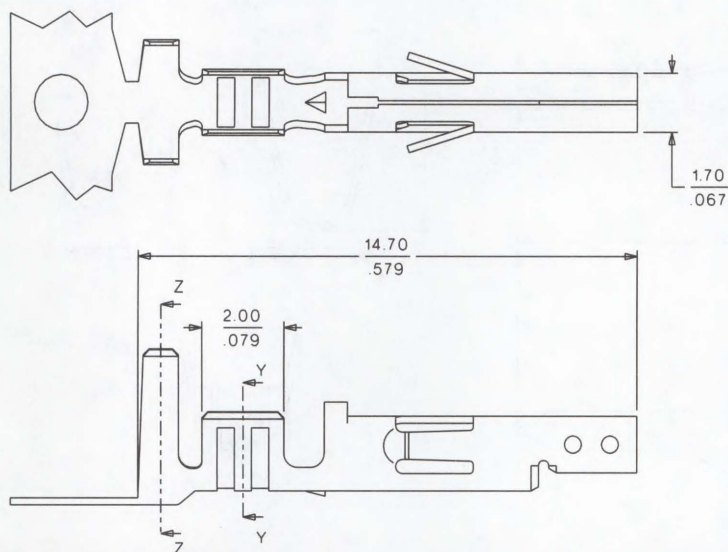
Crimp, Female



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Plating*	Wire Size (AWG)	Insulation Range	Order No. 5556		Order No. 44476		Dimension			
			Reel	Bag	Reel	Bag	C	D	E	F
Brass (Pre-plated Tin over Copper)	16	1.80-3.10 (.071-.122)	• 39-00-0077	• 39-00-0078			3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	1.30-3.10 (.051-.122)	• 39-00-0038	• 39-00-0039			3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	0.90-1.80 (.035-.071)	• 39-00-0046	• 39-00-0047			2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Brass (Pre-plated Gold over Nickel)	16	1.80-3.10 (.071-.122)	• 39-00-0089	• 39-00-0090			3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	1.30-3.10 (.051-.122)	• 39-00-0055	• 39-00-0056			3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	0.90-1.80 (.035-.071)	• 39-00-0085	• 39-00-0086			2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Brass* or Copper† (Post-plated Tin over Nickel)	16	1.80-3.10 (.071-.122)	• 39-00-0211*	• 39-00-0212*	44476-3111	44476-3112	3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	1.30-3.10 (.051-.122)	• 39-00-0207*	• 39-00-0208*	44476-1111†	44476-1112†	3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	0.90-1.80 (.035-.071)	• 39-00-0209*	• 39-00-0210*			2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Brass (Post-plated Gold over Nickel)	16	1.80-3.10 (.071-.122)	• 39-00-0167	• 39-00-0168			3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	1.30-3.10 (.051-.122)	• 39-00-0163	• 39-00-0164			3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	0.90-1.80 (.035-.071)	• 39-00-0165	• 39-00-0166			2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Phosphor Bronze (Pre-plated Tin)	16	1.80-3.10 (.071-.122)	• 39-00-0079	• 39-00-0080			3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	1.30-3.10 (.051-.122)	• 39-00-0059	• 39-00-0060			3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	0.90-1.80 (.035-.071)	• 39-00-0065	• 39-00-0066			2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Phosphor Bronze (Pre-plated Gold over Nickel)	16	1.80-3.10 (.071-.122)	• 39-00-0157	• 39-00-0158			3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	1.30-3.10 (.051-.122)	• 39-00-0153	• 39-00-0154			3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	0.90-1.80 (.035-.071)	• 39-00-0155	• 39-00-0156			2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Phosphor Bronze (Post-plated Tin over Nickel)	16	1.80-3.10 (.071-.122)	• 39-00-0217	• 39-00-0218			3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	1.30-3.10 (.051-.122)	• 39-00-0213	• 39-00-0214			3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	0.90-1.80 (.035-.071)	• 39-00-0215	• 39-00-0216			2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Phosphor Bronze (Post-plated Gold over Nickel)	16	1.80-3.10 (.071-.122)	• 39-00-0185	• 39-00-0186			3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	1.30-3.10 (.051-.122)	• 39-00-0181	• 39-00-0182			3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	0.90-1.80 (.035-.071)	• 39-00-0183	• 39-00-0184			2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)

* US Standard Product, available through Molex franchised distributors

† 18 to 20 AWG

* Tin-plated terminals have 4 points of contact. Gold plated terminals have 2 points of contact.

FEATURES AND SPECIFICATIONS

Features and Benefits

- Crimp terminal for use in all Mini-Fit, Jr., BMI and TPA plug housings
- Four gas-tight points of contact on Tin-plated contacts
- HCS offers 3 additional amperes of current

Reference Information

Packaging: Reel or bag
Use With: 5559, 42475 and 30068 housings

Electrical

Voltage: 600V

Current:

Standard—9.0A max.

HCS—12.0A max.

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 1.5kg max.

Contact Retention to Housing: 3.0kg min.

Wire Pull-Out Force: 9.0kg min.

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Contact: 5558—Brass or Phosphor Bronze

44478—High Copper Alloy

Plating: See Table

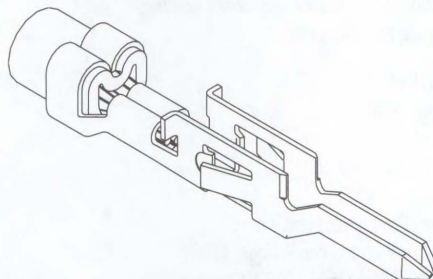
Operating Temperature: -40 to +105°C

Strip Length: 3.0 (.118) to 3.5mm (.138") max.

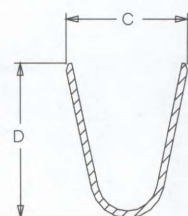
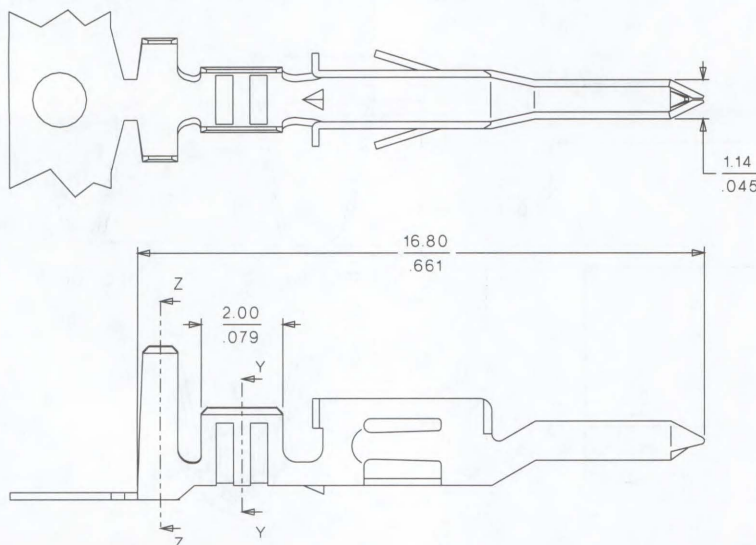
molex® 4.20mm (.165") Pitch Mini-Fit™ Family Terminal

5558/44478

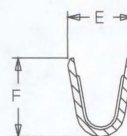
Crimp, Male



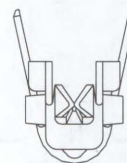
CATALOG DRAWING (FOR REFERENCE ONLY)



SECTION Z-Z



SECTION Y-Y



ORDERING INFORMATION AND DIMENSIONS

Plating	Wire Size (AWG)	Order No. 5558		Order No. 44478		Dimension			
		Reel	Bag	Reel	Bag	C	D	E	F
Brass (Pre-plated Tin over Copper)	16	• 39-00-0081	• 39-00-0082			3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	• 39-00-0040	• 39-00-0041			3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	• 39-00-0048	• 39-00-0049			2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Brass (Pre-plated Gold over Nickel)	16					3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24					3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28					2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Brass* or Copper† (Post-plated Tin over Nickel)	16	• 39-00-0124*	• 39-00-0125*	44478-3111	44478-3112	3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	• 39-00-0120*	• 39-00-0121*			3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	• 39-00-0122*	• 39-00-0123*	44478-1111‡	44478-1112‡	2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Brass (Post-plated Gold over Nickel)	16	• 39-00-0095	• 39-00-0096			3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	• 39-00-0053	• 39-00-0054			3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	• 39-00-0087	• 39-00-0088			2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Phosphor Bronze (Pre-plated Tin)	16	• 39-00-0083	• 39-00-0084			3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	• 39-00-0061	• 39-00-0062			3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	• 39-00-0067	• 39-00-0068			2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Phosphor Bronze (Pre-plated Gold over Nickel)	16					3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24					3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28					2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Phosphor Bronze (Post-plated Tin over Nickel)	16	• 39-00-0130	• 39-00-0131			3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	• 39-00-0126	• 39-00-0127			3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	• 39-00-0128	• 39-00-0129			2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Phosphor Bronze (Post-plated Gold over Nickel)	16	• 39-00-0223	• 39-00-0224			3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	• 39-00-0219	• 39-00-0220			3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	• 39-00-0221	• 39-00-0222			2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)

* US Standard Product, available through Molex franchised distributors

‡ 18-20 AWG

FEATURES AND SPECIFICATIONS

Features and Benefits

- High cycle terminal for power/signal applications
- Can be used in all Mini-Fit family applications/configurations
- Gold plating for high reliability
- Ideal for rack-mounted or drawer connecting modules requiring multiple insertions

Reference Information

Product Specification: PSX-44485-0001

Packaging: Reel

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 5558 terminals and all Mini-Fit family header systems

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 9.0A

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 1.5kg max.

Contact Retention to Housing: 3.0kg min.

Wire Pull-Out Force: 9.0kg min.

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 100 cycles

Physical

Contact: Phosphor Bronze

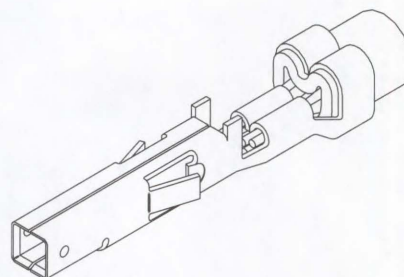
Plating: Select Gold

Operating Temperature: -40 to +105°C

molex® 4.20mm (.165") Pitch Mini-Fit™ Family Terminal

44485

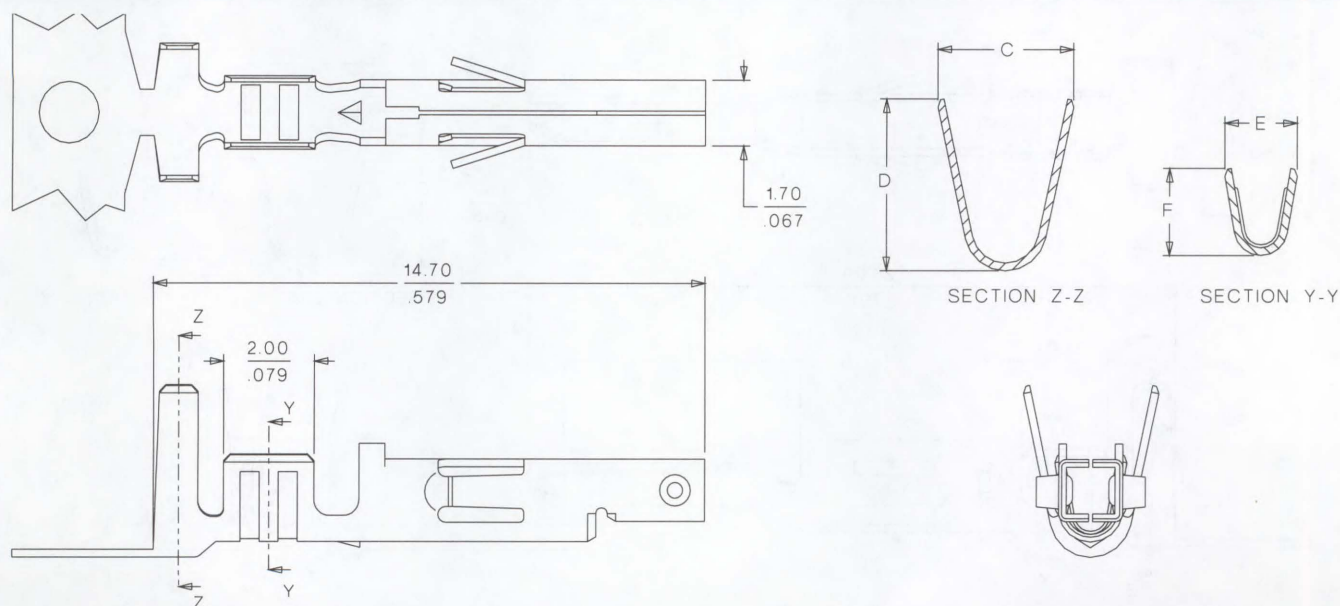
High Cycle



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Wire Size AWG	Dimension			
		C	D	E	F
44485-1211	18-24	3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)

FEATURES

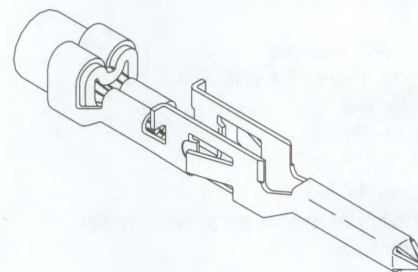
Features and Benefits

- For use in 5559 and 30068 housings
- Provides option of grounding pins in select locations
- Mates with 5556 terminals
- Cannot be used in BMI 42475 plug

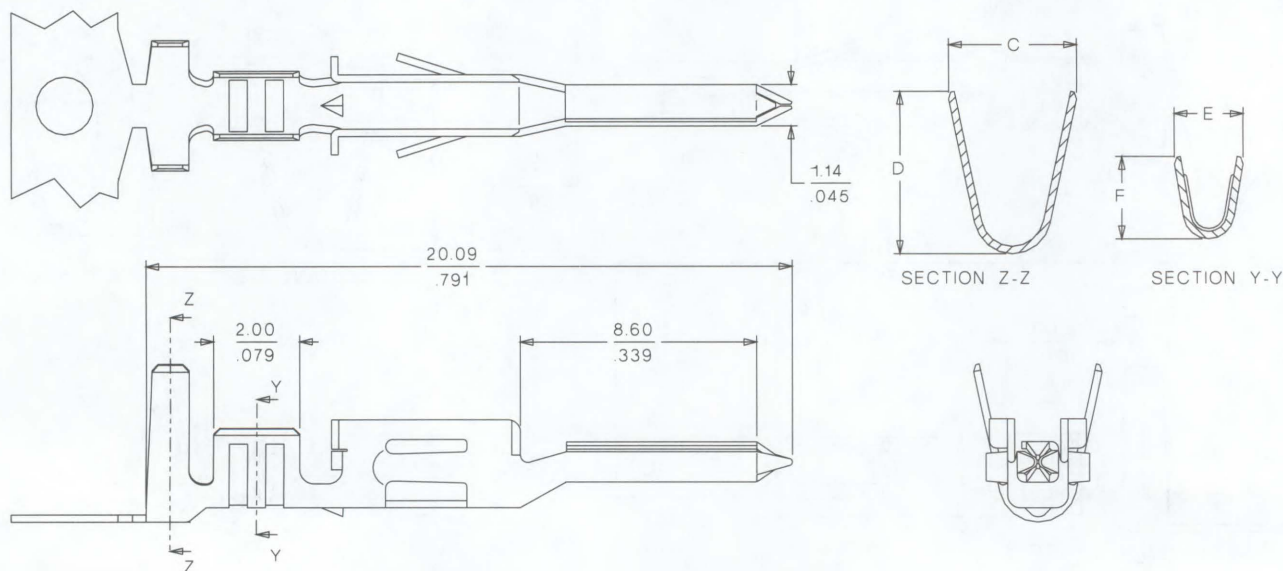


4.20mm (.165") Pitch Mini-Fit™ Family Grounding Pin

30490



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Plating	Wire Size (AWG)	Insulation Range	Order No.				Dimension			
			Reel		Bag		C	D	E	F
			Male	Female	Male	Female				
Phosphor Bronze (Post Plated Tin Over Nickel)	16	1.80-3.10 (.071-.122)					3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	1.30-3.10 (.051-.122)	• 30490-2002		• 30490-2012		3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	0.90-1.80 (.035-.071)					2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)
Phosphor Bronze (Post Plated 30μ Select Gold)	16	1.80-3.10 (.071-.122)					3.60 (.142)	4.50 (.177)	2.30 (.091)	2.70 (.106)
	18-24	1.30-3.10 (.051-.122)	• 30490-1002		• 30490-1012		3.60 (.142)	4.50 (.177)	1.90 (.075)	2.30 (.091)
	22-28	0.90-1.80 (.035-.071)					2.30 (.091)	2.30 (.091)	1.80 (.071)	1.65 (.065)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Low profile design to accommodate height constraints
- Fully isolated terminals to protect contacts from damage
- Uses standard Mini-Fit series terminals

Reference Information

Product Specification: PS-5556-0001

Packaging: Tray or bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 5559, 5566 and 5569 single row connectors and 71233 right angle headers

Use With: 5556 or 44476 terminals

Designed In: Millimeters

Mechanical

Contact Insertion Force: 1.5kg max.
Contact Retention to Housing: 3.0kg min.
Wire Pull-Out Force: 9.0kg min.
Insertion Force to PCB: 5.0kg max.
Mating Force: 0.7kg (1.54 lb) max.
Unmating Force: 0.05kg (0.11 lb) min.
Normal Force: 200g min.
Durability: 30 cycles

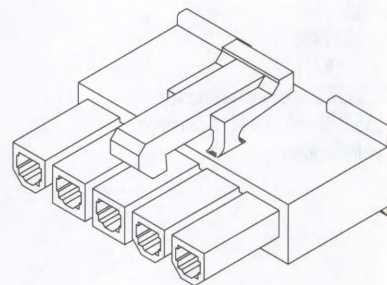
Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0
Contact: Brass or Phosphor Bronze
Plating: Tin, select Gold or overall Gold
Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch Mini-Fit, Jr.™ Receptacle

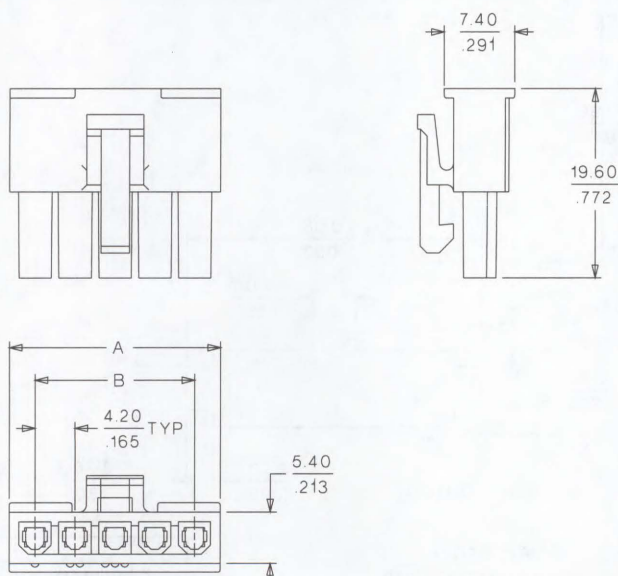
5557 Single Row



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



Order No.
15-04-0211
Polarizing Key

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	94V-2	94V-0	A	B
3*	39-01-4030	39-01-4031	13.80 (.543)	8.40 (.331)
4	39-01-4040	39-01-4041	18.00 (.709)	12.60 (.496)
5	39-01-4050	39-01-4051	22.20 (.874)	16.80 (.661)

• US Standard Product, available through Molex franchised distributors

* 3-circuit receptacle designed for first-mate/last-break applications

FEATURES AND SPECIFICATIONS

Features and Benefits

- Wire-to-wire plug for panel-mounted or free-hanging applications
- Available with and without panel mounting ears
- Positive housing locks to mate with Mini-Fit, Jr. receptacle
- Fully isolated terminals to protect contacts from damage
- Uses standard Mini-Fit series terminals

Reference Information

Product Specification: PS-5556-0001
 Packaging: Tray or bag
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R75142
 Mates With: 5557 single row receptacle
 Use With: 5558, 30490 or 44478 terminals
 Designed In: Millimeters

Mechanical

Contact Insertion Force: 1.5kg max.
 Contact Retention to Housing: 3.0kg min.
 Wire Pull-Out Force: 9.0kg min.
 Insertion Force to PCB: 5.0kg max.
 Mating Force: 0.7kg (1.54 lb) max.
 Unmating Force: 0.35kg (0.7 lb) min.
 Normal Force: 200g min.
 Durability: 30 cycles

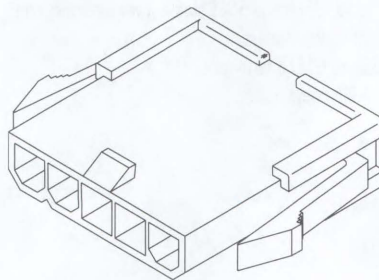
Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0
 Contact: Brass or Phosphor Bronze
 Plating: Tin, select Gold or overall Gold
 Operating Temperature: -40 to +105°C

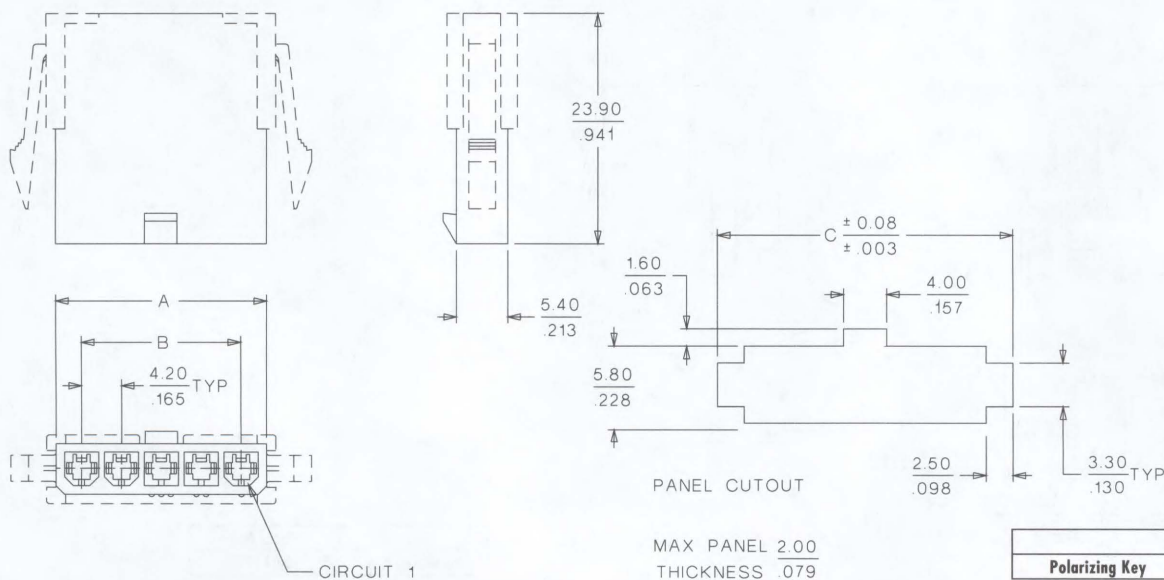
molex® 4.20mm (.165") Pitch Mini-Fit, Jr.™ Plug

5559

Single Row, With and Without Panel Mount Ears



CATALOG DRAWING (FOR REFERENCE ONLY)



Polarizing Key	Order No.
	15-04-0211

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Panel Mount		Free Hanging		A	B	C
	94V-2	94V-0	94V-2	94V-0			
3*	• 39-01-4032	• 39-01-4033	• 39-01-4036	• 39-01-4037	13.80 (.543)	8.40 (.331)	19.20 (.756)
4			• 39-01-4046		18.00 (.709)	12.60 (.496)	23.40 (.921)
5	• 39-01-4052	• 39-01-4053	• 39-01-4056	• 39-01-4057	22.20 (.847)	16.80 (.661)	27.60 (1.087)

• US Standard Product, available through Molex franchised distributors

* 3-circuit plug designed for first-mate/last-break applications

FEATURES AND SPECIFICATIONS

Features and Benefits

- Positive housing locks to mate with Mini-Fit, Jr. single row receptacles 5557
- Fully isolated terminals to protect contacts from damage
- Peg-mounted vertical headers for increased board retention
- Drain hole option available in vertical headers

Reference Information

Product Specification: PS-5556-0001

Packaging: Tray or bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 5557 single row receptacle

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6

Electrical (cont'd)

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 1.5kg max.

Contact Retention to Housing: 3.0kg min.

Wire Pull-Out Force: 9.0kg min.

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0

Contact: Brass or Phosphor Bronze

Plating: Tin, select Gold or overall Gold

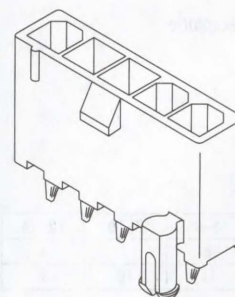
Operating Temperature: -40 to +105°C



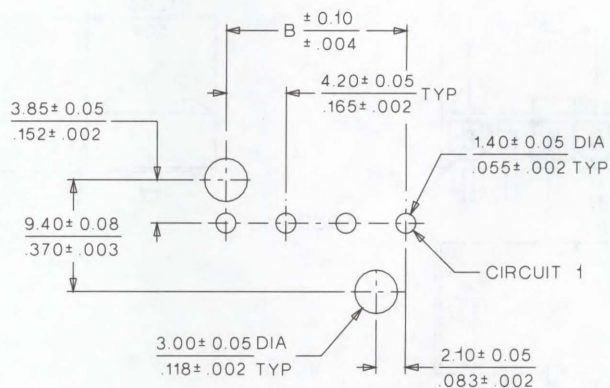
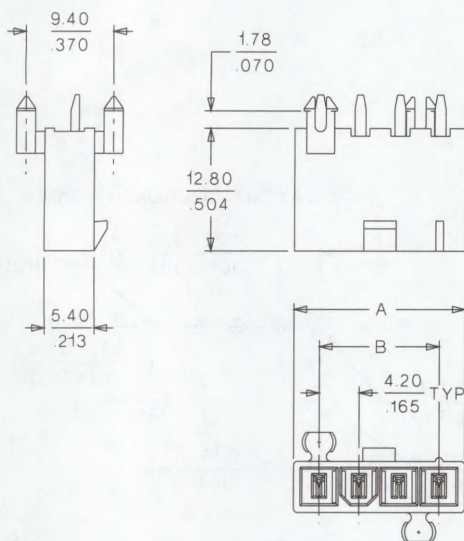
4.20mm (.165") Pitch Mini-Fit, Jr.™ Header

5566

Vertical, Single Row With Pegs



CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS: $\frac{1.78}{.070}$ MAX

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Drain Holes	Dimension	
	Tin Plated		Gold Plated (30μ")			A	B
	94V-2	94V-0	94V-2	94V-0			
3	• 39-30-1039	• 39-30-2030	• 39-30-2031	• 39-30-2032	No	13.80 (.543)	8.40 (.331)
	• 39-30-2035	• 39-30-2036	• 39-30-2037	• 39-30-2038	Yes		
4					No	18.00 (.709)	12.60 (.496)
	• 39-30-2045		• 39-30-2047		Yes		
5		• 39-30-2050		• 39-30-2052	No	22.20 (.874)	16.80 (.661)
		• 39-30-2056		• 39-30-2058	Yes		

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Pegs provide increased board retention
- Ideal for low profile power applications
- Positive housing locks to mate with Mini-Fit, Jr. single row receptacles 5557
- Fully isolated terminals to protect contacts from damage

Reference Information

Product Specification: PS-5556-0001

Packaging: Tray or bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: 5557 single row receptacle

TUV License No.: R75142

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6
Amperes-HCS	12	11	10	9

Electrical (cont'd)

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 49N (11.01 lb) max.

Mating Force: 6.9N (1.54 lb) max.

Unmating Force: 3.4N (0.7 lb) min.

Durability: 30 cycles

Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0

Contact: Brass

Plating: Tin, select Gold or overall Gold

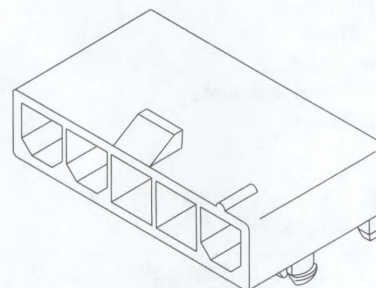
Operating Temperature: -40 to +105°C



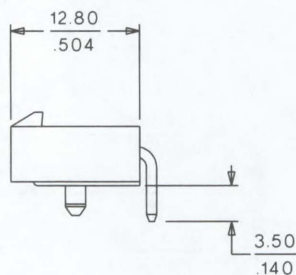
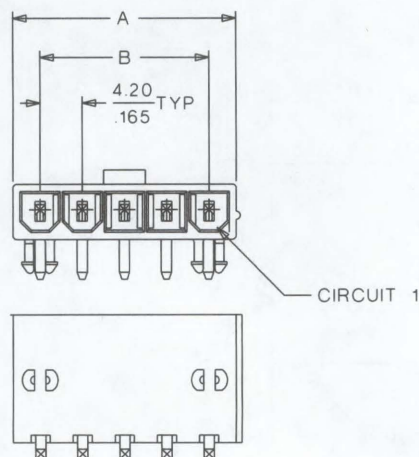
4.20mm (.165") Pitch Mini-Fit, Jr.™ Header

5569

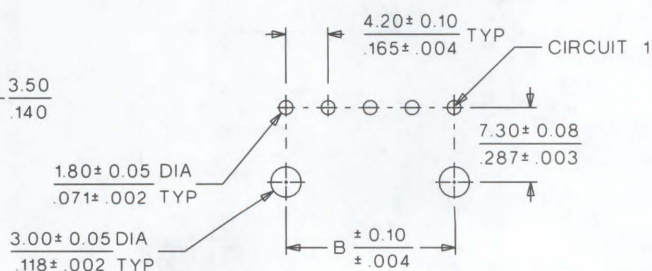
Right Angle, Single Row With Pegs



CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS $\frac{1.78}{.070}$ MAX

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension	
	Tin Plated		Gold Plated		A	B
	94V-2	94V-0	94V-2	94V-0		
3	• 39-30-3035	• 39-30-3036	• 39-30-3037	• 39-30-3038	13.80 (.540)	8.40 (.331)
4	• 39-30-3045		• 39-30-3047		18.00 (.709)	12.60 (.496)
5	• 39-30-3055	• 39-30-3056	• 39-30-3057	• 39-30-3058	22.20 (.874)	16.80 (.661)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Flanges allow for screw-in retention to board-mounted headers
- Low profile is ideal for power applications with space constraints

Reference Information

Product Specification: PS-5556-0001

Packaging: Tray or bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 5557 single row receptacle

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6
Amperes-HCS	12	11	10	9

Electrical (cont'd)

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 49N (11.01 lb) max.

Mating Force: 6.9N (1.54 lb) max.

Unmating Force: 3.4N (0.7 lb) min.

Durability: 30 cycles

Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0

Contact: Brass

Plating: Tin, select Gold or overall Gold

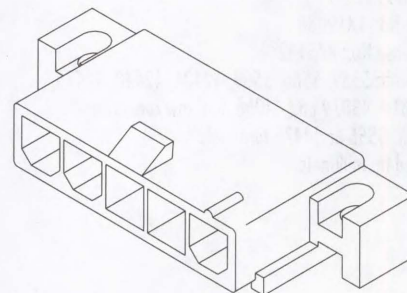
Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch Mini-Fit, Jr.™ Header

5569

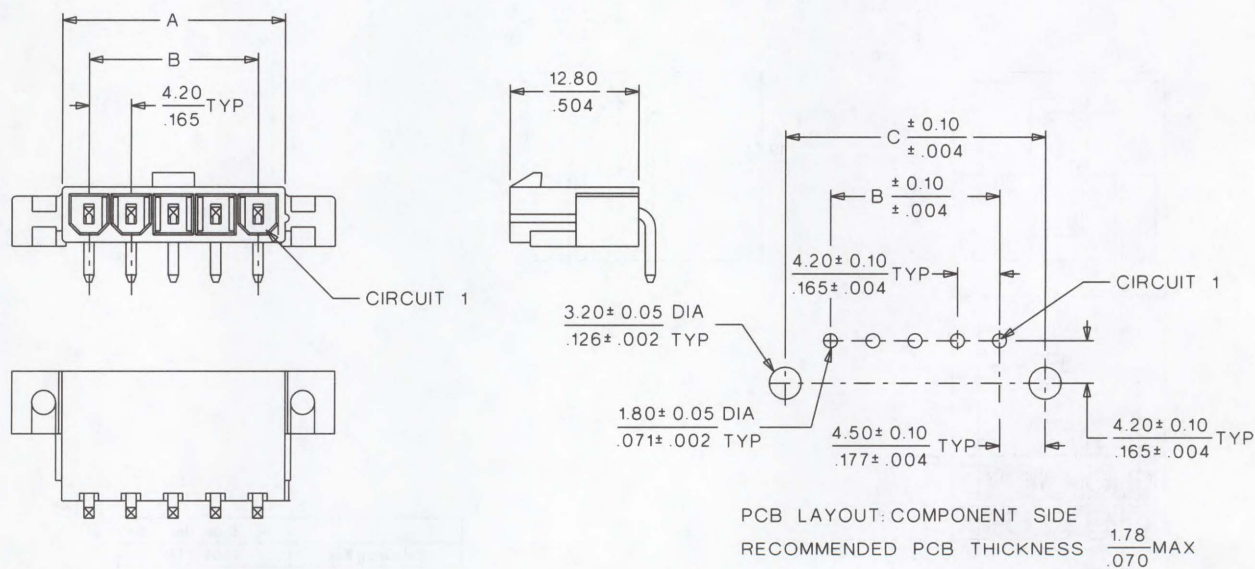
Right Angle, Single Row With Flanges



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated		A	B	C
	94V-2	94V-0	94V-2	94V-0			
3	• 39-30-3031	• 39-30-3032	• 39-30-3033	• 39-30-3034	13.80 (.540)	8.40 (.331)	17.40 (.685)
4	• 39-30-3041		• 39-30-3043		18.00 (.709)	12.60 (.496)	21.60 (.850)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Designed for use with strain relief or overmold applications
- Positive housing lock for secure mating retention
- Fully isolated terminals to protect contacts from damage
- Uses standard Mini-Fit series terminals
- 1-piece strain relief available (41995 series) for use with Mini-Fit, Jr. single row receptacles

Reference Information

Product Specification: PS-5556-0001

Packaging: Tray or bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 5559, 5566, 5569, 42404, 42440, 42475, 43810, 43879 and 44068 dual row connectors

Use With: 5556 or 44476 terminals

Designed In: Millimeters

Mechanical

Contact Insertion Force: 1.5kg max.

Contact Retention to Housing: 3.0kg min.

Wire Pull-Out Force: 9.0kg min.

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0

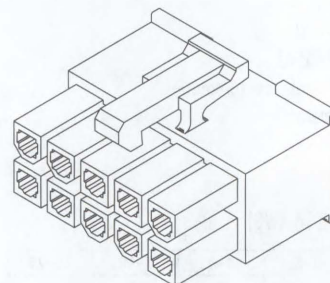
Operating Temperature: -40 to +105°C



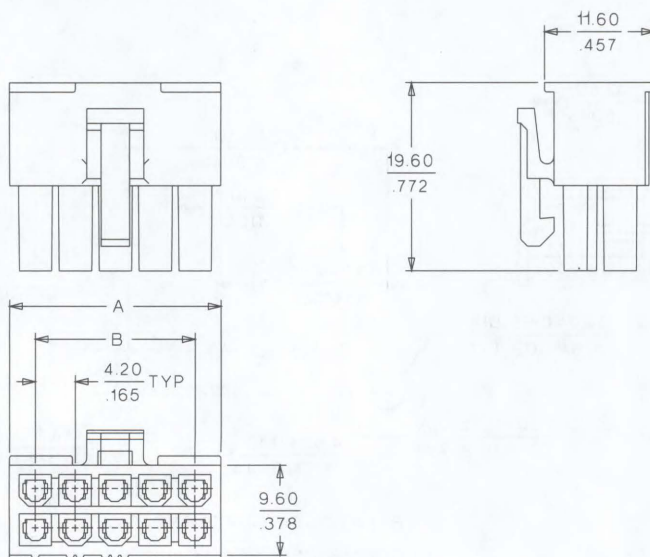
4.20mm (.165") Pitch Mini-Fit, Jr.™ Receptacle

5557

Dual Row



CATALOG DRAWING (FOR REFERENCE ONLY)



	Order No.
Polarizing Key	15-04-0211

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension	
	For Use with Strain Relief		Not for Use with Strain Relief		A	B
	94V-2	94V-0	94V-2	94V-0		
2	39-01-3022	39-01-3028	• 39-01-2020	• 39-01-2025	5.40 (.213)	
4	39-01-3042	39-01-3048	• 39-01-2040	• 39-01-2045	9.60 (.378)	4.20 (.165)
6	• 39-01-2060	• 39-01-2065			13.80 (.543)	8.40 (.331)
8	• 39-01-2080	• 39-01-2085			18.00 (.709)	12.60 (.496)
10	• 39-01-2100	• 39-01-2105			22.20 (.874)	16.80 (.661)
12	• 39-01-2120	• 39-01-2125			26.40 (1.039)	21.00 (.827)
14	• 39-01-2140	• 39-01-2145			30.60 (1.205)	25.20 (.992)
16	• 39-01-2160	• 39-01-2165			34.80 (1.370)	29.40 (1.158)
18	• 39-01-2180	• 39-01-2185			39.00 (1.535)	33.60 (1.323)
20	• 39-01-2200	• 39-01-2205			43.20 (1.701)	37.80 (1.488)
22	• 39-01-2220	• 39-01-2225			47.40 (1.866)	42.00 (1.654)
24	• 39-01-2240	• 39-01-2245			51.60 (2.031)	46.20 (1.819)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Wire-to-wire plug for panel-mounted or free-hanging applications
- Positive housing locks to mate with Mini-Fit, Jr. receptacle
- Fully isolated terminals to protect contacts from damage
- Uses standard Mini-Fit series terminals

Reference Information

Product Specification: PS-5556-0001

Packaging: Tray or bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 5557 dual row receptacle

Use With: 5558, 30490 or 44478 terminals

Designed In: Millimeters

Mechanical

Contact Insertion Force: 1.5kg max.
Contact Retention to Housing: 3.0kg min.
Wire Pull-Out Force: 9.0kg min.
Insertion Force to PCB: 5.0kg max.
Mating Force: 0.7kg (1.54 lb) max.
Unmating Force: 0.35kg (0.7 lb) min.
Normal Force: 200g min.
Durability: 30 cycles

Physical

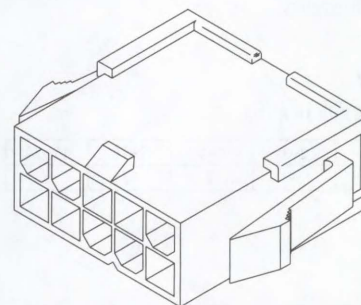
Housing: 6/6 nylon, UL 94V-2 or 94V-0
Operating Temperature: -40 to +105°C



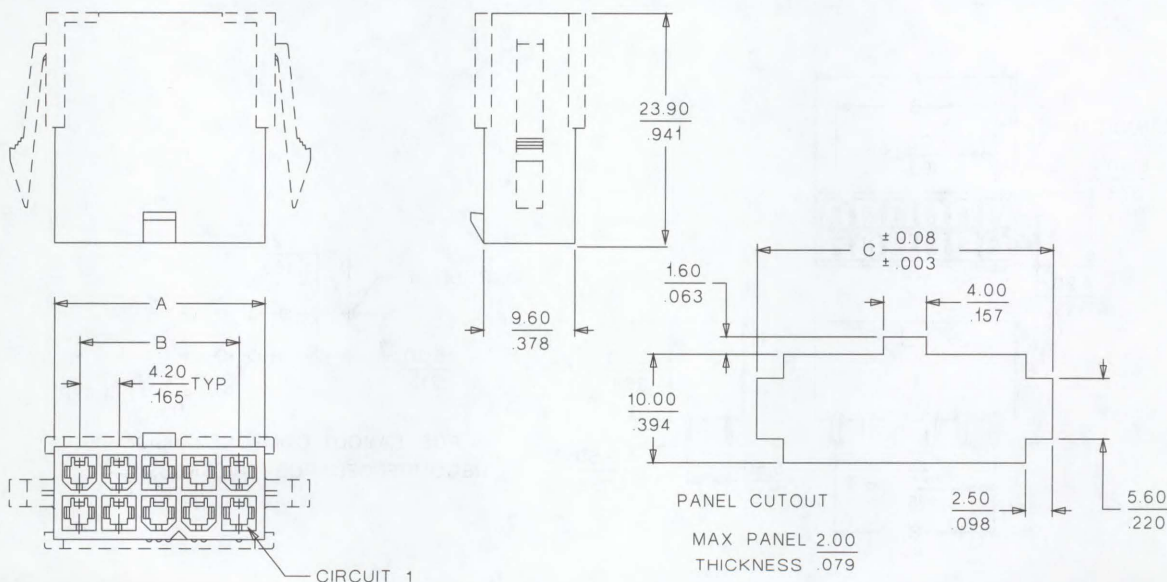
**4.20mm (.165") Pitch
Mini-Fit, Jr.™
Plug**

5559

**Dual Row
With and without Panel
Mount Ears**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Panel Mount		Free Hanging		A	B	C
	94V-2	94V-0	94V-2	94V-0			
2	• 39-01-2021	• 39-01-2026	• 39-01-3023	• 39-01-3029	5.40 (.213)	4.20 (.165)	10.80 (.425)
4	• 39-01-2041	• 39-01-2046	• 39-01-3043	• 39-01-3049	9.60 (.378)	4.20 (.165)	15.00 (.591)
6	• 39-01-2061	• 39-01-2066	• 39-01-3063	• 39-01-3069	13.80 (.543)	8.40 (.331)	19.20 (.756)
8	• 39-01-2081	• 39-01-2086	• 39-01-3083	• 39-01-3089	18.00 (.709)	12.60 (.496)	23.40 (.921)
10	• 39-01-2101	• 39-01-2106	• 39-01-3103	• 39-01-3109	22.20 (.874)	16.80 (.661)	27.60 (1.087)
12	• 39-01-2121	• 39-01-2126			26.40 (1.039)	21.00 (.827)	31.80 (1.252)
14	• 39-01-2141	• 39-01-2146	• 39-01-3143	• 39-01-3149	30.60 (1.205)	25.20 (.992)	36.00 (1.417)
16	• 39-01-2161	• 39-01-2166	• 39-01-3163	• 39-01-3169	34.80 (1.370)	29.40 (1.158)	40.20 (1.583)
18	• 39-01-2181				39.00 (1.535)	33.60 (1.323)	44.40 (1.748)
20	• 39-01-2201				43.20 (1.701)	37.80 (1.488)	48.60 (1.913)
22	• 39-01-2221				47.40 (1.866)	42.00 (1.654)	52.80 (2.079)
24	• 39-01-2241				51.60 (2.031)	46.20 (1.819)	57.00 (2.244)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Positive housing locks to mate with Mini-Fit, Jr. receptacle
- Fully isolated terminals to protect contacts from damage
- Drain hole option available

Reference Information

Product Specification: PS-5556-0001
 Packaging: Tray or bag
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R75142
 Mates With: 5557 dual row receptacle
 Designed In: Millimeters

Electrical

Voltage: 600V
 Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6

Electrical (cont'd)

Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC
 Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 1.5kg max.
 Contact Retention to Housing: 3.0kg min.
 Wire Pull-Out Force: 9.0kg min.
 Insertion Force to PCB: 5.0kg max.
 Mating Force: 0.7kg (1.54 lb) max.
 Unmating Force: 0.35kg (0.7 lb) min.
 Normal Force: 200g min.
 Durability: 30 cycles

Physical

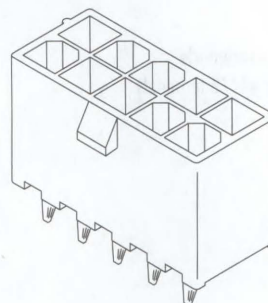
Housing: 6/6 nylon, UL 94V-2 or 94V-0
 Contact: Brass or Phosphor Bronze
 Plating: Tin, select Gold or overall Gold
 Operating Temperature: -40 to +105°C



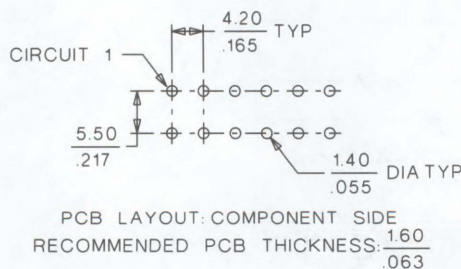
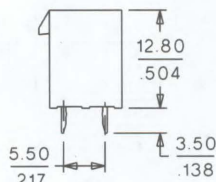
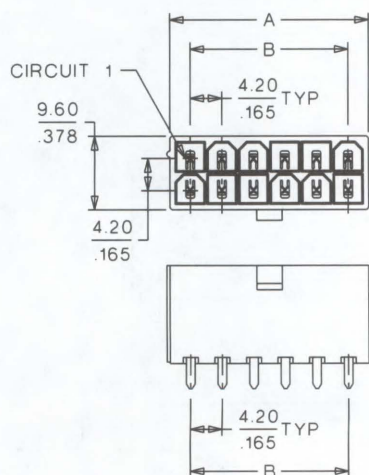
4.20mm (.165") Pitch Mini-Fit, Jr.™ Header

5566

Vertical, Dual Row Without Pegs



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

With Drain Holes						
Circuits	Order No.				Dimension	
	Tin Plated		Gold Plated (30μ")		A	B
	94V-2	94V-0	94V-2	94V-0		
2	•39-29-3026	•39-31-0020	•39-31-0027	•39-31-0028	5.40 (.210)	
4	•39-29-3046	•39-31-0040	•39-31-0047	•39-31-0048	9.60 (.380)	4.20 (.170)
6	•39-29-3066	•39-31-0060	•39-31-0067	•39-31-0068	13.80 (.540)	8.40 (.330)
8	•39-29-3086	•39-31-0080	•39-31-0087	•39-31-0088	18.00 (.710)	12.60 (.500)
10	•39-29-3106	•39-31-0100	•39-31-0107	•39-31-0108	22.20 (.870)	16.80 (.660)
12	•39-29-3126	•39-31-0120	•39-31-0127	•39-31-0128	26.40 (1.040)	21.00 (.830)
14	•39-29-3146	•39-31-0140	•39-31-0147	•39-31-0148	30.60 (1.200)	25.20 (.990)
16	•39-29-3166	•39-31-0160	•39-31-0167	•39-31-0168	34.80 (1.370)	29.40 (1.160)
20	•39-29-3206		•39-31-0207		43.20 (1.700)	37.80 (1.490)
22	•39-29-3226		•39-31-0227		47.40 (1.870)	42.00 (1.650)

• US Standard Product, available through Molex franchised distributors

Without Drain Holes						
Circuits	Order No.				Dimension	
	Tin Plated		Gold Plated (30μ")		A	B
	94V-2	94V-0	94V-2	94V-0		
2	•39-28-1023	•39-28-8020	•39-29-0023	•39-29-6028	5.40 (.210)	
4	•39-28-1043	•39-28-8040	•39-29-0043	•39-29-6048	9.60 (.380)	4.20 (.170)
6	•39-28-1063	•39-28-8060	•39-29-0063	•39-29-6068	13.80 (.540)	8.40 (.330)
8	•39-28-1083	•39-28-8080	•39-29-0083	•39-29-6088	18.00 (.710)	12.60 (.500)
10	•39-28-1103	•39-28-8100	•39-29-0103	•39-29-6108	22.20 (.870)	16.80 (.660)
12	•39-28-1123	•39-28-8120	•39-29-0123	•39-29-6128	26.40 (1.040)	21.00 (.830)
14	•39-28-1143	•39-28-8140	•39-29-0143	•39-29-6148	30.60 (1.200)	25.20 (.990)
16	•39-28-1163	•39-28-8160	•39-29-0163	•39-29-6168	34.80 (1.370)	29.40 (1.160)
18	•39-28-1183	•39-28-8180	•39-29-0183	•39-29-6188	39.00 (1.540)	33.60 (1.320)
20	•39-28-1203	•39-28-8200	•39-29-0203	•39-29-6208	43.20 (1.700)	37.80 (1.490)
22	•39-28-1223	•39-28-8220	•39-29-0223	•39-29-6228	47.40 (1.870)	42.00 (1.650)
24	•39-28-1243	•39-28-8240	•39-29-0243	•39-29-6248	51.60 (2.030)	46.20 (1.820)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Board-mounting pegs provide increased retention during soldering process
- Positive housing locks to mate with Mini-Fit, Jr. receptacle
- Fully isolated terminals to protect contacts from damage
- Drain hole option available in vertical headers

Reference Information

Product Specification: PS-5556-0001

Packaging: Tray or bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 5557 dual row receptacle

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6

Electrical (cont'd)

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 1.5kg max.

Contact Retention to Housing: 3.0kg min.

Wire Pull-Out Force: 9.0kg min.

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0

Contact: Brass or Phosphor Bronze

Plating: Tin, select Gold or overall Gold

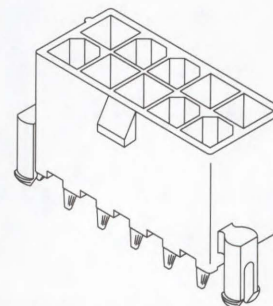
Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch Mini-Fit, Jr.™ Header

5566

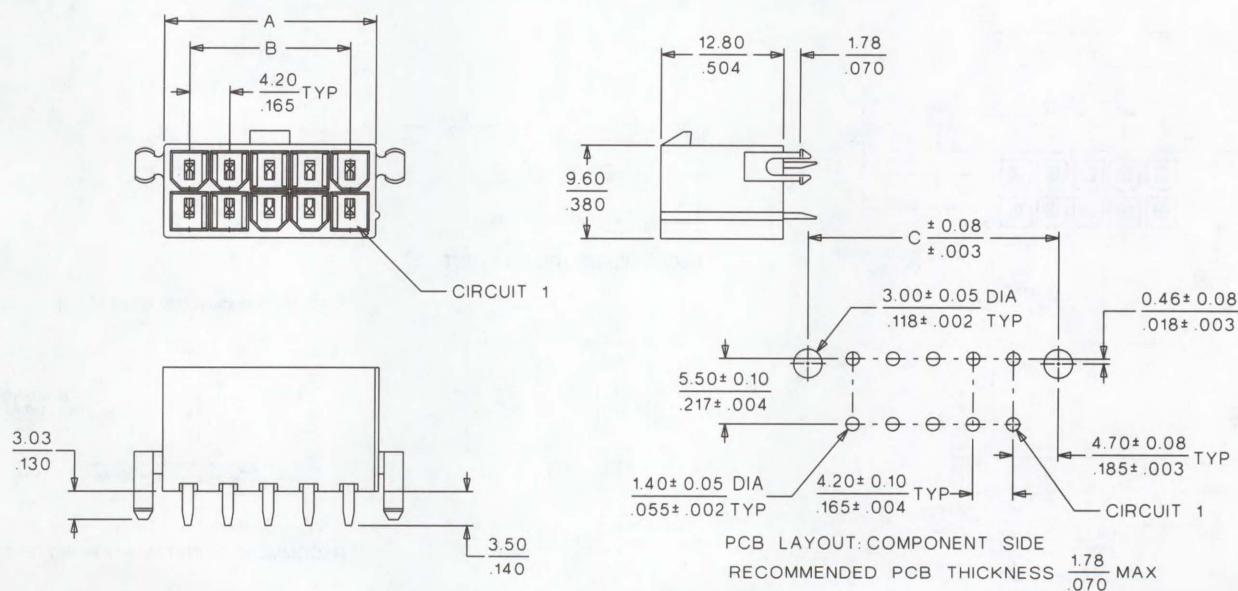
Vertical, Dual Row With Pegs



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

With Drain Holes							
Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated (30μ")		A	B	C
	94V-2	94V-0	94V-2	94V-0			
2	• 39-29-9022	• 39-29-9026	• 39-29-9024	• 39-28-9028	5.40 (.210)		9.40 (.370)
4	• 39-29-9042	• 39-29-9046	• 39-29-9044	• 39-28-9048	9.60 (.380)	4.20 (.170)	13.60 (.535)
6	• 39-29-9062	• 39-29-9066	• 39-29-9064	• 39-28-9068	13.80 (.540)	8.40 (.330)	17.80 (.701)
8	• 39-29-9082	• 39-29-9086	• 39-29-9084	• 39-28-9088	18.00 (.710)	12.60 (.500)	22.00 (.866)
10	• 39-29-9102	• 39-29-9106	• 39-29-9104	• 39-28-9108	22.20 (.870)	16.80 (.660)	26.20 (1.031)
12	• 39-29-9122	• 39-29-9126	• 39-29-9124	• 39-28-9128	26.40 (1.040)	21.00 (.830)	30.40 (1.197)
14	• 39-29-9142	• 39-29-9146	• 39-29-9144	• 39-28-9148	30.60 (1.200)	25.20 (.990)	34.60 (1.362)
16	• 39-29-9162	• 39-29-9166	• 39-29-9164	• 39-28-9168	34.80 (1.370)	29.40 (1.160)	38.80 (1.528)
18	• 39-29-9182	• 39-29-9186	• 39-29-9184	• 39-28-9188	39.00 (1.540)	33.60 (1.320)	43.00 (1.693)
20	• 39-29-9202	• 39-29-9206	• 39-29-9204	• 39-28-9208	43.20 (1.700)	37.80 (1.490)	47.20 (1.858)
22	• 39-29-9222		• 39-29-9224		47.40 (1.870)	42.00 (1.650)	51.40 (2.024)
24	• 39-29-9242	• 39-29-9246	• 39-29-9244	• 39-28-9248	51.60 (2.030)	46.20 (1.820)	55.60 (2.189)

Without Drain Holes							
Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated (30μ")		A	B	C
	94V-2	94V-0	94V-2	94V-0			
2	39-29-9023	39-29-9027	39-29-9025	39-29-9029	5.40 (.210)		9.40 (.370)
4	39-29-9043	39-29-9047	39-29-9045	39-29-9049	9.60 (.380)	4.20 (.170)	13.60 (.535)
6	39-29-9063	39-29-9067	39-29-9065	39-29-9069	13.80 (.540)	8.40 (.330)	17.80 (.701)
8	39-29-9083	39-29-9087	39-29-9085	39-29-9089	18.00 (.710)	12.60 (.500)	22.00 (.866)
10	39-29-9103	39-29-9107	39-29-9105	39-29-9109	22.20 (.870)	16.80 (.660)	26.20 (1.031)
12	39-29-9123	39-29-9127	39-29-9125	39-29-9129	26.40 (1.040)	21.00 (.830)	30.40 (1.197)
14	39-29-9143	39-29-9147	39-29-9145	39-29-9149	30.60 (1.200)	25.20 (.990)	34.60 (1.362)
16	39-29-9163	39-29-9167	39-29-9165	39-29-9169	34.80 (1.370)	29.40 (1.160)	38.80 (1.528)
18	39-29-9183	39-29-9187	39-29-9185	39-29-9189	39.00 (1.540)	33.60 (1.320)	43.00 (1.693)
20	39-29-9203	39-29-9207	39-29-9205	39-29-9209	43.20 (1.700)	37.80 (1.490)	47.20 (1.858)
24	39-29-9243	39-29-9247	39-29-9245	39-29-9249	51.60 (2.030)	46.20 (1.820)	55.60 (2.189)

• US Standard Product available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 24 circuits
- Molded in high temperature, surface mount compatible material
- Fully isolated terminals to protect contacts from damage

Reference Information

Product Specification: PS-87427-0001

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: 5557 dual row receptacle

Designed in: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6
Amperes-HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Pin Retention Force: 9.81N (2.2 lb) min.

Mating Force: 14.23N (3.19 lb) max.

Unmating Force: 0.50N (0.11 lb) max.

Durability: 30 cycles

Physical

Housing: 4/6 Nylon, UL 94V-0

Contact: Brass (1.07 square)

Plating: Tin

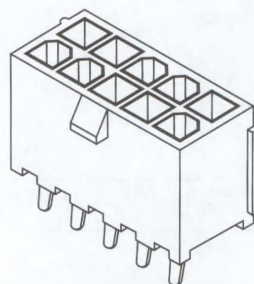
Operating Temperature: -40 to +105°C



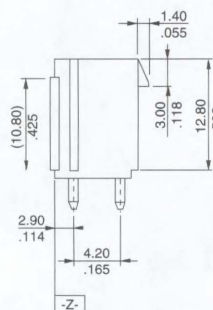
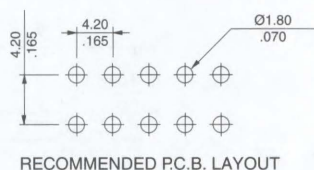
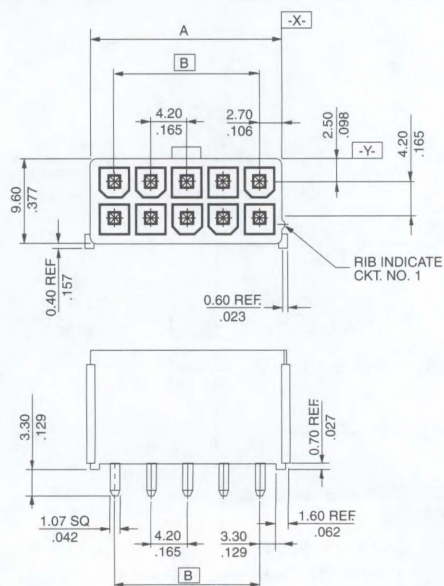
4.20mm (.165") Pitch Mini-Fit, Jr.™ Wire-to-Board Header

87427

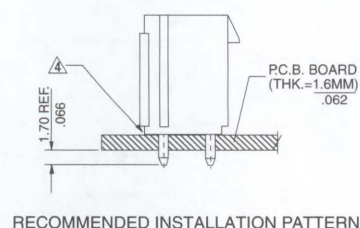
Vertical without Flanges High Temperature Material



CATALOG DRAWING (FOR REFERENCE ONLY)



△ Housing standoff (0.70mm REF.)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin Over Nickel Plating	Tin Over Copper Plating	A	B
2	87427-0242	87427-0243	5.40 (.212)	
4	87427-0442	87427-0443	9.60 (.377)	4.20 (.165)
6	87427-0642	87427-0643	13.80 (.543)	8.40 (.330)
8	87427-0842	87427-0843	18.00 (.708)	12.60 (.496)
10	87427-1042	87427-1043	22.20 (.874)	16.80 (.667)
12	87427-1242	87427-1243	26.40 (1.030)	21.00 (.826)
14	87427-1442	87427-1443	30.60 (1.204)	25.20 (.992)
16	87427-1642	87427-1643	34.80 (1.370)	29.40 (1.152)
18	87427-1842	87427-1843	39.00 (1.535)	33.60 (1.320)
20	87427-2042	87427-2043	43.20 (1.700)	37.80 (1.480)
22	87427-2242	87427-2243	47.40 (1.866)	42.00 (1.653)
24	87427-2442	87427-2443	51.60 (2.031)	46.20 (1.818)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Peg-mounted for increased board retention
- Low profile for space constraints
- Positive housing locks
- Fully isolated terminals to protect contacts from damage

Reference Information

Product Specification: PS-5556-0001

Packaging: Tray or bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 5557 dual row receptacle

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6
Amperes-HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0

Contact: Brass

Plating: Tin, select Gold or overall Gold

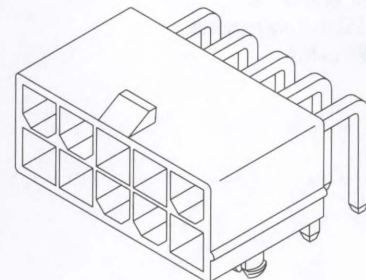
Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch Mini-Fit, Jr.™ Header

5569

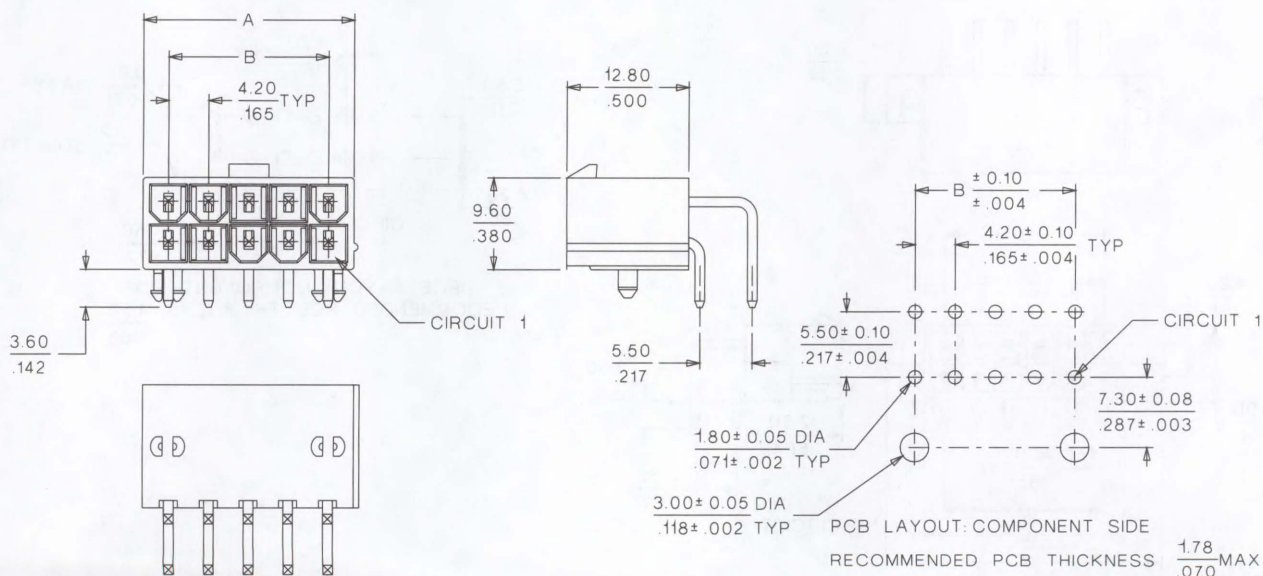
Right Angle, Dual Row With Pegs



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.						Dimension	
	Tin Plated		Gold Plated (30μ")		Select Gold Plated (30μ")		A	B
	94V-2	94V-0	94V-2	94V-0	94V-2	94V-0		
2	• 39-30-1020	• 39-30-0020	39-30-1021	39-30-1022	39-30-0023	39-30-0024	5.40 (.213)	
4	• 39-30-1040	• 39-30-0040	39-30-1041	39-30-1042	39-30-0043	39-30-0044	9.60 (.378)	4.20 (.165)
6	• 39-30-1060	• 39-30-0060	39-30-1061	39-30-1062			13.80 (.543)	8.40 (.331)
8	• 39-30-1080	• 39-30-0080	39-30-1081	39-30-1082			18.00 (.709)	12.60 (.496)
10	• 39-30-1100	• 39-30-0100	39-30-1101	39-30-1102			22.20 (.874)	16.80 (.661)
12	• 39-30-1120	• 39-30-0120	39-30-1121	39-30-1122			26.40 (1.039)	21.00 (.827)
14	• 39-30-1140	• 39-30-0140	39-30-1141	39-30-1142			30.60 (1.205)	25.20 (.992)
16	• 39-30-1160	• 39-30-0160	39-30-1161	39-30-1162			34.80 (1.370)	29.40 (1.158)
18	• 39-30-1180		39-30-1181				39.00 (1.535)	33.60 (1.323)
20	• 39-30-1200	• 39-30-0200	39-30-1201	39-30-1202			43.20 (1.701)	37.80 (1.488)
22	• 39-30-1220		39-30-1221				47.40 (1.866)	42.00 (1.654)
24	• 39-30-1240	• 39-30-0240	39-30-1241	39-30-1242			51.60 (2.031)	46.20 (1.819)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Flanges allow for screw-in retention to board-mounted header
- Low profile for space constraints
- Positive housing locks

Reference Information

Product Specification: PS-5556-0001

Packaging: Tray or bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 5557 dual row receptacle

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6
Amperes-HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0

Contact: Brass

Plating: Tin, select Gold or overall Gold

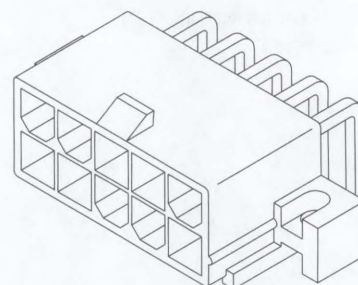
Operating Temperature: -40 to +105°C



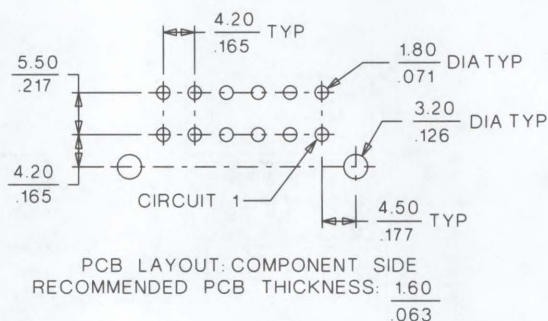
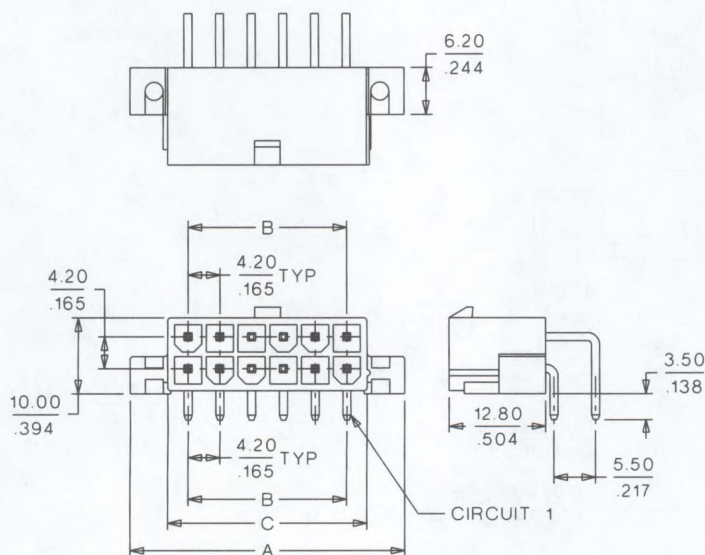
**molex® 4.20mm (.165") Pitch
Mini-Fit, Jr.™
Header**

5569

Right Angle, Dual Row With Flanges



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.						Dimension		
	Tin Plated		Gold Plated (30μ")		Select Gold Plated (30μ")		A	B	C
	94V-2	94V-0	94V-2	94V-0	94V-0	94V-2			
2	● 39-29-1028	● 39-29-1027	● 39-29-5023	● 39-29-4029	● 39-34-7020	● 39-34-7021	15.40 (.606)		5.40 (.213)
4	● 39-29-1048	● 39-29-1047	● 39-29-5043	● 39-29-4049	● 39-34-7040	● 39-34-7041	19.60 (.772)	4.20 (.165)	9.60 (.378)
6	● 39-29-1068	● 39-29-1067	● 39-29-5063	● 39-29-4069			23.80 (.937)	8.40 (.331)	13.80 (.543)
8	● 39-29-1088	● 39-29-1087	● 39-29-5083	● 39-29-4089			28.00 (1.102)	12.60 (.496)	18.00 (.709)
10	● 39-29-1108	● 39-29-1107	● 39-29-5103	● 39-29-4109			32.20 (1.268)	16.80 (.661)	22.20 (.874)
12	● 39-29-1128	● 39-29-1127	● 39-29-5123	● 39-29-4129			36.40 (1.433)	21.00 (.827)	26.40 (1.039)
14	● 39-29-1148	● 39-29-1147	● 39-29-5143	● 39-29-4149			40.60 (1.598)	25.20 (.992)	30.60 (1.205)
16	● 39-29-1168	● 39-29-1167	● 39-29-5163	● 39-29-4169			44.80 (1.764)	29.40 (1.158)	34.80 (1.370)
18	● 39-29-1188	● 39-29-1187	● 39-29-5183	● 39-29-4189			49.00 (1.929)	33.60 (1.323)	39.00 (1.535)
20	● 39-29-1208	● 39-29-1207	● 39-29-5203	● 39-29-4209			53.20 (2.094)	37.80 (1.488)	43.20 (1.701)
22	● 39-29-1228	● 39-29-1227	● 39-29-5223	● 39-29-4229			57.40 (2.260)	42.00 (1.654)	47.40 (1.866)
24	● 39-29-1248	● 39-29-1247	● 39-29-5243	● 39-29-4249			61.60 (2.425)	46.20 (1.819)	51.60 (2.031)

- US Standard Product, available through Molex franchised distributors

Features and Benefits

- ### Reference Information

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: 5557 dual row receptacle

Designed in: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6
Amperes-HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Pin Retention Force: 9.81N (2.2 lb) min.

Mating Force: 14.23N (3.19 lb) max.

Unmating Force: 0.50N (0.11 lb) max.

Durability: 30 cycles

Physical

Housing: Nylon 4/6, UL 94V-0

Contact: Brass (1.07 square)

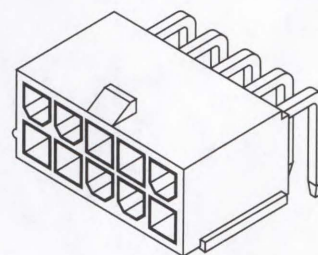
Plating: Tin

Operating Temperature: -40 to +105°C



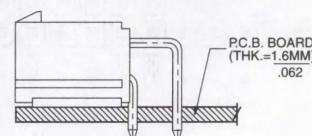
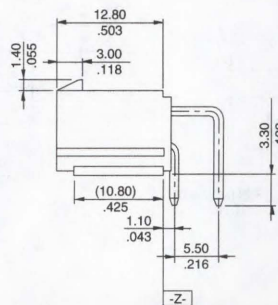
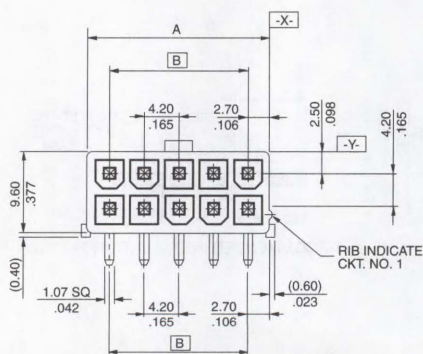
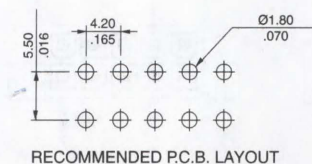
87427

Right Angle without Flanges High Temperature Material



Power Connectors

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RECOMMENDED INSTALLATION PATTERN

Circuits	Order No.		Dimension	
	Tin Over Nickel Plating	Tin Over Copper Plating	A	B
2	87427-0202	87427-0203	5.40 (.212)	
4	87427-0402	87427-0403	9.60 (.377)	4.20 (.165)
6	87427-0602	87427-0603	13.80 (.543)	8.40 (.330)
8	87427-0802	87427-0803	18.00 (.708)	12.60 (.496)
10	87427-1002	87427-1003	22.20 (.824)	16.80 (.667)
12	87427-1202	87427-1203	26.40 (1.030)	21.00 (.826)
14	87427-1402	87427-1403	30.60 (1.204)	25.20 (.992)
16	87427-1602	87427-1603	34.80 (1.370)	29.40 (1.152)
18	87427-1802	87427-1803	39.00 (1.535)	33.60 (1.324)
20	87427-2002	87427-2003	43.20 (1.700)	37.80 (1.488)
22	87427-2202	87427-2203	47.40 (1.866)	42.00 (1.653)
24	87427-2402	87427-2403	51.60 (2.031)	46.20 (1.818)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 24 circuits
- Molded in high temperature, surface mount compatible material
- Fully isolated terminals to protect contacts from damage

Reference Information

Product Specification: PS-87427-0001

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: 5557 dual row receptacle

Designed in: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6
Amperes-HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Pin Retention Force: 9.81N (2.2 lb) min.

Mating Force: 14.23N (3.19 lb) max.

Unmating Force: 0.50N (0.11 lb) max.

Durability: 30 cycles

Physical

Housing: 4/6 Nylon, UL 94V-0

Contact: Brass (1.07 square)

Plating: Tin

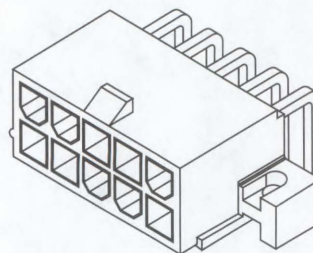
Operating Temperature: -40 to +105°C



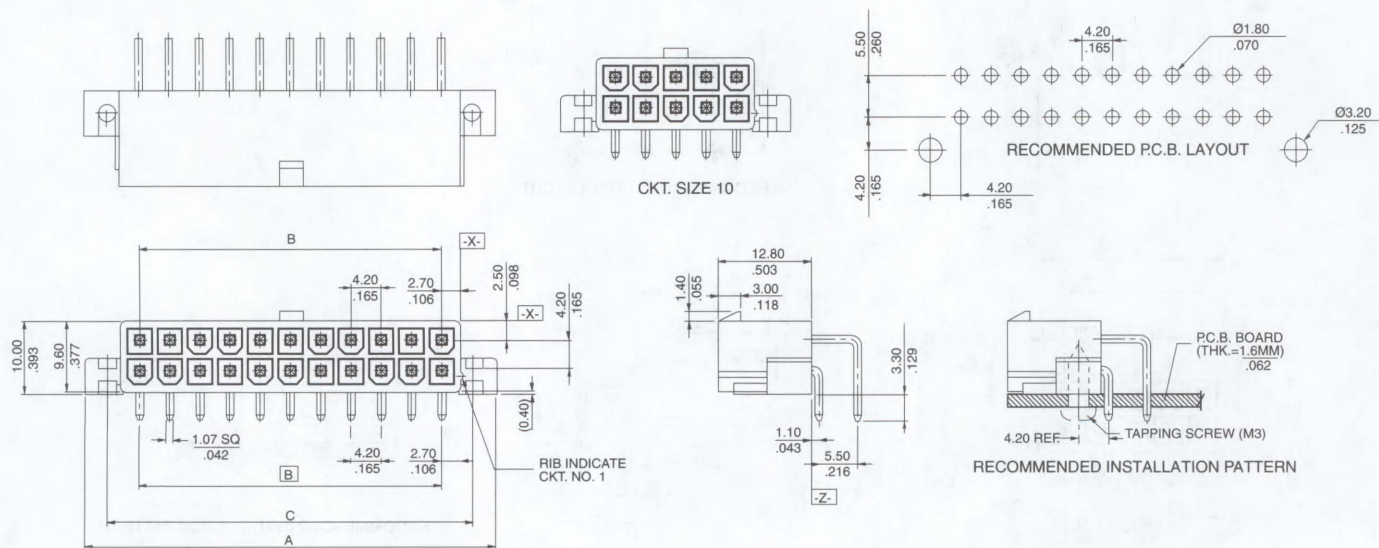
4.20mm (.165") Pitch Mini-Fit, Jr.™ Wire-to-Board Header

87427

Right Angle with Flange High Temperature Material



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	Tin Over Nickel Plating	Tin Over Copper Plating	A	B	C
2	87427-0212	87427-0213	15.40 (.606)		9.00 (.354)
4	87427-0412	87427-0413	19.60 (.770)	4.20 (.165)	13.20 (.519)
6	87427-0612	87427-0613	23.80 (.937)	8.40 (.330)	17.40 (.685)
8	87427-0812	87427-0813	28.00 (1.102)	12.60 (.496)	21.60 (.850)
10	87427-1012	87427-1013	32.20 (1.260)	16.80 (.667)	25.80 (1.010)
12	87427-1212	87427-1213	36.40 (1.433)	21.00 (.826)	30.00 (1.180)
14	87427-1412	87427-1413	40.60 (1.598)	25.20 (.992)	34.20 (1.340)
16	87427-1612	87427-1613	44.80 (1.763)	29.40 (1.152)	38.40 (1.511)
18	87427-1812	87427-1813	49.00 (1.929)	33.60 (1.320)	42.60 (1.677)
20	87427-2012	87427-2013	53.20 (2.094)	37.80 (1.488)	46.80 (1.842)
22	87427-2212	87427-2213	57.40 (2.250)	42.00 (1.653)	51.00 (2.000)
24	87427-2412	87427-2413	61.60 (2.030)	46.20 (1.818)	55.20 (2.170)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Provides secondary relief for wire harnesses using Mini-Fit, Jr. receptacles
- One-piece snap-on construction for easy assembly
- Accepts both free-hanging plug without ears and receptacle in 6 to 24 circuits

Reference Information

Product Specification: PS-5556-0001

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Use With: 5557 dual row receptacle

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 9.0A

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Wire Pull-Out Force: 9.0kg min.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

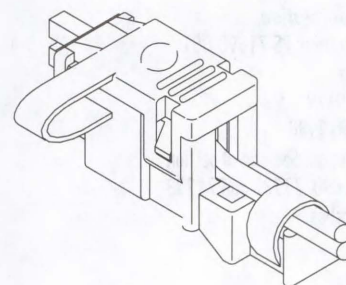
Housing: 6/6 nylon, UL 94V-2

Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch Mini-Fit, Jr.™ Strain Relief

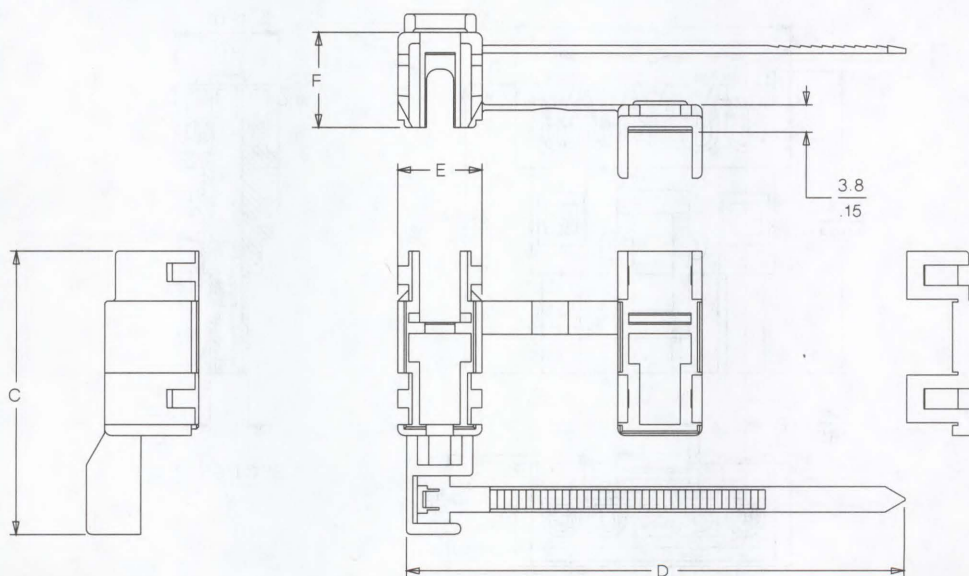
41995



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Color	Dimension			
			C	D	E	F
2	• 15-04-0340	Natural	39.10 (1.540)	69.80 (2.750)	11.90 (.470)	13.20 (.520)
4	• 15-04-0294		48.00 (1.890)	107.90 (4.250)	16.00 (.630)	13.20 (.520)
6	• 15-04-0296		48.20 (1.890)	107.90 (4.250)	20.20 (.800)	13.20 (.520)
8	• 15-04-0343		48.60 (1.890)	107.90 (4.250)	24.60 (.970)	13.20 (.520)
12	• 15-04-0345		48.00 (1.890)	107.90 (4.250)	33.00 (1.300)	13.20 (.520)
4	• 15-04-9341	Black	48.00 (1.890)	107.90 (4.250)	16.00 (.630)	13.20 (.520)
6	• 15-04-9342		48.00 (1.890)	107.90 (4.250)	20.20 (.800)	13.20 (.520)
8	• 15-04-9343		48.00 (1.890)	107.90 (4.250)	24.60 (.970)	13.20 (.520)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 12 circuits
- Positive latching system
- Built-in strain relief
- Polarized
- Feed-to and feed-through

Reference Information

Product Specification: PS-71690-001
 Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 Tooling Information: See end of section
 Mates With: 71690, 71231 and 71233
 Designed In: Inches

Electrical

Voltage: 600V
 Current: Receptacle and header

Wire Gauge	2 Circuit	3 to 12 Circuit
18	7.0	6.0
20	6.0	5.25
22	5.0	4.50
24	4.50	4.0

Electrical (continued)

Current: Receptacle and plug

Wire Gauge	2 Circuit	3 to 12 Circuit
18	6.25	5.00
20	5.50	4.75
22	4.75	4.25
24	4.50	4.00

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 2200V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 74N (16.64 lb) min.

Wire Pull-Out Force: 23N (5.17 lb) min.

Mating Force: 6.86N (1.54 lb) max.

Unmating Force: 3.92N (.89 lb) min.

Normal Force: 1.96N (.44 lb) min.

Durability: 30 cycles

Physical

Housing: Unfilled polyester, UL 94V-0

Contact: Phosphor Bronze

Plating: See table

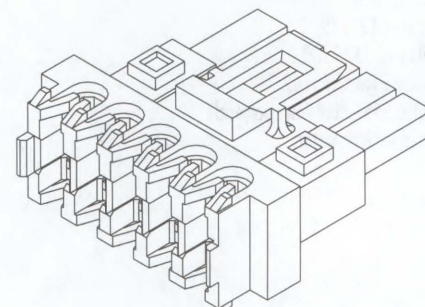
Operating Temperature: -40 to +105°C



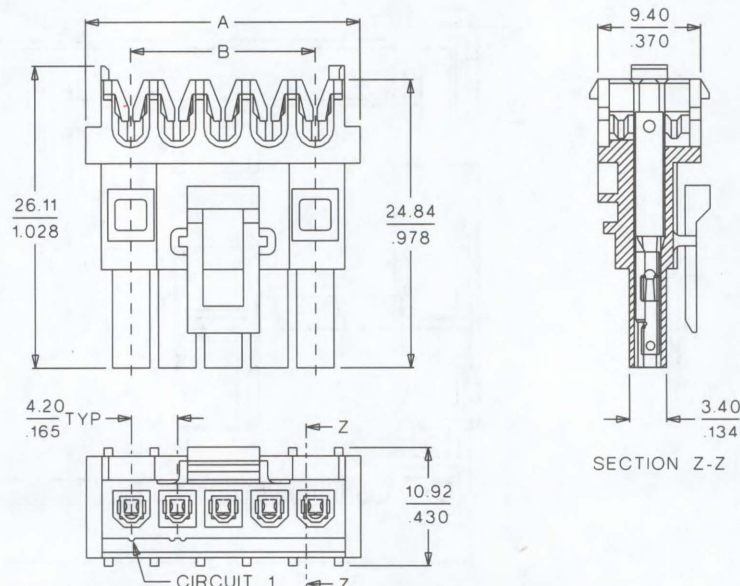
4.20mm (.165") Pitch Mini-Fit, IDT™ Receptacle

71694

Single Row



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.								Cover		Dimension	
	Tin/Lead				Gold				Feed-Through	Feed-To	A	B
	18 AWG	20 AWG	22 AWG	24 AWG	18 AWG	20 AWG	22 AWG	24 AWG				
2	• 71694-1001	• 71694-1003	71694-1004	71694-1005	71694-1007	71694-1009	71694-1010	71694-1011	71161-0201	71161-0202	12.45 (.490)	4.20 (.165)
3	• 71694-1101	• 71694-1103	71694-1104	71694-1105	71694-1107	71694-1109	71694-1110	71694-1111	71161-0301	71161-0302	16.65 (.655)	8.40 (.331)
4	• 71694-1301	• 71694-1303	71694-1304	71694-1305	71694-1307	71694-1309	71694-1310	71694-1311	71161-0401	71161-0402	20.85 (.821)	12.60 (.496)
5	• 71694-1501	• 71694-1503	71694-1504	71694-1505	71694-1507	71694-1509	71694-1510	71694-1511	71161-0501	71161-0502	25.05 (.986)	16.80 (.661)
6	• 71694-1701	• 71694-1703	71694-1704	71694-1705	71694-1707	71694-1709	71694-1710	71694-1711	71161-0601	71161-0602	29.25 (1.152)	21.00 (.827)
7	• 71694-1801	• 71694-1803	71694-1804	71694-1805	71694-1807	71694-1809	71694-1810	71694-1811	71161-0701	71161-0702	33.45 (1.317)	25.20 (.992)
8	• 71694-1901	• 71694-1903	71694-1904	71694-1905	71694-1907	71694-1909	71694-1910	71694-1911	71161-0801	71161-0802	37.65 (1.482)	29.40 (1.158)
9	• 71694-2001	• 71694-2003	71694-2004	71694-2005	71694-2007	71694-2009	71694-2010	71694-2011	71161-0901	71161-0902	41.85 (1.648)	33.60 (1.323)
10	• 71694-2101	• 71694-2103	71694-2104	71694-2105	71694-2107	71694-2109	71694-2110	71694-2111	71161-1001	71161-1002	46.05 (1.813)	37.80 (1.488)
11	• 71694-2201	• 71694-2203	71694-2204	71694-2205	71694-2207	71694-2209	71694-2210	71694-2211	71161-1101	71161-1102	50.25 (1.978)	42.00 (1.654)
12	• 71694-2301	• 71694-2303	71694-2304	71694-2305	71694-2307	71694-2309	71694-2310	71694-2311	71161-1201	71161-1202	54.45 (2.144)	46.20 (1.819)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 12 circuits
- Positive latching system
- Polarized
- Built-in strain relief
- Feed-through daisy chain capability

Reference Information

Product Specification: PS-71690 -001

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Tooling Information: See end of section

Mates With: 71694 receptacle

Designed In: Inches

Electrical

Voltage: 600V

Current: Receptacle and header

Wire Gauge	2 Circuit	3 to 12 Circuit
18	6.25	5.00
20	5.50	4.75
22	4.75	4.25
24	4.50	4.00

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 2200V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 74N (16.64 lb) min.

Wire Pull-Out Force: 23N (5.17 lb) min.

Mating Force: 6.86N (1.54 lb) max.

Unmating Force: 3.92N (.89 lb) min.

Durability: 30 cycles

Physical

Housing: Unfilled polyester, UL 94V-0

Contact: Phosphor Bronze

Plating: See table

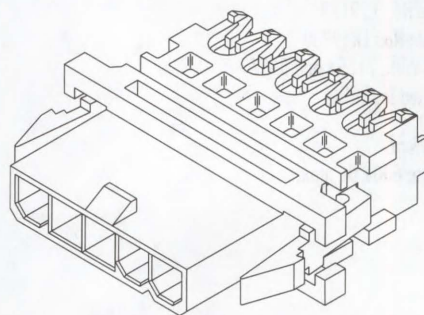
Operating Temperature: -40 to +105°C



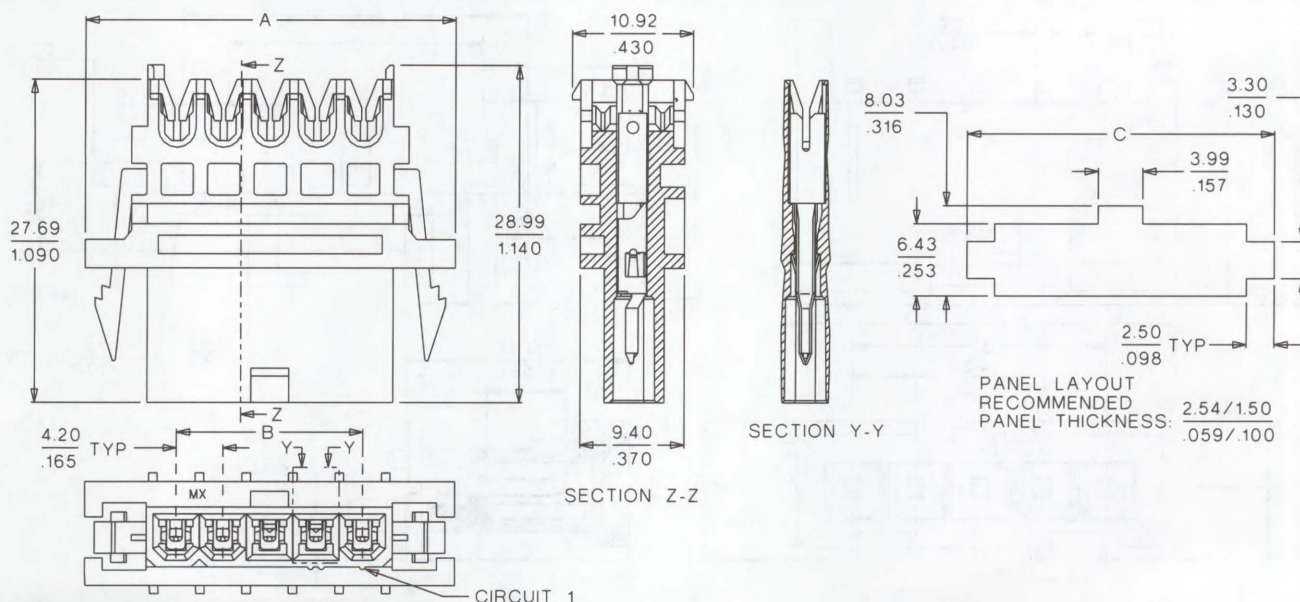
4.20mm (.165") Pitch Mini-Fit, IDT™ Wire-to-Wire Plug

71690

Single Row SMC



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.								Cover		Dimension		
	Tin/Lead				Gold				Feed-Through	Feed-To	A	B	C
	18 AWG	20 AWG	22 AWG	24 AWG	18 AWG	20 AWG	22 AWG	24 AWG					
2	• 71690-1101	• 71690-1103	71690-1104	71690-1105	71690-1107	71690-1109	71690-1110	71690-1111	71161-0201	71161-0202	20.48 (.821)	4.20 (.165)	15.00 (.591)
3	• 71690-1501	• 71690-1503	71690-1504	71690-1505	71690-1507	71690-1509	71690-1510	71690-1511	71161-0301	71161-0302	25.05 (.986)	8.40 (.331)	19.20 (.756)
4	• 71690-1901	• 71690-1903	71690-1904	71690-1905	71690-1907	71690-1909	71690-1910	71690-1911	71161-0401	71161-0402	29.25 (1.151)	12.60 (.496)	23.40 (.921)
5	• 71690-2301	• 71690-2303	71690-2304	71690-2305	71690-2307	71690-2309	71690-2310	71690-2311	71161-0501	71161-0502	33.45 (1.317)	16.80 (.661)	27.60 (1.087)
6	• 71690-2701	• 71690-2703	71690-2704	71690-2705	71690-2707	71690-2709	71690-2710	71690-2711	71161-0601	71161-0602	37.65 (1.482)	21.00 (.827)	31.80 (1.252)
7	• 71690-3101	• 71690-3103	71690-3104	71690-3105	71690-3107	71690-3109	71690-3110	71690-3111	71161-0701	71161-0702	41.85 (1.648)	25.20 (.992)	36.00 (1.417)
8	• 71690-3501	• 71690-3503	71690-3504	71690-3505	71690-3507	71690-3509	71690-3510	71690-3511	71161-0801	71161-0802	46.05 (1.813)	29.40 (1.158)	40.20 (1.582)
9	• 71690-3901	• 71690-3903	71690-3904	71690-3905	71690-3907	71690-3909	71690-3910	71690-3911	71161-0901	71161-0902	50.25 (1.978)	33.60 (1.323)	44.40 (1.747)
10	• 71690-4301	• 71690-4303	71690-4304	71690-4305	71690-4307	71690-4309	71690-4310	71690-4311	71161-1001	71161-1002	54.45 (2.144)	37.80 (1.488)	48.60 (1.912)
11	• 71690-4701	• 71690-4703	71690-4704	71690-4705	71690-4707	71690-4709	71690-4710	71690-4711	71161-1101	71161-1102	58.65 (2.309)	42.00 (1.654)	52.80 (2.077)
12	• 71690-5101	• 71690-5103	71690-5104	71690-5105	71690-5107	71690-5109	71690-5110	71690-5111	71161-1201	71161-1202	62.85 (2.474)	46.20 (1.819)	57.00 (2.242)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 12 circuits
- Positive latching system
- Fully polarized to the mating receptacle
- Fully isolated contacts
- Flanged mating envelope for ease in blind mating
- Snap-in peg locks the header to the PCB for optimum retention

Reference Information

Product Specification: PS-71690-001

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

Mates With: 71694 and 5557

Designed In: Inches

Electrical

Voltage: 600V DC max.

Electrical (continued)

Current:

Wire Gauge	2 Circuits	3-12 Circuits
18	7.0	6.0
20	6.0	5.25
22	5.0	4.5
24	4.5	4.0

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 2200V AC min.

Insulation Resistance: 100 MΩ min.

Mechanical

Insertion Force to PCB: 21N (4.72 lb) max.

Retention Force: 18N (4.05 lb) min.

Mating Force: 6.86N (1.54 lb) max.

Unmating Force: 3.92N (.89 lb) min.

Durability: 30 cycles

Physical

Housing: High-temperature glass-filled polyester, UL 94V-0

Contact: Brass

Plating: See Table

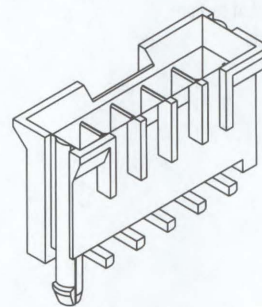
Operating Temperature: -40 to +105°C



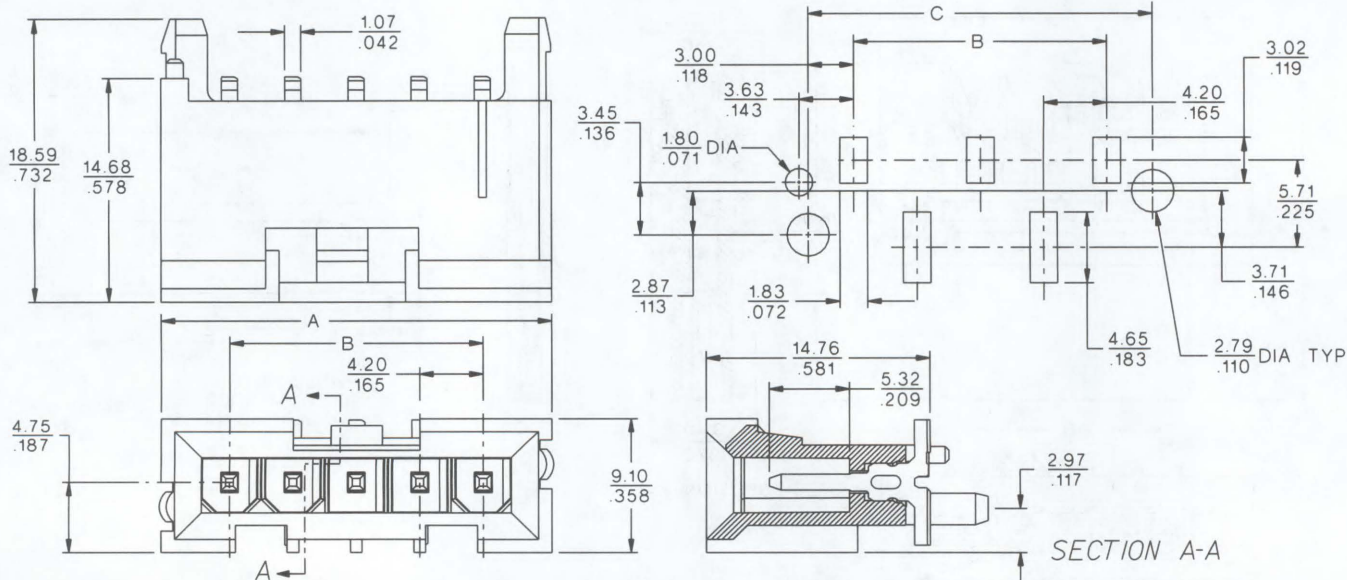
4.20mm (.165") Pitch Mini-Fit™ Wire-to-Board Header

71232

Single Row, Vertical SMT



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.						Dimension		
	Tin/Lead		15μ" Gold		30μ" Gold		A	B	C
	With Pegs	Without Pegs	With Pegs	Without Pegs	With Pegs	Without Pegs			
2	71232-0001	71232-0201	71232-0401	71232-0501	71232-0101	71232-0301	13.31 (.524)	4.20 (.165)	10.24 (.403)
3	71232-0003	71232-0203	71232-0403	71232-0503	71232-0103	71232-0303	17.51 (.689)	8.40 (.331)	14.44 (.569)
4	71232-0005	71232-0205	71232-0405	71232-0505	71232-0105	71232-0305	21.71 (.855)	12.60 (.496)	18.64 (.734)
5	71232-0007	71232-0207	71232-0407	71232-0507	71232-0107	71232-0307	25.91 (1.020)	16.80 (.661)	22.84 (.899)
6	71232-0009	71232-0209	71232-0409	71232-0509	71232-0109	71232-0309	30.11 (1.185)	21.00 (.827)	27.04 (1.064)
7	71232-0011	71232-0211	71232-0411	71232-0511	71232-0111	71232-0311	34.31 (1.351)	25.20 (.992)	31.24 (1.230)
8	71232-0013	71232-0213	71232-0413	71232-0513	71232-0113	71232-0313	38.51 (1.516)	29.40 (1.158)	35.44 (1.395)
9	71232-0015	71232-0215	71232-0415	71232-0515	71232-0115	71232-0315	42.71 (1.682)	33.60 (1.323)	39.64 (1.561)
10	71232-0017	71232-0217	71232-0417	71232-0517	71232-0117	71232-0317	46.91 (1.847)	37.80 (1.488)	43.84 (1.726)
11	71232-0019	71232-0219	71232-0419	71232-0519	71232-0119	71232-0319	51.11 (2.012)	42.00 (1.654)	48.04 (1.891)
12	71232-0021	71232-0221	71232-0421	71232-0521	71232-0121	71232-0321	55.31 (2.177)	46.20 (1.819)	52.24 (2.057)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 12 circuits
- Positive latching system
- Polarized
- Flanged mating envelope for ease in blind mating
- PCB pegs optional
- Surface Mount Compatible

Reference Information

Product Specification: PS-71690-001

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

Mates With: 71694 and 5557

Designed In: Inches

Electrical

Voltage: 600V

Current: Receptacle and header

Wire Gauge	2 Circuit	3 to 12 Circuit
18	7.00	6.00
20	6.00	5.25
22	5.00	4.50
24	4.50	4.00

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 2200V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 21N (4.72 lb) min.

Retention Force to PCB: 18N (4.05 lb) min.

Mating Force: 6.86N (1.54 lb) max.

Unmating Force: 3.92N (.89 lb) max.

Durability: 30 cycles

Physical

Housing: High temperature glass-filled polyester, UL 94V-0

Contact: Brass

Plating: See Table

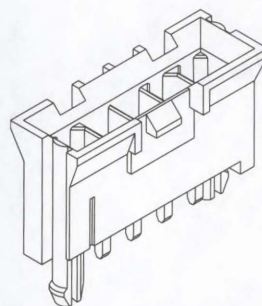
Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch Mini-Fit™ Wire-to-Board Header

71231

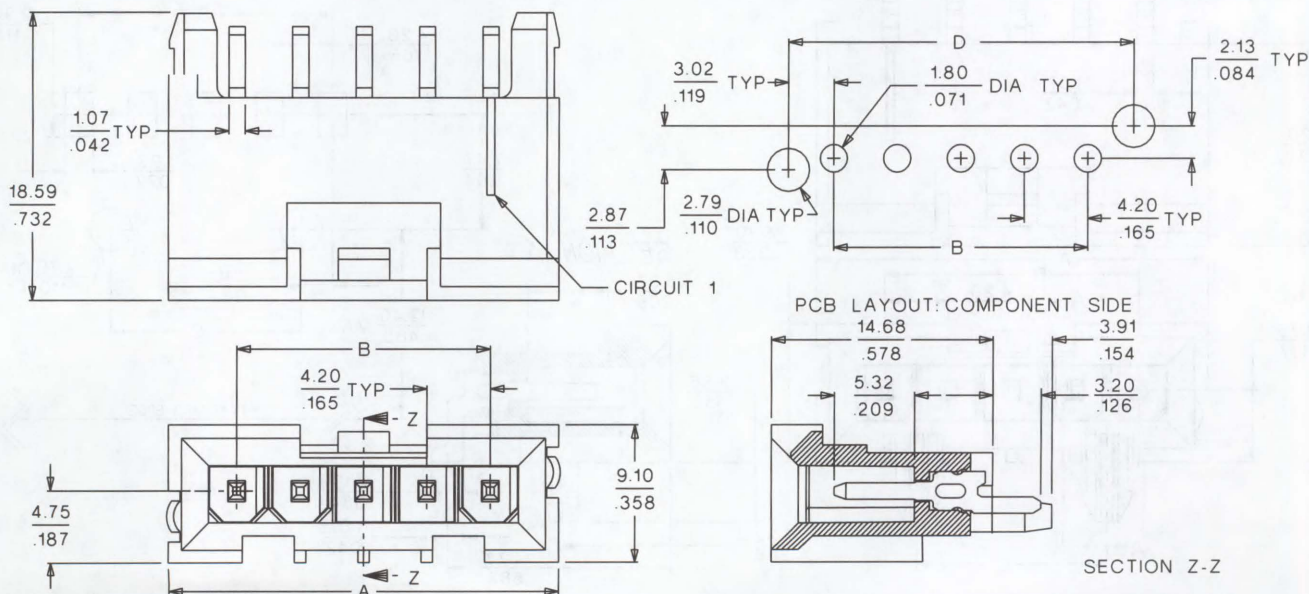
Single Row, Vertical
SMC



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.						Dimension		
	Tin/Lead		15μ" Gold		30μ" Gold		A	B	D
	With Pegs	Without Pegs	With Pegs	Without Pegs	With Pegs	Without Pegs			
2	• 71231-0001	71231-0201	71231-0401	71231-0501	71231-0101	71231-0301	13.31 (.524)	4.20 (.165)	10.24 (.403)
3	• 71231-0003	71231-0203	71231-0403	71231-0503	71231-0103	71231-0303	17.50 (.689)	8.40 (.331)	14.43 (.569)
4	• 71231-0005	71231-0205	71231-0405	71231-0505	71231-0105	71231-0305	21.71 (.855)	12.60 (.496)	18.61 (.734)
5	• 71231-0007	71231-0207	71231-0407	71231-0507	71231-0107	71231-0307	25.91 (1.020)	16.80 (.661)	22.84 (.899)
6	• 71231-0009	71231-0209	71231-0409	71231-0509	71231-0109	71231-0309	30.10 (1.185)	21.00 (.827)	27.03 (1.064)
7	• 71231-0011	71231-0211	71231-0411	71231-0511	71231-0111	71231-0311	34.31 (1.351)	25.20 (.992)	31.24 (1.230)
8	• 71231-0013	71231-0213	71231-0413	71231-0513	71231-0113	71231-0313	38.50 (1.516)	29.40 (1.158)	35.44 (1.395)
9	• 71231-0015	71231-0215	71231-0415	71231-0515	71231-0115	71231-0315	42.72 (1.682)	33.60 (1.323)	39.65 (1.561)
10	• 71231-0017	71231-0217	71231-0417	71231-0517	71231-0117	71231-0317	46.91 (1.847)	37.80 (1.488)	43.84 (1.726)
11	• 71231-0019	71231-0219	71231-0419	71231-0519	71231-0119	71231-0319	51.10 (2.012)	42.00 (1.654)	48.03 (1.891)
12	• 71231-0021	71231-0221	71231-0421	71231-0521	71231-0121	71231-0321	55.30 (2.177)	46.20 (1.819)	52.25 (2.057)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 12 circuits
- Positive latching system
- Fully polarized to the mating receptacle
- Fully isolated contacts
- Flanged mating envelope for ease in blind mating
- Snap-in peg locks the header to the PCB for optimum retention

Reference Information

Product Specification: PS-71690-001

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

Mates With: 71694 and 5557

Designed In: Inches

Electrical

Voltage: 600V DC max.

Electrical (continued)

Current:

Wire Gauge	2 Circuits	3-12 Circuits
18	7.0	6.0
20	6.0	5.25
22	5.0	4.5
24	4.5	4.0

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 2200V AC min.

Insulation Resistance: 100 MΩ min.

Mechanical

Insertion Force to PCB: 21N (4.72 lb) max.

Retention Force: 18N (4.05 lb) min.

Mating Force: 6.86N (1.54 lb) max.

Unmating Force: 3.92N (.89 lb) min.

Durability: 30 cycles

Physical

Housing: High-temperature glass-filled polyester, UL 94V-0

Contact: Brass

Plating: See Table

Operating Temperature: -40 to +105°C

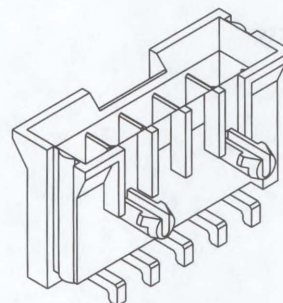


4.20mm (.165") Pitch

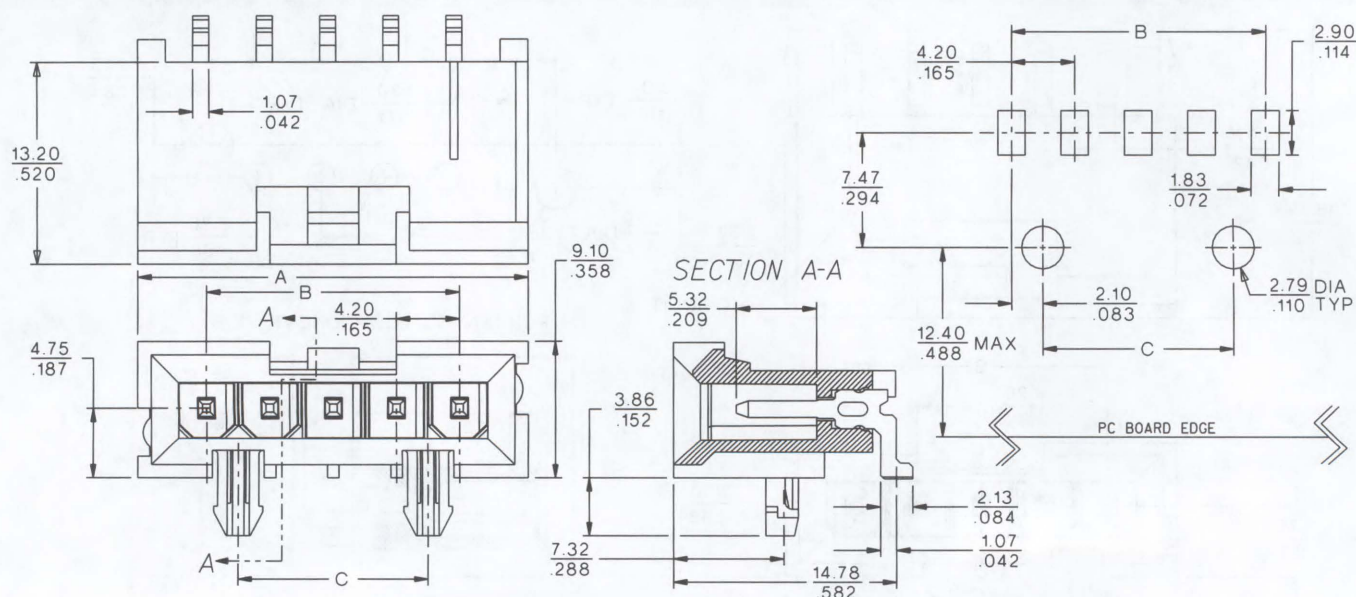
Mini-Fit™

Wire-to-Board
Header

71234

Single Row, Right Angle
SMT

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSION

Circuits	Order No.						Dimension		
	Tin/Lead		15μ" Gold		30μ" Gold		A	B	C
	With Pegs	Without Pegs	With Pegs	Without Pegs	With Pegs	Without Pegs			
2	71234-0001	71234-0201	71234-0401	71234-0501	71234-0101	71234-0301	13.31 (.524)	4.20 (.165)	
3	71234-0003	71234-0203	71234-0403	71234-0503	71234-0103	71234-0303	17.51 (.689)	8.40 (.331)	
4	71234-0005	71234-0205	71234-0405	71234-0505	71234-0105	71234-0305	21.71 (.855)	12.60 (.496)	8.40 (.330)
5	71234-0007	71234-0207	71234-0407	71234-0507	71234-0107	71234-0307	25.91 (1.020)	16.80 (.661)	12.60 (.496)
6	71234-0009	71234-0209	71234-0409	71234-0509	71234-0109	71234-0309	30.11 (1.185)	21.00 (.827)	16.80 (.661)
7	71234-0011	71234-0211	71234-0411	71234-0511	71234-0111	71234-0311	34.31 (1.351)	25.20 (.992)	21.00 (.827)
8	71234-0013	71234-0213	71234-0413	71234-0513	71234-0113	71234-0313	38.51 (1.516)	29.40 (1.158)	25.20 (.992)
9	71234-0015	71234-0215	71234-0415	71234-0515	71234-0115	71234-0315	42.71 (1.682)	33.60 (1.323)	29.40 (1.158)
10	71234-0017	71234-0217	71234-0417	71234-0517	71234-0117	71234-0317	46.91 (1.847)	37.80 (1.488)	33.60 (1.323)
11	71234-0019	71234-0219	71234-0419	71234-0519	71234-0119	71234-0319	51.11 (2.012)	42.00 (1.654)	37.80 (1.488)
12	71234-0021	71234-0221	71234-0421	71234-0521	71234-0121	71234-0321	55.31 (2.177)	46.20 (1.819)	42.00 (1.654)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 12 circuits
- Positive latching system
- Polarized
- Flanged mating envelope for ease in blind mating
- PCB pegs optional
- Surface Mount Compatible

Reference Information

Product Specification: PS-71690-001

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

Mates With: 71694 and 5557

Designed In: Inches

Electrical

Voltage: 600V

Current: Receptacle and header

Wire Gauge	2 Circuit	3 to 12 Circuit
18	7.00	6.00
20	6.00	5.25
22	5.00	4.50
24	4.50	4.00

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 2200V AC

Insulation Resistance: 1000 MΩmin.

Mechanical

Insertion Force to PCB: 21N (4.72 lb) min.

Retention Force to PCB: 18N (4.05 lb) min.

Mating Force: 6.86N (1.54 lb) max.

Unmating Force: 3.92N (.89 lb) max.

Durability: 30 cycles

Physical

Housing: High temperature glass-filled polyester, UL 94V-0

Contact: Brass

Plating: See Table

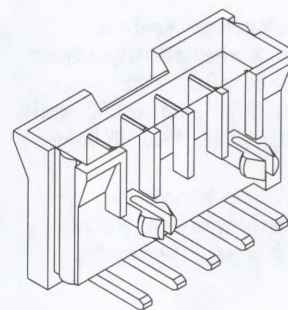
Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch Mini-Fit™ Wire-to-Board Header

71233

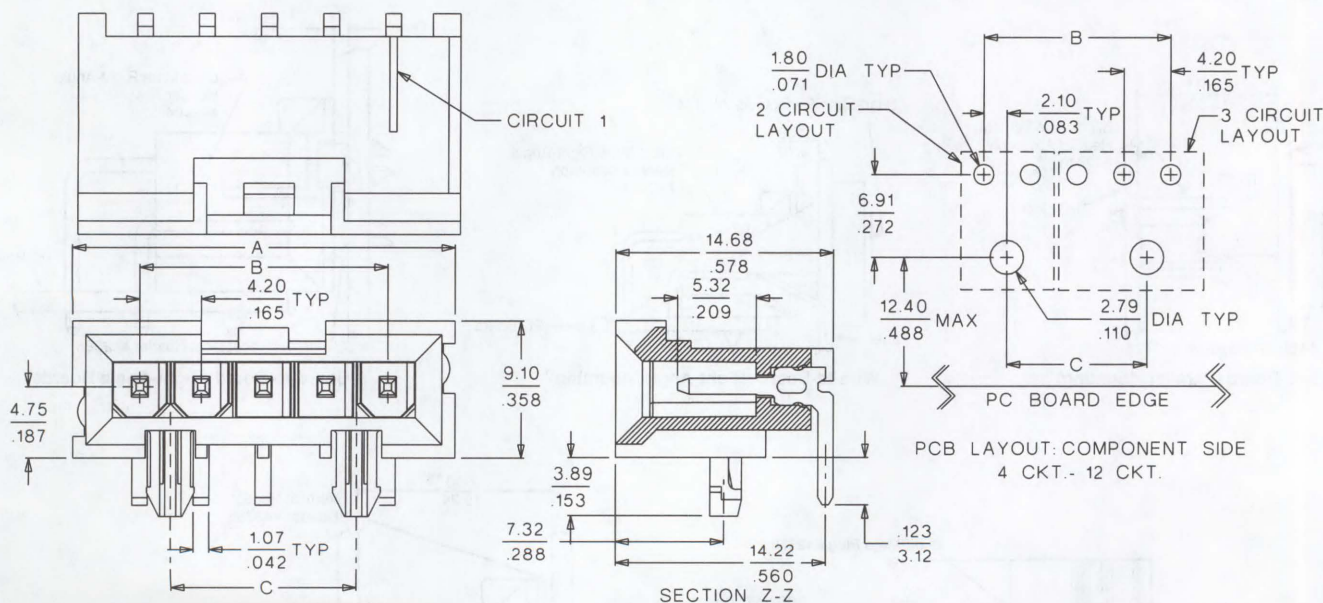
Single Row, Right Angle SMC



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.						Dimension		
	Tin/Lead		15μ" Gold		30μ" Gold		A	B	C
	With Pegs	Without Pegs	With Pegs	Without Pegs	With Pegs	Without Pegs			
2	• 71233-0001	71233-0201	71233-0401	71233-0501	71233-0101	71233-0301	13.31 (.524)	4.20 (.165)	
3	• 71233-0003	71233-0203	71233-0403	71233-0503	71233-0103	71233-0303	17.50 (.689)	8.40 (.331)	
4	• 71233-0005	71233-0205	71233-0405	71233-0505	71233-0105	71233-0305	21.71 (.855)	12.60 (.496)	8.40 (.330)
5	• 71233-0007	71233-0207	71233-0407	71233-0507	71233-0107	71233-0307	25.91 (1.020)	16.80 (.661)	12.60 (.496)
6	• 71233-0009	71233-0209	71233-0409	71233-0509	71233-0109	71233-0309	30.10 (1.185)	21.00 (.827)	16.80 (.661)
7	• 71233-0011	71233-0211	71233-0411	71233-0511	71233-0111	71233-0311	34.31 (1.351)	25.20 (.992)	21.00 (.826)
8	• 71233-0013	71233-0213	71233-0413	71233-0513	71233-0113	71233-0313	38.50 (1.516)	29.40 (1.158)	25.20 (.992)
9	• 71233-0015	71233-0215	71233-0415	71233-0515	71233-0115	71233-0315	42.72 (1.682)	33.60 (1.323)	29.40 (1.157)
10	• 71233-0017	71233-0217	71233-0417	71233-0517	71233-0117	71233-0317	46.91 (1.847)	37.80 (1.488)	33.60 (1.322)
11	• 71233-0019	71233-0219	71233-0419	71233-0519	71233-0119	71233-0319	51.10 (2.012)	42.00 (1.654)	37.80 (1.488)
12	• 71233-0021	71233-0221	71233-0421	71233-0521	71233-0121	71233-0321	55.30 (2.177)	46.20 (1.819)	42.00 (1.653)

• US Standard Product, available through Molex franchised distributors

BLIND MATING FAMILY

Features and Benefits

- Blind Mating Wire-to-Wire
- Blind Mating Wire-to-Board (parallel mounting)
- Blind Mating Wire-to-Board (right angle mounting)
- Blind Mating Board-to-Board (parallel stacked boards)
- Blind Mating Board-to-Board (right angle boards)
- Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-BMI	9	8	7	6
Amperes-BMI with HCS	12	11	10	9

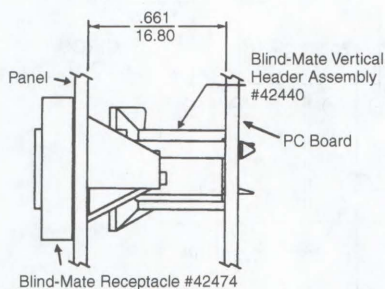
- 600V rating
- Positive housing locks to mate with Mini-Fit, Jr.™
- Fully isolated terminals to protect contacts from damage
- Post-plated Tin over Nickel or Gold contacts
- Available in 6/6 nylon, UL 94V-2 and UL 94V-0 materials
- UL File No. E29179, CSA File No. 19980, TUV License No. R75142
- Uses standard Mini-Fit™ series terminals
- Mini-Fit, BMI connectors have the capability of being selectively loaded with longer pins for grounding



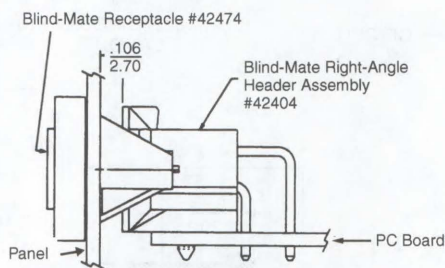
Mini-Fit, BMI™ Blind Mating System

The Mini-Fit, BMI is designed for a wide range of applications requiring the blind mating of modules, sub-assemblies or printed circuit boards. The Mini-Fit, BMI allows a misalignment of up to .100". It is appropriate for both power and signal applications as it can carry currents of up to 12.0A (with HCS) per circuit and has a 10mΩ maximum initial contact resistance.

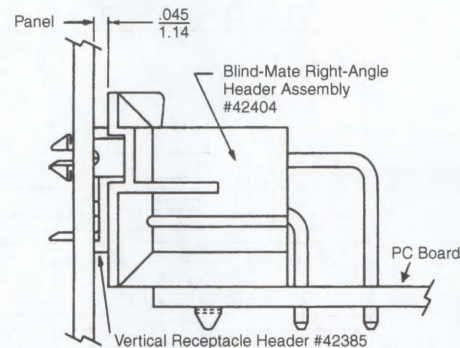
BLIND MATING CONFIGURATIONS (SHOWN MATED)



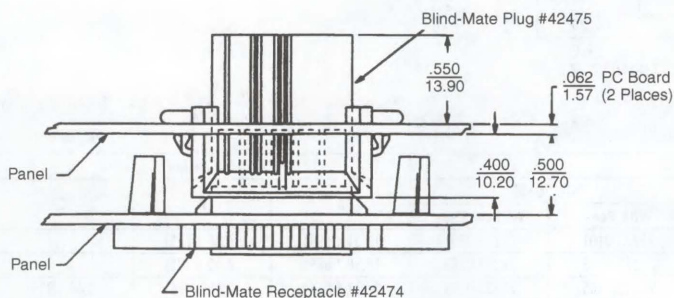
Wire-to-Board (Parallel Mounting)*



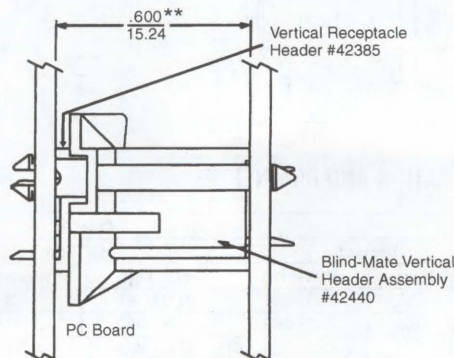
Wire-to-Board (Right-Angle Mounting)*



Board-to-Board (Right-Angle Boards)



Wire-to-Wire*



Board-to-Board (Parallel Boards)

inch
mm

* Wipe Length: A maximum tolerance of 1.27 (.050) for two points of contact, and 0.51 (.020) for four points of contact
 ** Use 16.51mm (.650") for 43879 CPI and 44668 SMC vertical headers.

FEATURES AND SPECIFICATIONS

Features and Benefits

- Blind mating panel mount receptacle
- For wire-to-wire and wire-to-board applications
- Fully isolated terminals to protect contacts from damage
- Uses standard Mini-Fit series terminals

Reference Information

Product Specification: PS-5556-0002

Packaging: Tray and bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 42404, 42440, 43759, 43810, 43879, 44068
and 44474 headers or 42475 and 43770 plugs

Use With: 5556 or 44476 HCS
terminals

Designed In: Millimeters

Electrical

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-BMI	9	8	7	6
Amperes-BMI with HCS	12	11	10	9

Mechanical

Contact Insertion Force: 1.5kg max.
Contact Retention to Housing: 3.0kg min.
Wire Pull-Out Force: 9.0kg min.
Mating Force: 0.7kg (1.54 lb) max.
Unmating Force: 0.35kg (0.7 lb) min.
Normal Force: 200g min.
Durability: 30 cycles

Physical

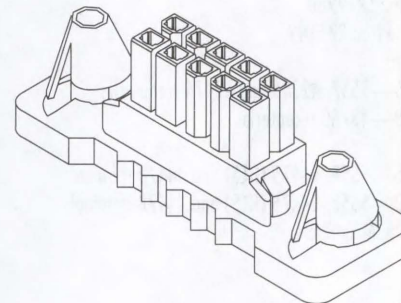
Housing: 6/6 nylon, UL 94V-2 or 94V-0
Contact: Brass or Phosphor Bronze
Plating: Tin, select Gold or overall Gold
Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch Mini-Fit, BMI™ Receptacle

42474/43760

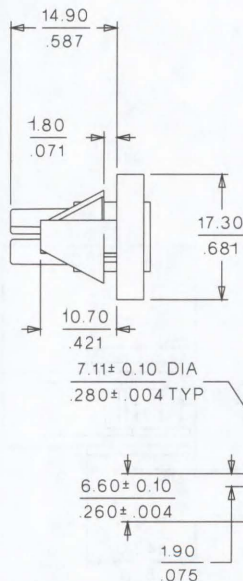
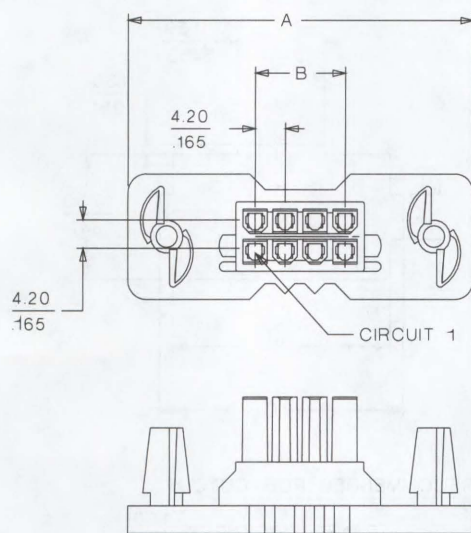
Dual Row With Panel Mount Ears



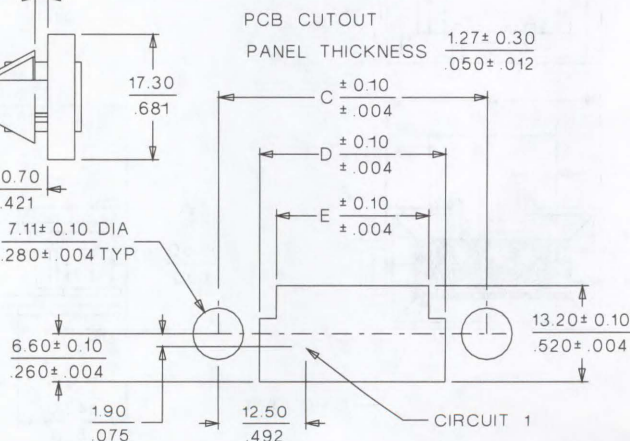
Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



Polarizing Key	Order No.
	15-04-0211



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension				
	94V-2	94V-0	A	B	C	D	E
4	• 15-06-0040	• 15-06-0041	40.20 (1.583)	4.20 (.165)	29.20 (1.150)	17.60 (.693)	12.90 (.508)
6	• 15-06-0060	• 15-06-0061	44.40 (1.748)	8.40 (.331)	33.40 (1.315)	21.80 (.858)	17.10 (.673)
8	• 15-06-0080		48.60 (1.913)	12.60 (.496)	37.60 (1.480)	26.00 (1.023)	21.30 (.838)
10	• 15-06-0100	• 15-06-0101	52.80 (2.078)	16.80 (.661)	41.80 (1.645)	30.20 (1.189)	25.50 (1.004)
14	• 15-06-0140	• 15-06-0141	61.20 (2.409)	25.20 (.992)	50.20 (1.976)	38.60 (1.520)	33.90 (1.335)
18	• 15-06-0180	• 15-06-0181	69.60 (2.740)	33.60 (1.323)	58.60 (2.307)	47.00 (1.850)	42.30 (1.665)
24	• 15-06-0240	• 15-06-0241	82.20 (3.236)	46.20 (1.819)	71.20 (2.803)	59.60 (2.346)	54.90 (2.161)
36	43760-0001		107.40 (4.228)	71.40 (2.811)	96.40 (3.795)	81.50 (3.208)	76.78 (3.023)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Blind mating panel mounted plug
- Positive housing locks to mate with Mini-Fit, Jr.
- Fully isolated terminals to protect contacts from damage
- Uses standard Mini-Fit series terminals
- 43770 provides first-mate/last-break capability

Reference Information

Product Specification: PS-5556-0002

Packaging: Tray and bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With:

42475—5557, 42385 and 42474 receptacles

43770—43760 receptacle

Use With:

42475—5558, 44475 (HCS) and 44478 terminals

43770—5558, 44475 (HCS) and 44478 terminals

Designed In: Millimeters

Mechanical

Contact Insertion Force: 1.5kg max.
Contact Retention to Housing: 3.0kg min.
Wire Pull-Out Force: 9.0kg min.
Mating Force: 0.7kg (1.54 lb) max.
Unmating Force: 0.35kg (0.7 lb) min.
Normal Force: 200g min.
Durability: 30 cycles

Physical

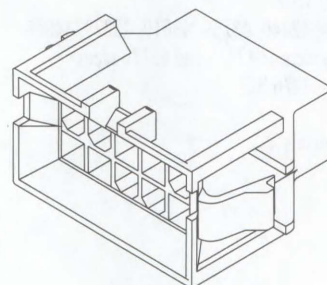
Housing: 6/6 nylon, UL 94V-2 or 94V-0
Contact: Brass or Phosphor Bronze
Plating: Tin, select Gold or overall Gold
Operating Temperature: -40 to +105°C



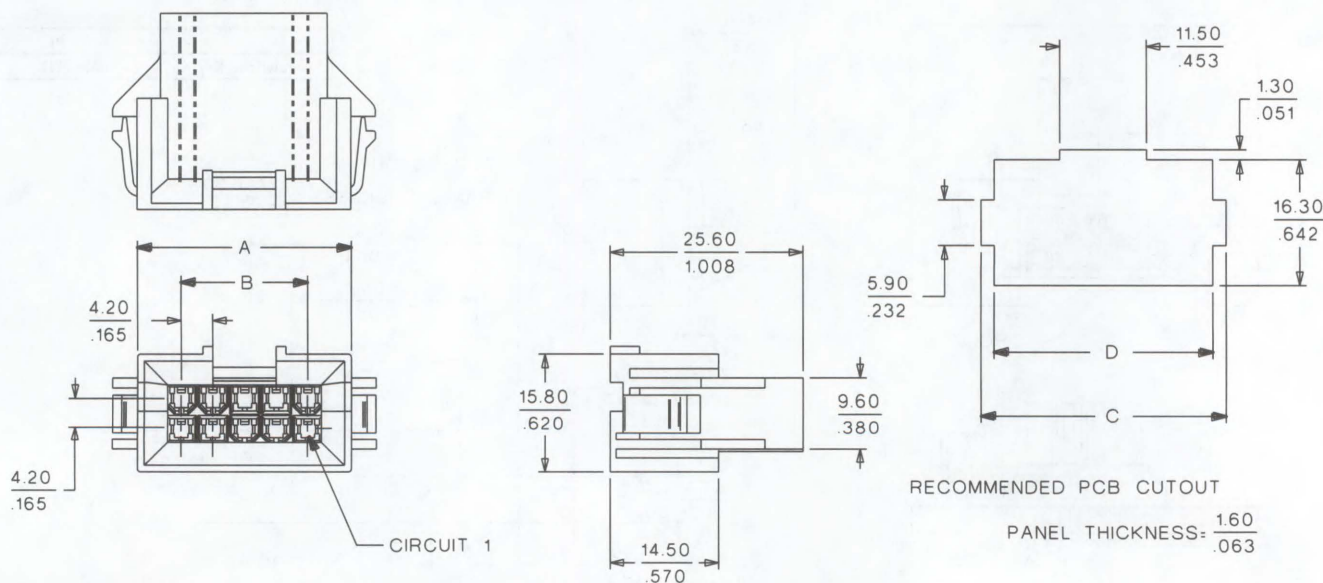
**4.20mm (.165") Pitch
Mini-Fit, BMI™
Plug**

42475/43770

**Dual Row
With Panel Mount Ears**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension			
	94V-2	94V-0	A	B	C	D
4	• 15-06-0045	• 15-06-0046	15.80 (.622)	4.20 (.165)	19.80 (.779)	16.30 (.642)
6	• 15-06-0065		20.00 (.787)	8.40 (.331)	24.00 (.945)	20.50 (.807)
8	• 15-06-0085		24.20 (.952)	12.60 (.496)	28.20 (1.110)	24.70 (.972)
10	• 15-06-0105	• 15-06-0106	28.40 (1.118)	16.80 (.661)	32.40 (1.276)	28.90 (1.138)
14	• 15-06-0145	• 15-06-0146	36.80 (1.449)	25.20 (.992)	40.80 (1.606)	37.30 (1.469)
18	• 15-06-0185	• 15-06-0186	45.20 (1.780)	33.60 (1.323)	49.20 (1.937)	45.70 (1.799)
20	• 15-06-0205		49.40 (1.945)	37.80 (1.488)	53.40 (2.102)	49.90 (1.965)
24	• 15-06-0245		57.80 (2.276)	46.20 (1.819)	61.80 (2.433)	58.30 (2.295)
36	• 43770-0001		79.50 (3.130)	71.40 (2.811)	87.00 (3.430)	83.49 (3.290)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Board-mounted receptacle header for board-to-board applications
- Fully isolated terminals to protect contacts from damage

Reference Information

Product Specification: PS-5556-0002

Packaging: Tray and bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Use With: Standard Mini-Fit terminals

Mates With: 42475 plug, 42404, 42440, 43810, 43879 and 44068 headers

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-BMI	9	8	7	6

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0

Contact: Brass or Phosphor Bronze

Plating: Post-plated Tin over Nickel or Gold

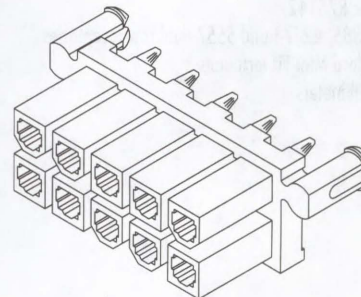
Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch Mini-Fit, BMI™ Receptacle Header

42385

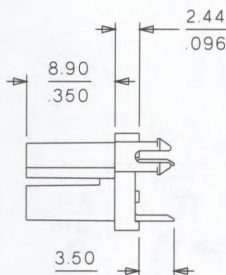
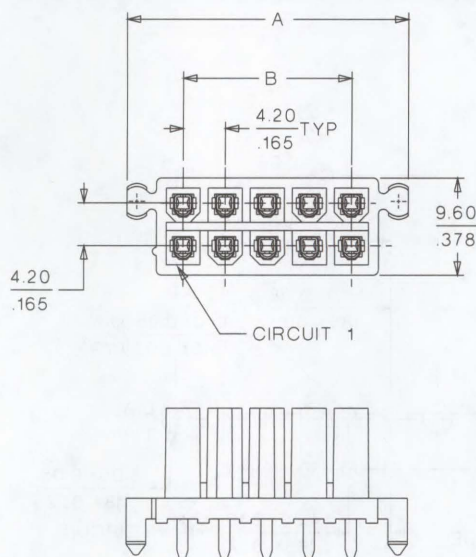
Vertical Dual Row



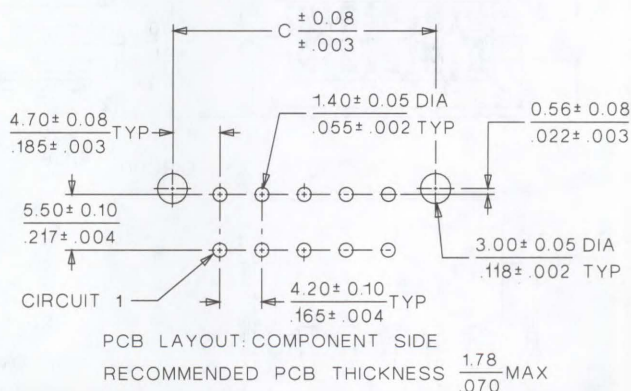
Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



Polarizing Key	Order No.
	15-04-0211



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS 1.78 MAX
.070

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated		A	B	C
	94V-2	94V-0	94V-2	94V-0			
4	• 15-24-7040	• 15-24-7041	• 15-24-7042	• 15-24-7043	15.62 (.615)	4.20 (.165)	13.60 (.535)
6	• 15-24-7060	• 15-24-7061	• 15-24-7062	• 15-24-7063	19.82 (.780)	8.40 (.331)	17.80 (.701)
10	• 15-24-7100	• 15-24-7101	• 15-24-7102	• 15-24-7103	28.22 (1.111)	16.80 (.661)	26.20 (1.031)
14	• 15-24-7140	• 15-24-7141	• 15-24-7142	• 15-24-7143	36.62 (1.442)	25.20 (.992)	34.60 (1.362)
16	• 15-24-7160	• 15-24-7161	• 15-24-7162	• 15-24-7163	40.80 (1.607)	29.40 (1.157)	38.80 (1.528)
18	• 15-24-7180	• 15-24-7181	• 15-24-7182	• 15-24-7183	45.02 (1.772)	33.60 (1.323)	43.00 (1.693)
24	• 15-24-7240	• 15-24-7241	• 15-24-7242	• 15-24-7243	57.62 (2.269)	46.20 (1.819)	55.60 (2.189)

• US Standard Product, available through Molex franchised distributors

Note: 42385 headers do not mate with Mini-Fit, Jr.™ products

FEATURES AND SPECIFICATIONS

Features and Benefits

- Positive housing locks to mate with Mini-Fit, Jr. receptacles
- Fully isolated terminals to protect contacts from damage
- Mini-Fit, BMI connectors have the capability of being selectively loaded with longer pins for grounding

Reference Information

Product Specification: PS-5556-0002

Packaging: Tray and bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 42385, 42474 and 5557 dual row receptacles

Use With: Standard Mini-Fit terminals

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-BMI	9	8	7	6

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0

Contact: Brass or Phosphor Bronze

Plating: Tin, select Gold or overall Gold

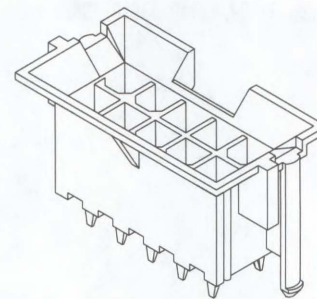
Operating Temperature: -40 to +105°C



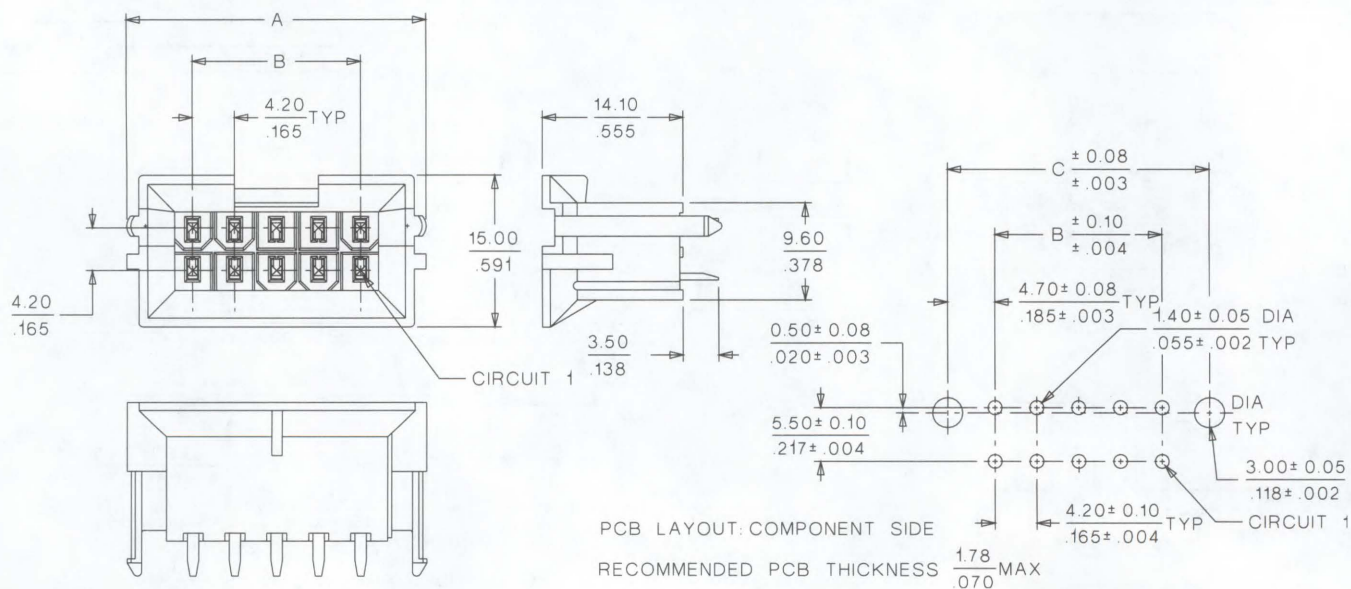
4.20mm (.165") Pitch Mini-Fit, BMI™ Header

42440

Vertical Dual Row



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

With Drain Holes							
Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated				
	94V-2	94V-0	94V-2	94V-0	A	B	C
4	•15-24-6046	•15-24-6047	•15-28-6046	•15-28-6047	17.40 (.685)	4.20 (.170)	13.60 (.535)
6	•15-24-6066		•15-28-6066		21.60 (.850)	8.40 (.330)	17.80 (.701)
10	•15-24-6106	•15-24-6107	•15-28-6106	•15-28-6107	30.00 (1.181)	16.80 (.660)	26.20 (1.031)
14	•15-24-6146	•15-24-6147	•15-28-6146	•15-28-6147	38.40 (1.512)	25.20 (.990)	34.60 (1.362)
18	•15-24-6186	•15-24-6187	•15-28-6186	•15-28-6187	46.80 (1.843)	33.60 (1.320)	43.00 (1.693)
24	•15-24-6246	•15-24-6247	•15-28-6246	•15-28-6247	59.40 (2.339)	46.20 (1.820)	55.60 (2.189)

• US Standard Product, available through Molex franchised distributors

Without Drain Holes							
Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated				
	94V-2	94V-0	94V-2	94V-0	A	B	C
4	• 15-24-6041	• 15-24-6042	• 15-28-6041	• 15-28-6042	17.40 (.685)	4.20 (.170)	13.60 (.535)
6					21.60 (.850)	8.40 (.330)	17.80 (.701)
10	• 15-24-6101	• 15-24-6102	• 15-28-6101	• 15-28-6102	30.00 (1.181)	16.80 (.660)	26.20 (1.031)
14	• 15-24-6141	• 15-24-6142	• 15-28-6141	• 15-28-6142	38.40 (1.512)	25.20 (.990)	34.60 (1.362)
16	• 15-24-6161		• 15-28-6161		42.60 (1.677)	29.40 (1.160)	38.80 (1.528)
18	• 15-24-6181	• 15-24-6182	• 15-28-6181	• 15-28-6182	46.80 (1.843)	33.60 (1.320)	43.00 (1.693)
24	• 15-24-6241	• 15-24-6242	• 15-28-6241	• 15-28-6242	59.40 (2.339)	46.20 (1.820)	55.60 (2.189)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Positive housing locks to mate with Mini-Fit, Jr. receptacles
- Fully isolated terminals to protect contacts from damage
- Mini-Fit, BMI connectors have the capability of being selectively loaded with longer pins for grounding
- 43759 is a first-mate/last-break header

Reference Information

Product Specification: PS-5556-0002

Packaging: Tray and bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 42385, 42474, 44475 and 5557
dual row receptacles

Use With: Standard Mini-Fit terminals

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-BMI	9	8	7	6
Amperes-BMI with HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0

Contact: Brass

Plating: Tin, select Gold or overall Gold

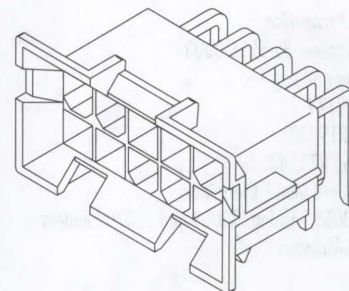
Operating Temperature: -40 to +105°C



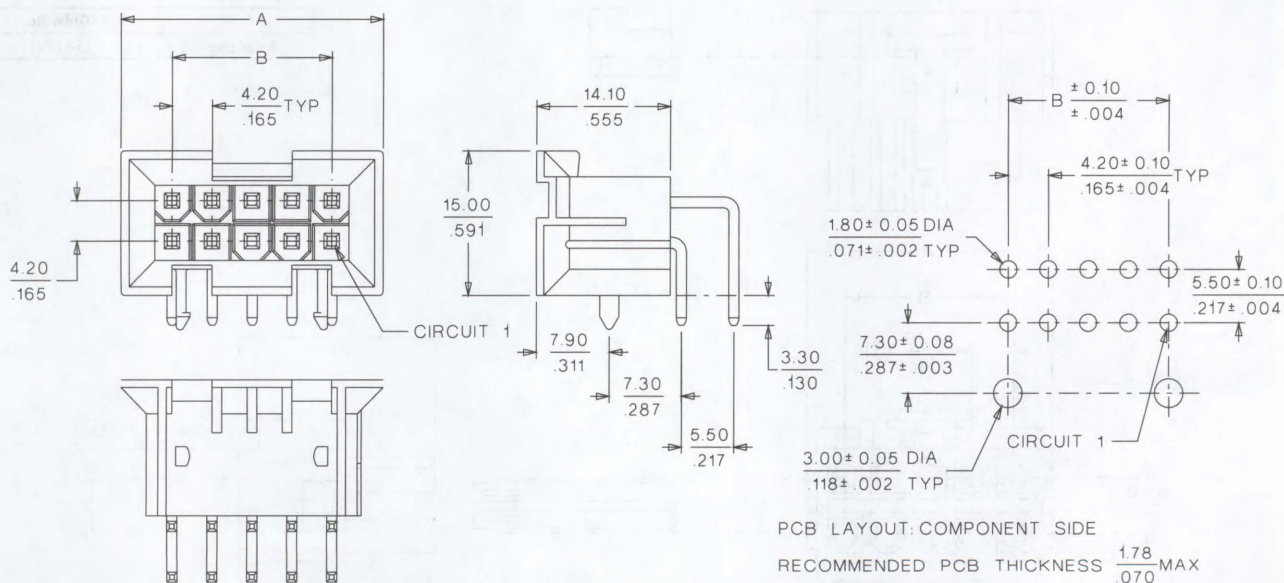
4.20mm (.165") Pitch Mini-Fit, BMI™ Header

42404/43759

Right Angle Dual Row



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension	
	Tin Plated		Gold Plated		A	B
	94V-2	94V-0	94V-2	94V-0		
4	• 15-24-6040	• 15-24-9044	• 15-24-9043	• 15-24-9045	15.00 (.590)	4.20 (.165)
6	• 15-24-6060	• 15-24-9064	• 15-24-9063	• 15-24-9065	19.20 (.760)	8.40 (.331)
10	• 15-24-6100	• 15-24-9104	• 15-24-9103	• 15-24-9105	27.60 (1.090)	16.80 (.661)
14	• 15-24-6140	• 15-24-9144	• 15-24-9143	• 15-24-9145	36.00 (1.420)	25.20 (.992)
16		• 15-24-9164		• 15-24-9165	40.20 (1.580)	29.40 (1.157)
18	• 15-24-6180	• 15-24-9184	• 15-24-9183	• 15-24-9185	44.40 (1.750)	33.60 (1.323)
24	• 15-24-6240	• 15-24-9244	• 15-24-9243	• 15-24-9245	57.00 (2.240)	46.20 (1.819)
36	• 43759-0001				82.20 (3.240)	71.40 (2.811)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Receptacle housing for wire-to-wire and wire-to-board applications
- Terminal Position Assurance (TPA) allows the terminal to be fully seated in the housing assuring that it will not back out during high vibration applications
- Connector Position Assurance (CPA) assures housing cannot be inadvertently disengaged
- Contrasting color (white) TPA/CPA for high visibility
- TPA and CPA keys are sold individually to meet customer-specific needs

Reference Information

Product Specification: PS-5556-0003

Packaging: Tray and bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Use With: Standard Mini-Fit terminals

Mates With: 30068 housing, 30069 and 30070 headers

Designed In: Millimeters

Mechanical

Contact Insertion Force: 1.5kg max.
 Contact Retention to Housing: 3.0kg min.
 Wire Pull-Out Force: 9.0kg min.
 Mating Force: 0.7kg (1.54 lb) max.
 Unmating Force: 0.35kg (0.7 lb) min.
 Normal Force: 200g min.
 Durability: 30 cycles

Physical

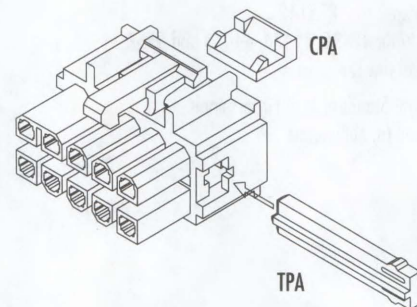
Housing: Black polyester, UL 94V-0
 Contact: Brass or Phosphor Bronze
 Plating: Tin, select Gold and overall Gold
 Operating Temperature: -40 to +105°C



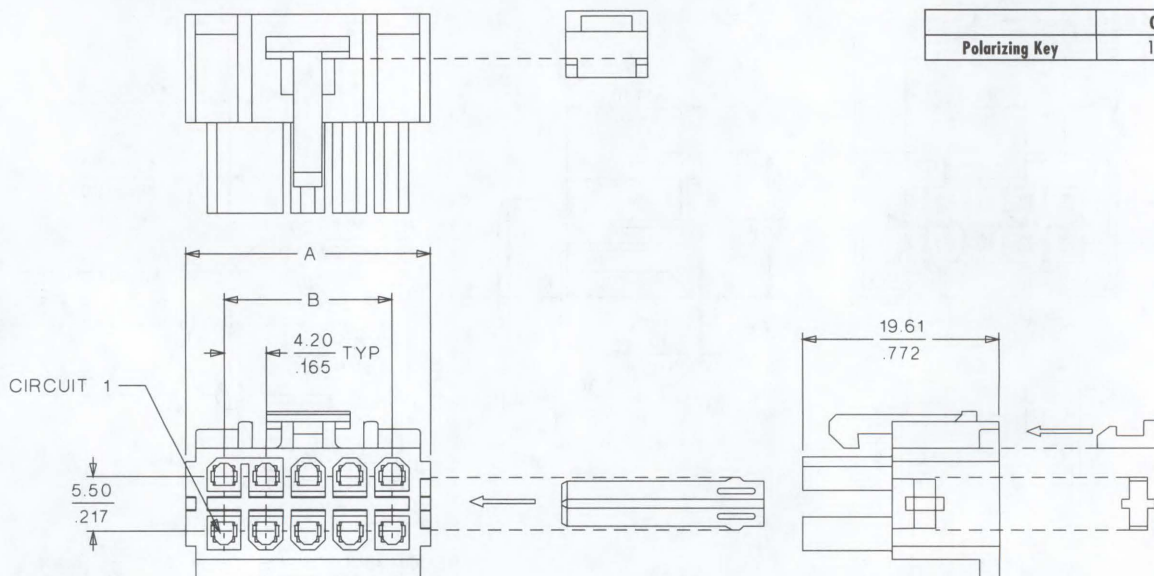
4.20mm (.165") Pitch Mini-Fit, TPA™ Receptacle

30067

Dual Row With Secondary Terminal Retention



CATALOG DRAWING (FOR REFERENCE ONLY)



Polarizing Key	Order No.
	15-04-0211

ORDERING INFORMATION AND DIMENSIONS

Circuits	Receptacle Order No.	Receptacle Dimension		Terminal Position Assurance	Connector Position Assurance
		A	B	30072	30071 (Fits All Receptacles)
2	• 15-97-5021*	11.86 (.467)		• 15-97-9041†	• 15-97-0071
4	• 15-97-5041*	11.86 (.467)	4.20 (.165)	• 15-97-9041†	
6	• 15-97-5061*	16.08 (.633)	8.40 (.331)	• 15-97-9061	
8	• 15-97-5081	20.27 (.798)	12.60 (.496)	• 15-97-9081	
10	• 15-97-5101	24.46 (.963)	16.80 (.661)	• 15-97-9101	
12	• 15-97-5121	28.68 (1.129)	21.00 (.827)	• 15-97-9121	
16	• 15-97-5161	37.06 (1.459)	29.40 (1.157)	• 15-97-9161	

* US Standard Product, available through Molex franchised distributors

* Receptacles have side pull tabs for use with strain reliefs

† The same TPA is used for both the 2 and 4 circuit receptacles

FEATURES AND SPECIFICATIONS

Features and Benefits

- Wire-to-wire plug
- Terminal Position Assurance (TPA) allows the terminal to be fully seated in the housing assuring that it will not back out during high vibration applications
- TPA key is sold individually to meet customer-specific needs
- Optional snap-on ears for panel mounting
- Contrasting color (white) TPA/CPA for high visibility

Reference Information

Product Specification: PS-5556-0003

Packaging: Tray and bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Use With: Standard Mini-Fit terminals

Mates With: 30067 housing

Designed In: Millimeters

Mechanical

Contact Insertion Force: 1.5kg max.
Contact Retention to Housing: 3.0kg min.
Wire Pull-Out Force: 9.0kg min.
Mating Force: 0.7kg (1.54 lb) max.
Unmating Force: 0.35kg (0.7 lb) min.
Normal Force: 200g min.
Durability: 30 cycles

Physical

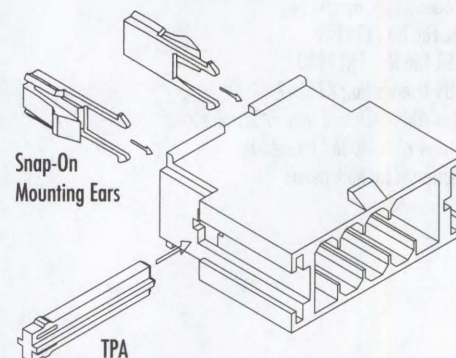
Housing: Black polyester, UL 94V-0
Contact: Brass or Phosphor Bronze
Plating: Tin, select Gold and overall Gold
Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch
Mini-Fit, TPA™
Plug

30068

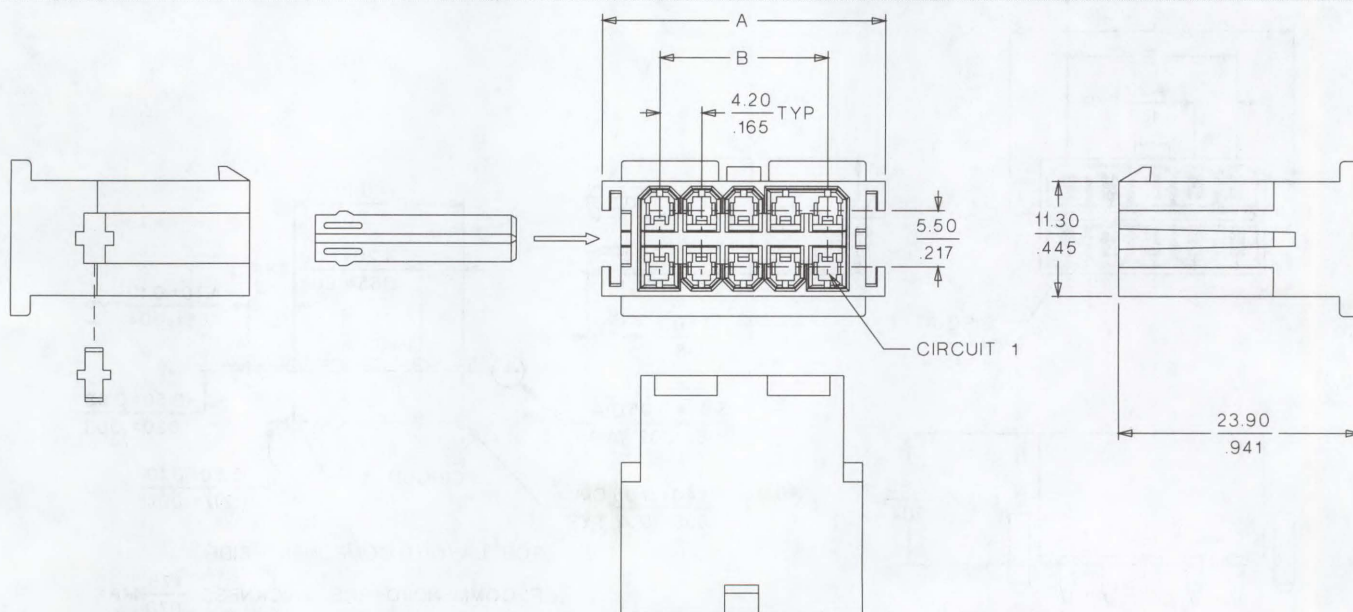
Dual Row with Secondary
Terminal Retention



Power Connectors

F

CATALOG DRAWINGS (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Plug Order No.	Terminal Position Assurance	Dimension		Snap-on Panel Mounting Ears
			A	B	
2	• 15-97-6021*	• 15-97-9041†	11.86 (.467)		43130-0001†
4	• 15-97-6041	• 15-97-9041	11.86 (.467)	8.01 (.315)	
6	• 15-97-6061	• 15-97-9061	16.08 (.633)	12.21 (.481)	
8	• 15-97-6081	• 15-97-9081	20.27 (.798)	16.41 (.646)	
10	• 15-97-6101	• 15-97-9101	24.26 (.963)	20.61 (.811)	
12	• 15-97-6121	• 15-97-9121	28.68 (1.129)	24.81 (.977)	
16	• 15-97-6161	• 15-97-9161	37.06 (1.459)	33.21 (1.307)	

• US Standard Product, available through Molex franchised distributors

* Receptacles have side pull tabs for use with strain reliefs

† The same TPA is used for both the 2 and 4 circuit plugs

† Two required per plug

FEATURES AND SPECIFICATIONS

Features and Benefits

- Wire-to-board vertical header with mounting pegs for increased retention
- Positive housing locks
- Fully isolated terminals
- Contrasting color (white) TPA/CPA for high visibility
- Redundant housing lock (CPA)

Reference Information

Product Specification: PS-5556-0003
 Packaging: Tray and bag
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R75142
 Use With: Standard Mini-Fit terminals
 Mates With: 30067 receptacle
 Designed In: Millimeters

Electrical

Voltage: 600V
 Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-TPA	9	8	7	6

Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.
 Mating Force: 0.7kg (1.54 lb) max.
 Unmating Force: 0.35kg (0.7 lb) min.
 Normal Force: 200g min.
 Durability: 30 cycles

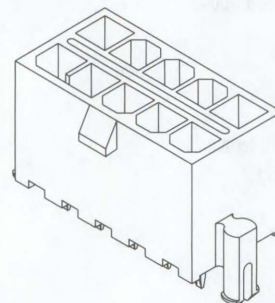
Physical

Housing: Black polyester, UL 94V-0
 Contact: Brass or Phosphor Bronze
 Plating: Tin, select Gold and overall Gold
 Operating Temperature: -40 to +105°C

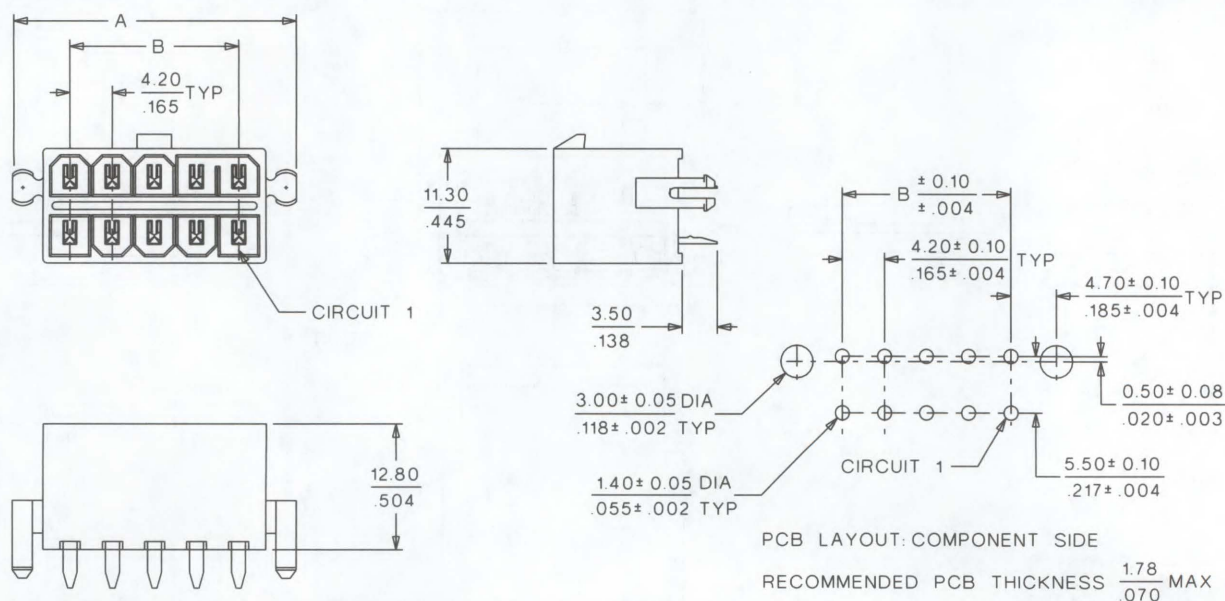
molex® 4.20mm (.165") Pitch Mini-Fit, TPA™ Header

30069

Vertical, Dual Row With Pegs



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

With Drain Holes				
Circuits	Order No.		Dimension	
	Tin Plated	Gold Plated	A	B
2			5.40 (.213)	
4			9.60 (.378)	4.20 (.165)
6	• 15-97-7067	• 15-97-7069	13.80 (.543)	8.40 (.331)
8			18.00 (.709)	12.60 (.496)
10			22.20 (.874)	16.80 (.661)
12			26.40 (1.039)	21.00 (.827)
14			30.60 (1.205)	25.20 (.992)
16			34.80 (1.370)	29.40 (1.157)

Without Drain Holes				
Circuits	Order No.		Dimension	
	Tin Plated	Gold Plated	A	B
2			5.40 (.213)	
4			9.60 (.378)	4.20 (.165)
6	• 15-97-7063	• 15-97-7065	13.80 (.543)	8.40 (.331)
8			18.00 (.709)	12.60 (.496)
10			22.20 (.874)	16.80 (.661)
12			26.40 (1.039)	21.00 (.827)
14			30.60 (1.205)	25.20 (.992)
16			34.80 (1.370)	29.40 (1.157)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Wire-to-board vertical header with mounting flanges for increased retention
- Positive housing locks
- Fully isolated terminals
- Redundant housing lock (CPA)

Reference Information

Product Specification: PS-5556-0003

Packaging: Tray and bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Use With: Standard Mini-Fit terminals

Mates With: 30067 receptacle

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-TPA	9	8	7	6

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: Black polyester, UL 94V-0

Contact: Brass or Phosphor Bronze

Plating: Tin, select Gold and overall Gold

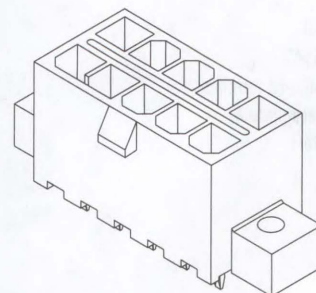
Operating Temperature: -40 to +105°C



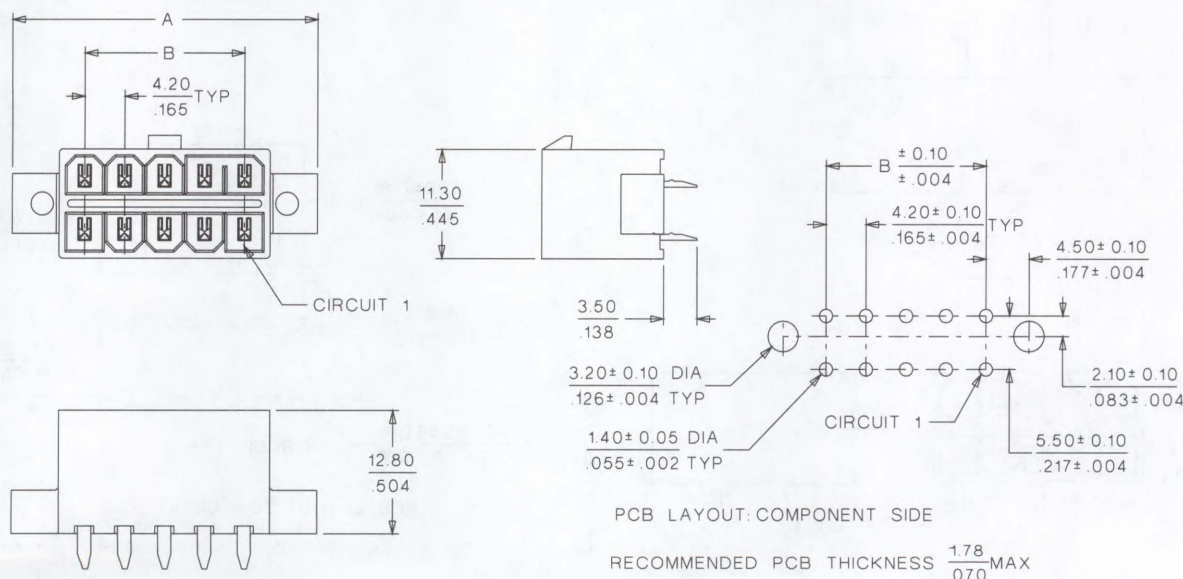
4.20mm (.165") Pitch Mini-Fit, TPA™ Header

30069

Vertical, Dual Row With Flanges



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

With Drain Holes				
Circuits	Order No.		Dimension	
	Tin Plated	Gold Plated	A	B
2			15.40 (.606)	
4	• 15-97-7046	• 15-97-7048	19.60 (.772)	4.20 (.165)
6	• 15-97-7066	• 15-97-7068	23.80 (.937)	8.40 (.331)
8	• 15-97-7086	• 15-97-7088	28.00 (1.102)	12.60 (.496)
10	• 15-97-7106	• 15-97-7108	32.20 (1.268)	16.80 (.661)
12	• 15-97-7126	• 15-97-7128	36.40 (1.433)	21.00 (.827)
16	• 15-97-7166	• 15-97-7168	44.80 (1.764)	29.40 (1.157)

Without Drain Holes				
Circuits	Order No.		Dimension	
	Tin Plated	Gold Plated	A	B
2	• 15-97-7022	• 15-97-7024	15.40 (.606)	
4	• 15-97-7042	• 15-97-7044	19.60 (.772)	4.20 (.165)
6	• 15-97-7062	• 15-97-7064	23.80 (.937)	8.40 (.331)
8	• 15-97-7082	• 15-97-7084	28.00 (1.102)	12.60 (.496)
10	• 15-97-7102	• 15-97-7104	32.20 (1.268)	16.80 (.661)
12	• 15-97-7122	• 15-97-7124	36.40 (1.433)	21.00 (.827)
16	• 15-97-7162	• 15-97-7164	44.80 (1.764)	29.40 (1.157)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Wire-to-board with terminal position assurance (TPA)
- Positive housing locks
- Secondary retention and locking features (TPA and CPA keys)
- Fully isolated contacts
- Pegs molded onto housing for increased board retention

Reference Information

Product Specification: PS-5556-0003

Packaging: Tray and bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Use With: Standard Mini-Fit terminals

Mates With: 30067 receptacle

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-TPA	9	8	7	6
Amperes-TPA with HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: Black polyester, UL 94V-0

Contact: Brass or Phosphor Bronze

Plating: Tin, select Gold and overall Gold

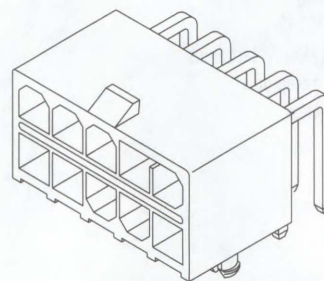
Operating Temperature: -40 to +105°C



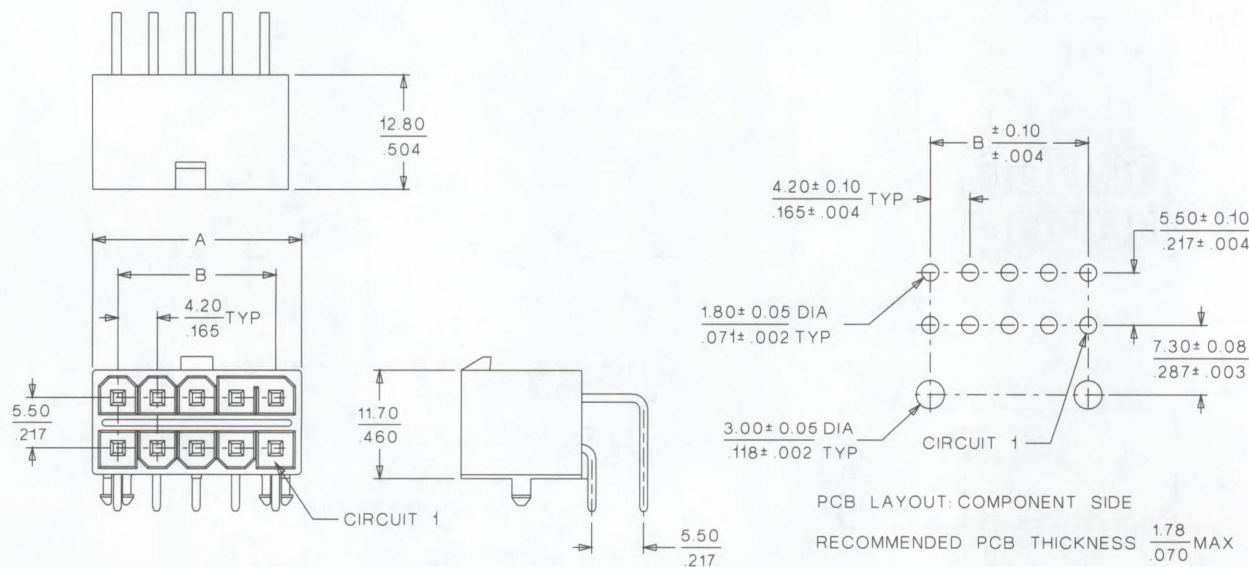
4.20mm (.165") Pitch Mini-Fit, TPA™ Header

30070

Right Angle, Dual Row With Pegs



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin Plated	Gold Plated	A	B
2	• 15-97-8023	• 15-97-8028	15.40 (.606)	
4	• 15-97-8043	• 15-97-8048	19.60 (.772)	4.20 (.165)
6			23.80 (.937)	8.40 (.331)
8			28.00 (1.102)	12.60 (.496)
10			32.20 (1.268)	16.80 (.661)
12			36.40 (1.433)	21.00 (.827)
14			40.60 (1.598)	25.20 (.992)
16			44.80 (1.764)	29.40 (1.157)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Wire-to-board with terminal position assurance (TPA)
- Positive housing locks
- Secondary retention and locking features (TPA and CPA keys)
- Fully isolated contacts

Reference Information

Product Specification: PS-5556-0003

Packaging: Tray and bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Use With: Standard Mini-Fit terminals

Mates With: 30067 receptacle

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-TPA	9	8	7	6
Amperes-TPA with HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: Black polyester, UL 94V-0

Contact: Brass or Phosphor Bronze

Plating: Tin, select Gold and overall Gold

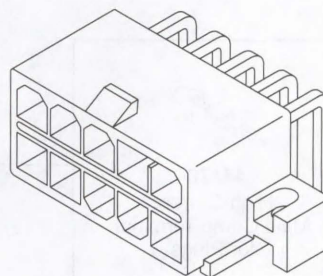
Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch
Mini-Fit, TPA™
Header

30070

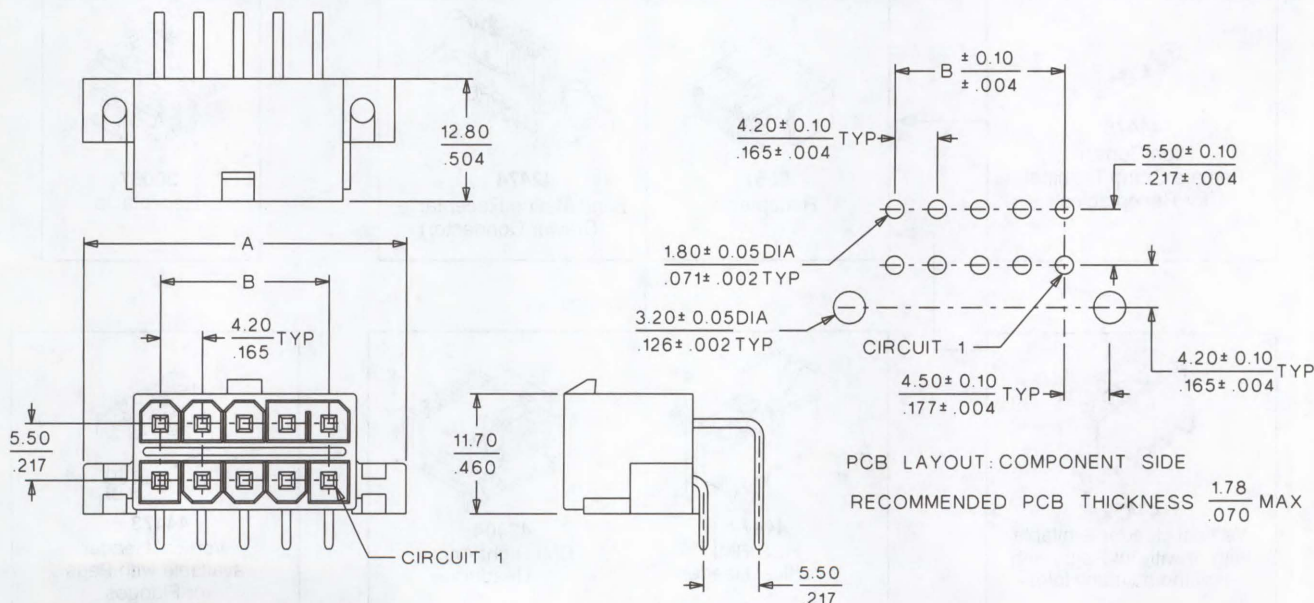
Right Angle, Dual Row
With Flanges



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	Tin Plated	Gold Plated	A	B	C
2	• 15-97-8022	• 15-97-8027	15.40 (.606)		5.40 (.213)
4	• 15-97-8042	• 15-97-8047	19.60 (.772)	4.20 (.165)	9.60 (.378)
6	• 15-97-8062	• 15-97-8067	23.80 (.937)	8.40 (.331)	13.80 (.543)
8	• 15-97-8082	• 15-97-8087	28.00 (1.102)	12.60 (.496)	18.00 (.709)
10	• 15-97-8102	• 15-97-8107	32.20 (1.268)	16.80 (.661)	22.20 (.874)
12	• 15-97-8122	• 15-97-8127	36.40 (1.433)	21.00 (.827)	26.40 (1.039)
16	• 15-97-8162	• 15-97-8167	44.80 (1.764)	29.40 (1.157)	34.80 (1.370)

• US Standard Product, available through Molex franchised distributors

MINI-FIT™ FAMILY**Features and Benefits**

- 3 more amperes per circuit
- Available in all existing Mini-Fit housing configurations
- 600V rating
- Positive housing locks
- Four points of contact
- 10 million maximum initial contact resistance
- One of the most versatile high current connector systems available
- Dimensions of the housings for Mini-Fit, HCS are the same as the dimensions for Mini-Fit, Jr.™, BMI™ and TPA™ housings

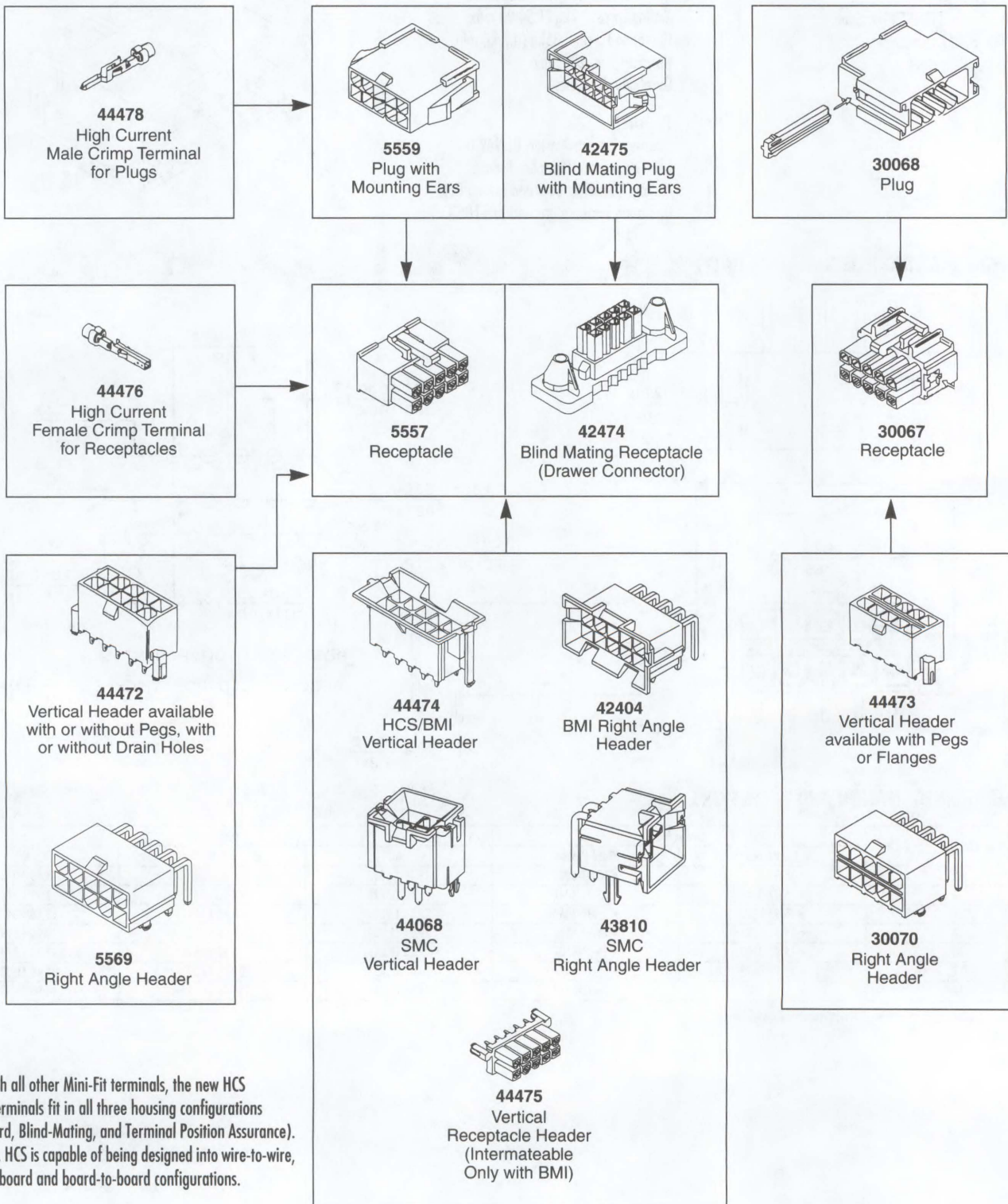
Reference Information

UL File No.: E29179
 CSA File No.: 19980
 TUV License No.: R75142

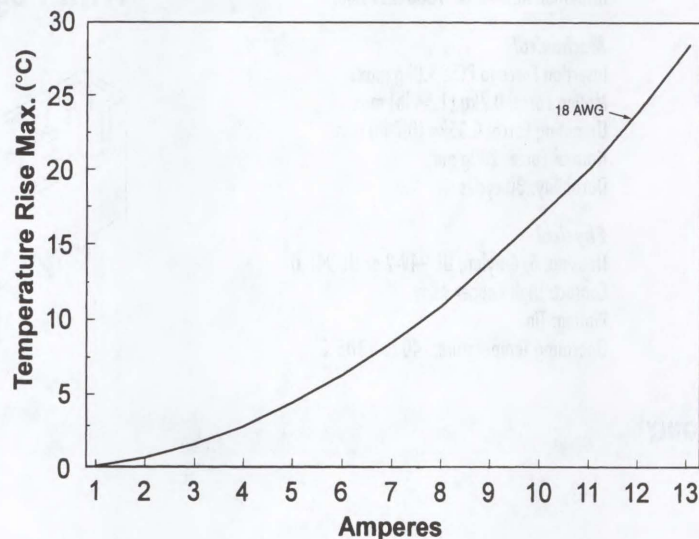


Mini-Fit, HCS™ High Current System Overview

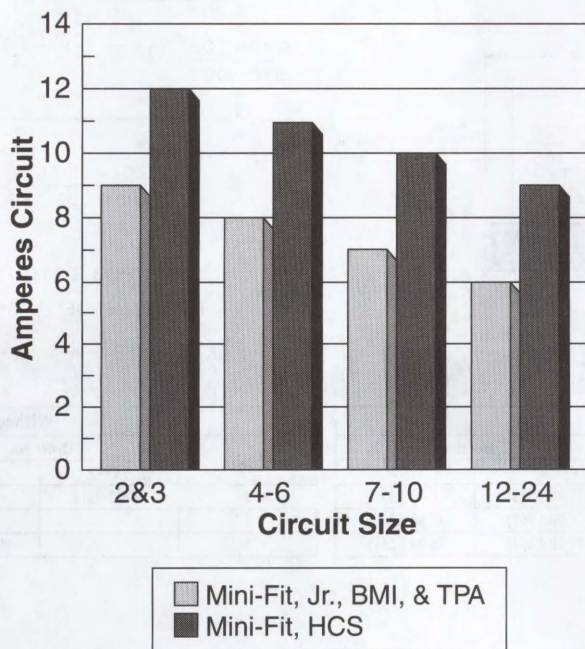
The Mini-Fit, HCS connector system is the newest member of the Mini-Fit family and is capable of carrying up to 12.0A per circuit on .165" centers. With 3 more amperes per circuit than standard Mini-Fit, Jr., the Mini-Fit, HCS line is ideal for applications requiring high currents in smaller packages. This new higher conductivity, high density power connector features Molex's proven spring beam design with high pressure, gas-tight contact points on all crimp terminals.



MINI-FIT, HCS TEMPERATURE RISE CURVE



MINI-FIT, HCS vs. STANDARD MINI-FIT CURRENT INCREASE



Note: Ordering numbers are different for crimp terminals and vertical headers because HCS uses a new, high conductivity contact for increased performance. Right angle header part numbers for all three configurations (Standard, Blind-Mating and Terminal Position Assurance) remain the same because of their .042" square pin contact design.

FEATURES AND SPECIFICATIONS

Features and Benefits

- Carries 3 more amperes per circuit than 42385 series receptacle header
- Fully polarized housing prevents mismatching
- Board mounted receptacle for board-to-board applications
- Mateable with Mini-Fit, BMI™ housings and headers only

Reference Information

Product Specification: PSX-44476-0002

Packaging: Tray or bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 42404, 44474, 43810 and 44068 headers

Use with: 44478 HCS terminals

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6
Amperes-HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: 6/6 nylon, UL 94V-2 or UL 94V-0

Contact: High Copper Alloy

Plating: Tin

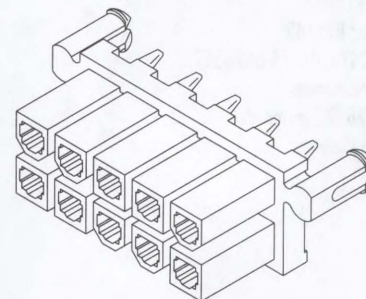
Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch Mini-Fit, HCS™ Receptacle Header

44475

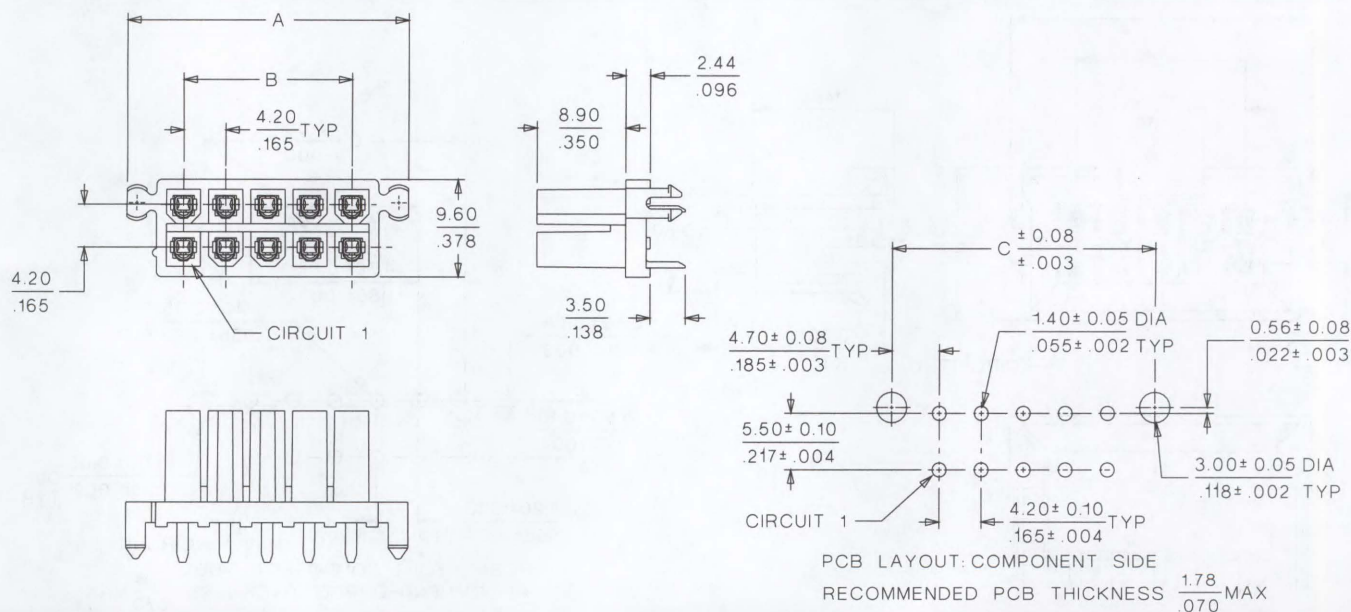
Right Angle Dual Row



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	94V-2	94V-0	A	B	C
4	44475-0411	44475-0421	15.62 (.615)	4.20 (.165)	13.60 (.535)
6	44475-0611	44475-0621	19.82 (.780)	8.40 (.331)	17.80 (.701)
10	44475-1011	44475-1021	28.22 (1.111)	16.80 (.661)	26.20 (1.031)
14	44475-1411	44475-1421	36.62 (1.442)	25.20 (.992)	34.60 (1.362)
18	44475-1811	44475-1821	45.02 (1.772)	33.60 (1.323)	43.00 (1.693)
24	44475-2411	44475-2421	57.62 (2.269)	46.20 (1.819)	55.60 (2.189)

FEATURES AND SPECIFICATIONS

Features and Benefits

- .100" lead-in for self-aligning connection with receptacle
- Carries 3 more amperes per circuit than 42440 series headers
- Positive housing locks and pegs for increased harness and board retention

Reference Information

Product Specification: PSX-44476-0002

Packaging: Tray or bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 42474, 44475 and 5557

dual row receptacles

Use With: 44476 HCS terminals

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6
Amperes-HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: 6/6 nylon, UL 94V-2 or UL 94V-0

Contact: High Copper Alloy

Plating: Tin

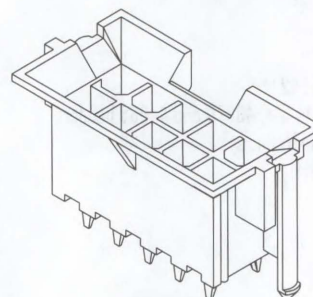
Operating Temperature: -40 to +105°C



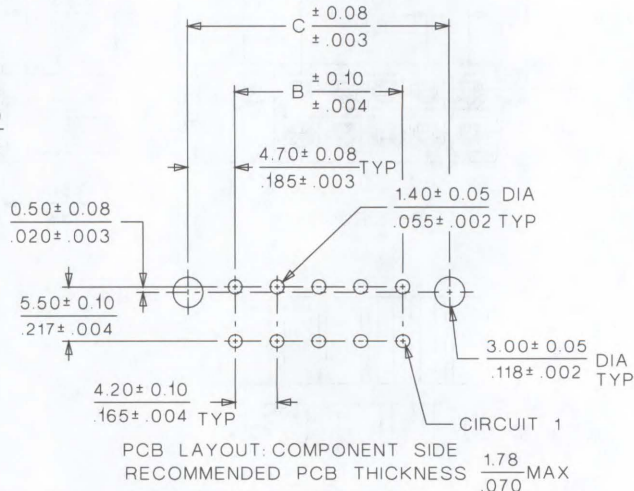
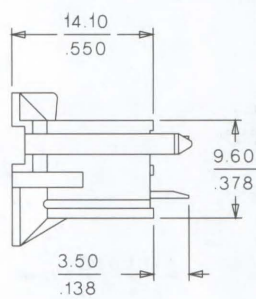
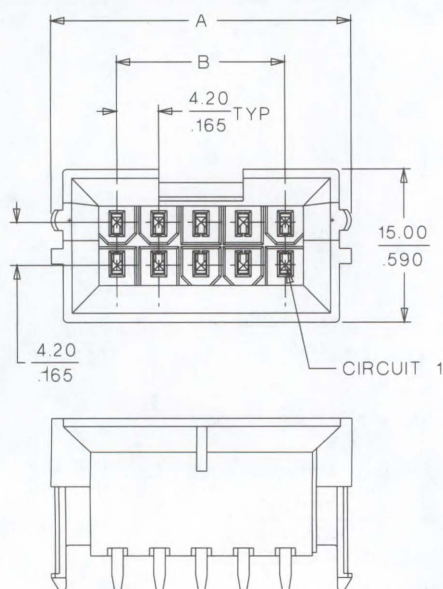
4.20mm (.165") Pitch Mini-Fit, HCS™ Header

44474

Dual Row, Vertical



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Without Drain Holes					
Circuits	Order No.		Dimension		
	94V-2	94V-0	A	B	C
4	44474-0411	44474-0421	17.40 (.685)	4.20 (.170)	13.60 (.535)
6			21.60 (.850)	8.40 (.330)	17.80 (.701)
10	44474-1011	44474-1021	30.00 (1.181)	16.80 (.660)	26.20 (1.031)
14	44474-1411	44474-1421	38.40 (1.512)	25.20 (.990)	34.60 (1.362)
18	44474-1811	44474-1821	46.80 (1.843)	33.60 (1.320)	43.00 (1.693)
24	44474-2411	44474-2421	59.40 (2.339)	46.20 (1.820)	55.60 (2.189)

With Drain Holes					
Circuits	Order No.		Dimension		
	94V-2	94V-0	A	B	C
4	44474-0431	44474-0441	17.40 (.685)	4.20 (.170)	13.60 (.535)
6	44474-0631		21.60 (.850)	8.40 (.330)	17.80 (.701)
10	44474-1031	44474-1041	30.00 (1.181)	16.80 (.660)	26.20 (1.031)
14	44474-1431	44474-1441	38.40 (1.512)	25.20 (.990)	34.60 (1.362)
18	44474-1831	44474-1841	46.80 (1.843)	33.60 (1.320)	43.00 (1.693)
24	44474-2431	44474-2441	59.40 (2.339)	46.20 (1.820)	55.60 (2.189)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Carries 3 more amperes per circuit than 5566 series headers
- Headers available with mounting pegs for increased board retention
- Positive housing locks
- High current vertical header (standard configuration)

Reference Information

Product Specification: PSX-44476-0001

Packaging: Tray or bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 5557 housings

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6
Amperes-HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: 6/6 nylon, UL 94V-2 or UL 94V-0

Contact: High Copper Alloy

Plating: Tin

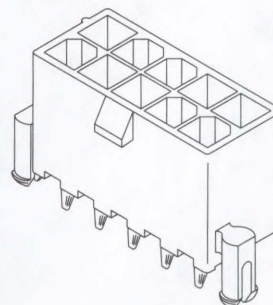
Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch Mini-Fit, HCS™ Header

44472

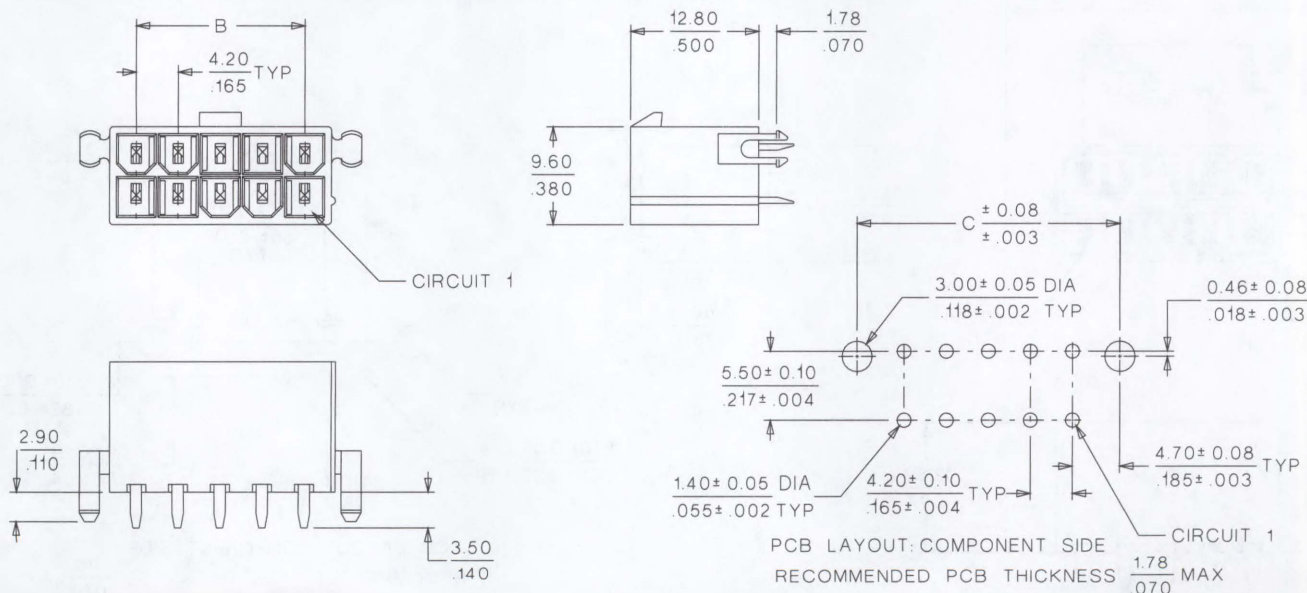
Dual Row, Vertical With and Without Pegs



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Without Drain Holes							
Circuits	Order No.				Dimension		
	Without PCB Pegs		With PCB Pegs		A	B	C
	94V-2	94V-0	94V-2	94V-0			
2	44472-0254	44472-0255	44472-0250	44472-0251	5.40 (.210)		9.40 (.370)
4	44472-0454	44472-0455	44472-0450	44472-0451	9.60 (.380)	4.20 (.170)	13.60 (.535)
6	44472-0654	44472-0655	44472-0650	44472-0651	13.80 (.540)	8.40 (.330)	17.80 (.701)
8	44472-0854	44472-0855	44472-0850	44472-0851	18.00 (.710)	12.60 (.500)	22.00 (.866)
10	44472-1054	44472-1055	44472-1050	44472-1051	22.20 (.870)	16.80 (.660)	26.20 (1.031)
12	44472-1254	44472-1255	44472-1250	44472-1251	26.40 (1.040)	21.00 (.830)	30.40 (1.197)
14	44472-1454	44472-1455	44472-1450	44472-1451	30.60 (1.200)	25.20 (.990)	34.60 (1.362)
16	44472-1654	44472-1655	44472-1650	44472-1651	34.80 (1.370)	29.40 (1.160)	38.80 (1.528)
18	44472-1854	44472-1855	44472-1850	44472-1851	39.00 (1.540)	33.60 (1.320)	43.00 (1.693)
20	44472-2054	44472-2055	44472-2050	44472-2051	43.20 (1.700)	37.80 (1.490)	47.20 (1.858)
22	44472-2254	44472-2255			47.40 (1.870)	42.00 (1.650)	51.40 (2.024)
24	44472-2454	44472-2455	44472-2450	44472-2451	51.60 (2.030)	46.20 (1.820)	55.60 (2.189)

With Drain Holes							
Circuits	Order No.				Dimension		
	Without PCB Pegs		With PCB Pegs		A	B	C
	94V-2	94V-0	94V-2	94V-0			
2	44472-0256	44472-0257	44472-0252	44472-0253	5.40 (.210)		9.40 (.370)
4	44472-0456	44472-0457	44472-0452	44472-0453	9.60 (.380)	4.20 (.170)	13.60 (.535)
6	44472-0656	44472-0657	44472-0652	44472-0653	13.80 (.540)	8.40 (.330)	17.80 (.701)
8	44472-0856	44472-0857	44472-0852	44472-0853	18.00 (.710)	12.60 (.500)	22.00 (.866)
10	44472-1056	44472-1057	44472-1052	44472-1053	22.20 (.870)	16.80 (.660)	26.20 (1.031)
12	44472-1256	44472-1257	44472-1252	44472-1253	26.40 (1.040)	21.00 (.830)	30.40 (1.197)
14	44472-1456	44472-1457	44472-1452	44472-1453	30.60 (1.200)	25.20 (.990)	34.60 (1.362)
16	44472-1656	44472-1657	44472-1652	44472-1653	34.80 (1.370)	29.40 (1.160)	38.80 (1.528)
18			44472-1852	44472-1853	39.00 (1.540)	33.60 (1.320)	43.00 (1.693)
20	44472-2056		44472-2052	44472-2053	43.20 (1.700)	37.80 (1.490)	47.20 (1.858)
22	44472-2256		44472-2252		47.40 (1.870)	42.00 (1.650)	51.40 (2.024)
24			44472-2452	44472-2453	51.60 (2.030)	46.20 (1.820)	55.60 (2.189)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Carries 3 more amperes per circuit than 30069 headers
- Fully polarized housing prevents mismatching
- Headers available with flanges for increased board retention

Reference Information

Product Specification: PSX-44476-0003

Packaging: Tray or bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 30067 housings

Designed In: Millimeters

Electrical

Voltage: 600V

Current: (Used with 16 AWG)

Circuits	2-3	4-6	7-10	12-24
Amperes-Jr.	9	8	7	6
Amperes-HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) max.

Unmating Force: 0.35kg (0.7 lb) min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

Housing: Black polyester, UL 94V-0

Contact: High Copper Alloy

Plating: Tin

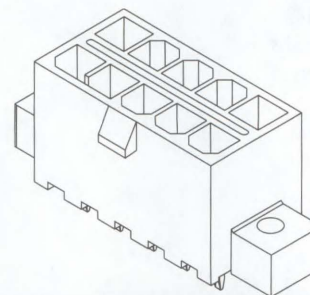
Operating Temperature: -40 to +105°C



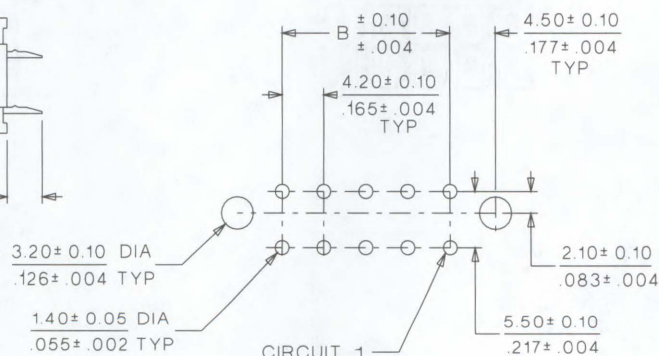
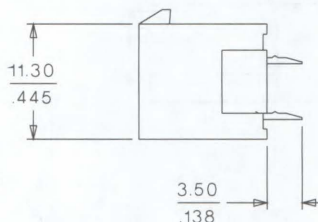
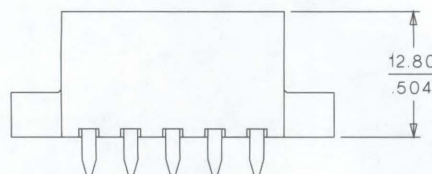
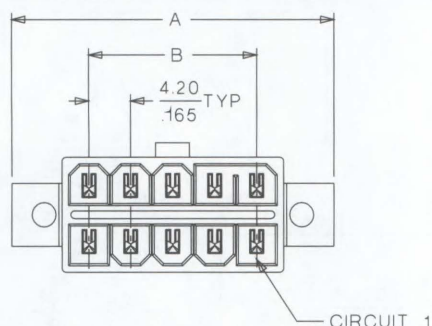
4.20mm (.165") Pitch Mini-Fit, HCS™ Header

44473

Terminal Position Assurance Dual Row, Vertical With Flanges and Pegs



CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS $\frac{1.78}{.070}$ MAX

ORDERING INFORMATION AND DIMENSIONS

Without Drain Holes				
Circuits	Order No.		Dimension	
	Flanges	Pegs	A	B
2	44473-0211		15.40 (.606)	
4	44473-0411		19.60 (.772)	4.20 (.165)
6	44473-0611	44473-0631	23.80 (.937)	8.40 (.331)
8	44473-0811		28.00 (1.102)	12.60 (.496)
10	44473-1011		32.20 (1.268)	16.80 (.661)
12	44473-1211		36.40 (1.433)	21.00 (.827)
16	44473-1611		44.80 (1.764)	29.40 (1.157)

With Drain Holes				
Circuits	Order No.		Dimension	
	Flanges	Pegs	A	B
2			15.40 (.606)	
4	44473-0421		19.60 (.772)	4.20 (.165)
6	44473-0621	44473-0641	23.80 (.937)	8.40 (.331)
8	44473-0821		28.00 (1.102)	12.60 (.496)
10	44473-1021		32.20 (1.268)	16.80 (.661)
12	44473-1221		36.40 (1.433)	21.00 (.827)
16	44473-1621		44.80 (1.764)	29.40 (1.157)

FEATURES

This product line offers great design flexibility by allowing you to connect:

Mini-Fit, SMC

- Current rating up to 12 amperes per circuit*
- 600 volt rating
- Positive housing locks to mate with Mini-Fit, Jr.
- Fully isolated contacts
- Surface mount compatible
- Tin or Gold plating
- Patented metal board retention clips available in 4 PCB thicknesses: 1.60, 2.39, 3.18, and 6.35 mm (.063, .094, .125, and .250")
- Different PC tail lengths available
- Uses standard Mini-Fit and Mini-Fit, HCS terminals

Mini-Fit, Jr.

- Mini-Fit, Jr. wire to board (vertical header)
- Mini-Fit, Jr. wire-to-board (right angle header)

Mini-Fit, BMI

- Blind mating wire-to-board (parallel mounting)
- Blind mating wire-to-board (right angle mounting)
- Blind mating board-to-board (parallel stacked boards)
- Blind mating board-to-board (right angle boards)

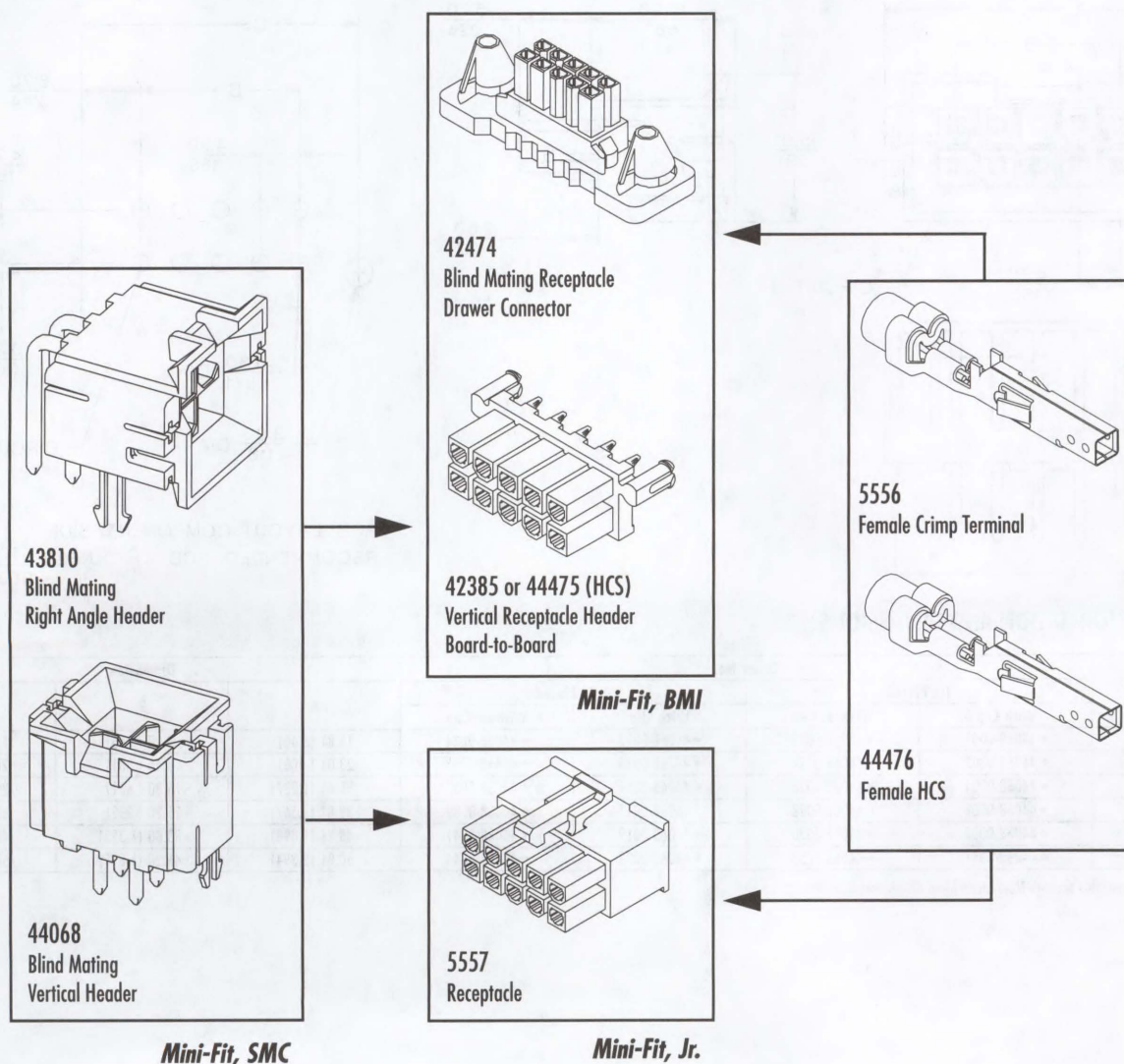
* HCS terminals must be used to obtain 12 amperes per circuit depending upon circuit size

The Mini-Fit, SMC is a surface mount compatible product from the well-known Mini-Fit family. This product is designed for high current/high density applications which require high temperature resistance (up to 245° C) to withstand the soldering processes. The patented metal retention clip is retained during and after the soldering process. It is appropriate for both power and signal applications as it can carry currents of up to 12 amperes per circuit and has a 10mΩ contact resistance.

Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



FEATURES AND SPECIFICATIONS

Features and Benefits

- Surface Mount Compatible
- Fully isolated terminals to protect contacts from damage
- A variety of board thicknesses available
- Patented metal retention clip holds product before and after the soldering process
- Blind-mating capabilities

Reference Information

Product Specification: PS-43810-0001

Packaging: Tray

Mates With: 42385, 42474, 44475 and 5557 dual row receptacles

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 9.0A (12.0A with HCS terminals)

Circuits	2-3	4-6	7-10	12-24
Amperes-BMI	9	8	7	6
Amperes-BMI with HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) per circuit max.

Unmating Force: 0.35kg (0.7 lb) per circuit min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

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

Contact: Brass

Plating: Tin, overall Gold

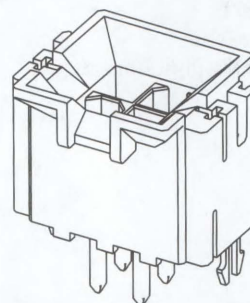
Operating Temperature: -40 to +105°C



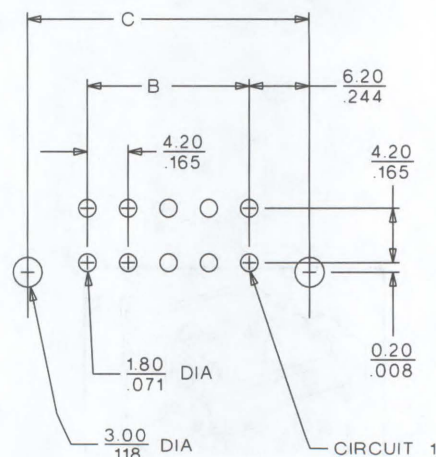
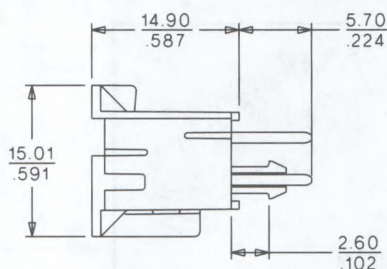
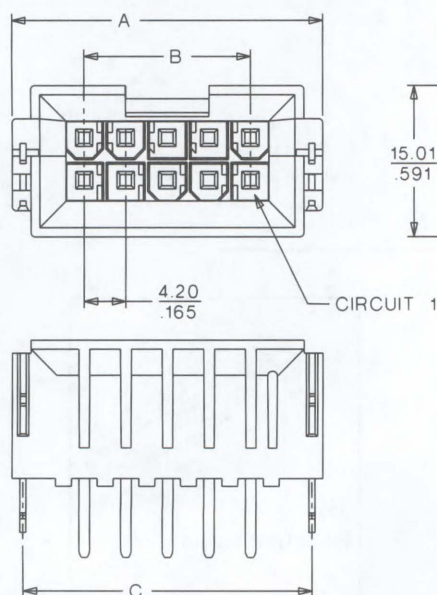
Mini-Fit, SMC™ Surface Mount Compatible Headers

44068

Vertical, Dual Row For 1.60mm (.063") max. PCB Thickness



CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: 1.60
063

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated		A	B	C
	With Clip	Without Clip	With Clip	Without Clip			
4	• 44068-0001	• 44068-0023	• 44068-0012	• 44068-0034	18.81 (.740)	4.20 (.165)	16.60 (.653)
6	• 44068-0002	• 44068-0024	• 44068-0013	• 44068-0035	23.01 (.906)	8.40 (.331)	20.80 (.819)
10	• 44068-0004	• 44068-0026	• 44068-0015	• 44068-0037	31.41 (1.237)	16.80 (.661)	29.20 (1.150)
14	• 44068-0006	• 44068-0028	• 44068-0017	• 44068-0039	39.81 (1.567)	25.20 (.992)	37.60 (1.480)
18	• 44068-0008	• 44068-0030	• 44068-0019	• 44068-0041	48.21 (1.898)	33.60 (1.323)	46.00 (1.810)
24	• 44068-0011	• 44068-0033	• 44068-0022	• 44068-0044	60.81 (2.394)	46.20 (1.819)	58.60 (2.307)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Surface Mount Compatible
- Fully isolated terminals to protect contacts from damage
- A variety of board thicknesses available
- Patented metal retention clip holds product before and after the soldering process
- Blind-mating capabilities

Reference Information

Product Specification: PS-43810-0001

Packaging: Tray

Mates With: 42385, 42474, 44475 and 5557 dual row receptacles

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 9.0A (12.0A with HCS terminals)

Circuits	2-3	4-6	7-10	12-24
Amperes-BMI	9	8	7	6
Amperes-BMI with HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) per circuit max.

Unmating Force: 0.35kg (0.7 lb) per circuit min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

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

Contact: Brass

Plating: Tin, overall Gold

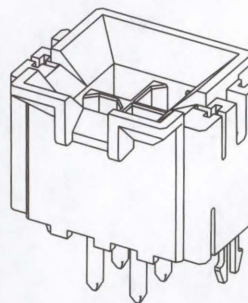
Operating Temperature: -40 to +105°C



Mini-Fit, SMC™ Surface Mount Compatible Headers

44068

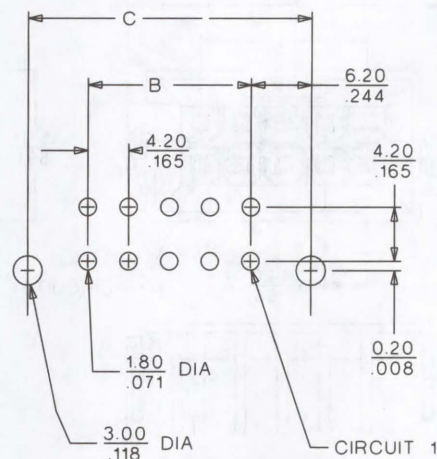
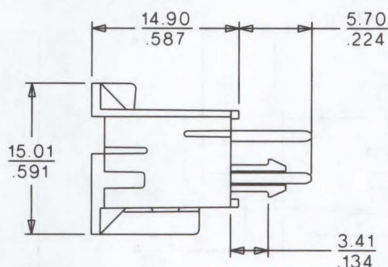
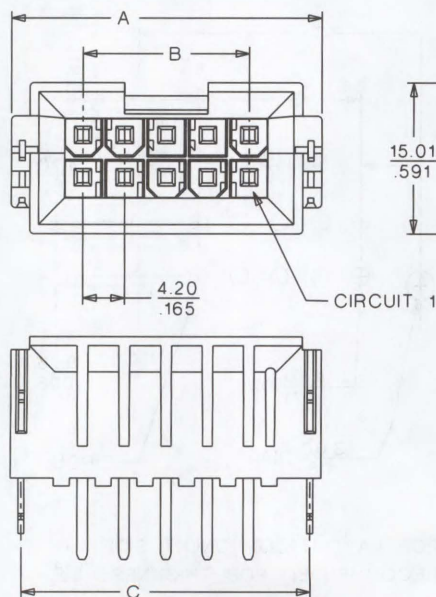
Vertical, Dual Row For 2.39mm (.094") max. PCB Thickness



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: 2.39
094

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated		A	B	C
	With Clip	Without Clip	With Clip	Without Clip			
4	• 44068-0045	• 44068-0023	• 44068-0056	• 44068-0034	18.81 (.740)	4.20 (.165)	16.60 (.653)
6	• 44068-0046	• 44068-0024	• 44068-0057	• 44068-0035	23.01 (.906)	8.40 (.331)	20.80 (.819)
10	• 44068-0048	• 44068-0026	• 44068-0059	• 44068-0037	31.41 (1.237)	16.80 (.661)	29.20 (1.150)
14	• 44068-0050	• 44068-0028	• 44068-0061	• 44068-0039	39.81 (1.567)	25.20 (.992)	37.60 (1.480)
18	• 44068-0052	• 44068-0030	• 44068-0063	• 44068-0041	48.21 (1.898)	33.60 (1.323)	46.00 (1.810)
24	• 44068-0055	• 44068-0033	• 44068-0066	• 44068-0044	60.81 (2.394)	46.20 (1.819)	58.60 (2.307)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Surface Mount Compatible
- Fully isolated terminals to protect contacts from damage
- A variety of board thicknesses available
- Patented metal retention clip holds product before and after the soldering process
- Blind-mating capabilities

Reference Information

Product Specification: PS-43810-0001

Packaging: Tray

Mates With: 42385, 42474, 44475 and 5557 dual row receptacles

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 9.0A (12.0A with HCS terminals)

Circuits	2-3	4-6	7-10	12-24
Amperes-BMI	9	8	7	6
Amperes-BMI with HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) per circuit max.

Unmating Force: 0.35kg (0.7 lb) per circuit min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

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

Contact: Brass

Plating: Tin, overall Gold

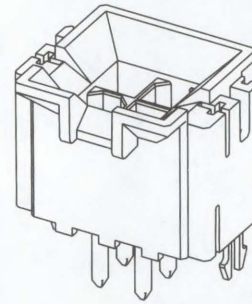
Operating Temperature: -40 to +105°C



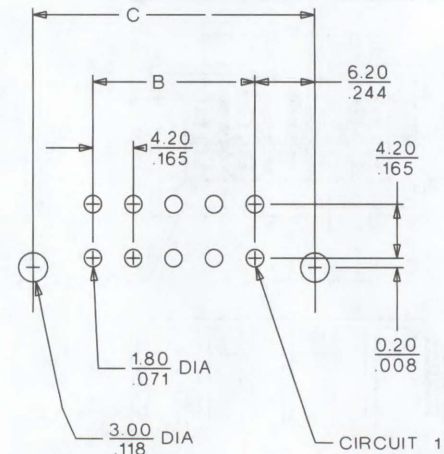
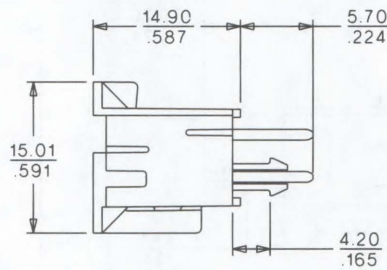
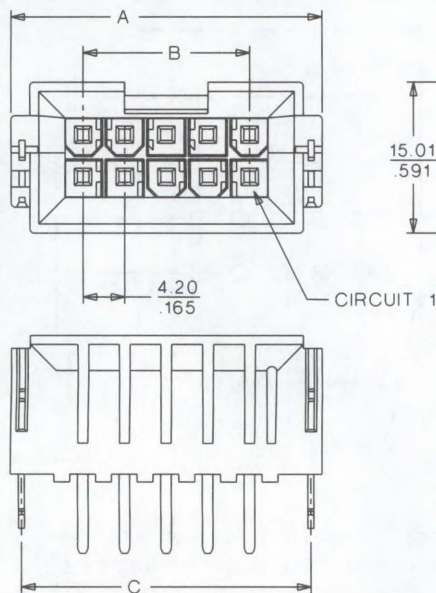
Mini-Fit, SMC™ Surface Mount Compatible Headers

44068

Vertical, Dual Row For 3.18mm (.125") max. PCB Thickness



CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: 3.18
.125

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated		A	B	C
	With Clip	Without Clip	With Clip	Without Clip			
4	• 44068-0089	• 44068-0023	• 44068-0100	• 44068-0034	18.81 (.740)	4.20 (.165)	16.60 (.653)
6	• 44068-0090	• 44068-0024	• 44068-0101	• 44068-0035	23.01 (.906)	8.40 (.331)	20.80 (.819)
10	• 44068-0092	• 44068-0026	• 44068-0103	• 44068-0037	31.41 (1.237)	16.80 (.661)	29.20 (1.150)
14	• 44068-0094	• 44068-0028	• 44068-0105	• 44068-0039	39.81 (1.567)	25.20 (.992)	37.60 (1.480)
18	• 44068-0096	• 44068-0030	• 44068-0107	• 44068-0041	48.21 (1.898)	33.60 (1.323)	46.00 (1.810)
24	• 44068-0099	• 44068-0033	• 44068-0110	• 44068-0044	60.81 (2.394)	46.20 (1.819)	58.60 (2.307)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Surface Mount Compatible
- Fully isolated terminals to protect contacts from damage
- Patented metal retention clip holds product before and after the soldering process
- Blind-mating capabilities

Reference Information

Product Specification: PS-43810-0001

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 42385, 42474, 44475 and 5557 dual row receptacles

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 9.0A (12.0A with HCS terminals)

Circuits	2-3	4-6	7-10	12-24
Amperes-BMI	9	8	7	6
Amperes-BMI with HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) per circuit max.

Unmating Force: 0.35kg (0.7 lb) per circuit min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

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

Contact: Brass

Plating: Tin, overall Gold

Operating Temperature: -40 to +105°C

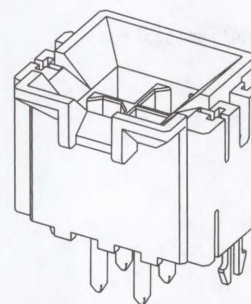


Mini-Fit, SMC™

Surface Mount
Compatible Headers

44068

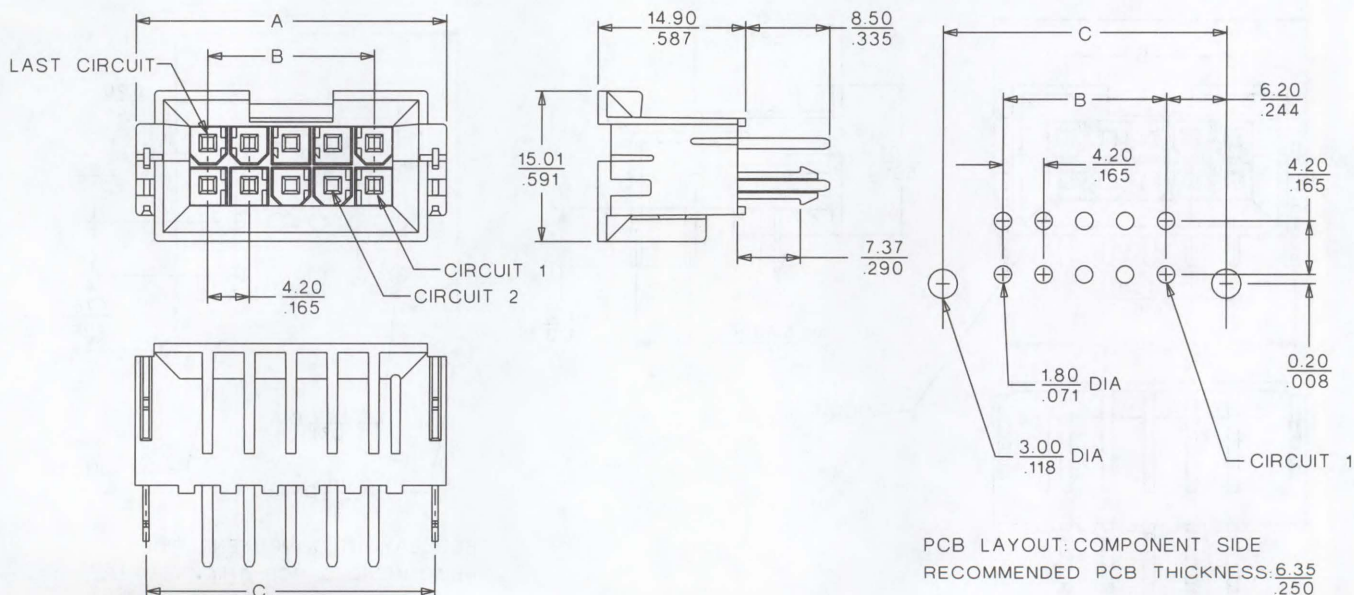
Vertical, Dual Row for
6.35mm (.250") max.
PCB Thickness



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated		A	B	C
	With Clip	Without Clip	With Clip	Without Clip			
4	• 44068-0266	• 44068-0244	• 44068-0277	• 44068-0255	18.81 (.740)	4.20 (.165)	16.60 (.653)
6	• 44068-0267	• 44068-0245	• 44068-0278	• 44068-0256	23.01 (.906)	8.40 (.331)	20.80 (.819)
10	• 44068-0269	• 44068-0247	• 44068-0280	• 44068-0258	31.41 (1.237)	16.80 (.661)	29.20 (1.150)
14	• 44068-0271	• 44068-0249	• 44068-0282	• 44068-0260	39.81 (1.567)	25.20 (.992)	37.60 (1.480)
18	• 44068-0273	• 44068-0251	• 44068-0284	• 44068-0262	48.21 (1.898)	33.60 (1.323)	46.00 (1.810)
24	• 44068-0276	• 44068-0254	• 44068-0287	• 44068-0265	60.81 (2.394)	46.20 (1.819)	58.60 (2.307)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Surface Mount Compatible
- Fully isolated terminals to protect contacts from damage
- Patented metal retention clip holds product before and after the soldering process
- Blind-mating capabilities

Reference Information

Product Specification: PS-43810-0001

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 42385, 42474, 44475 and 5557 dual row receptacles

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 9.0A (12.0A with HCS terminals)

Circuits	2-3	4-6	7-10	12-24
Amperes-BMI	9	8	7	6
Amperes-BMI with HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) per circuit max.

Unmating Force: 0.35kg (0.7 lb) per circuit min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

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

Contact: Brass

Plating: Tin, overall Gold

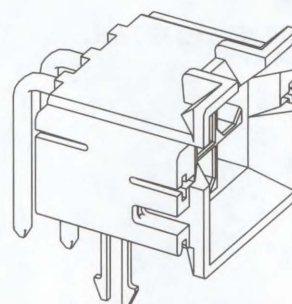
Operating Temperature: -40 to +105°C



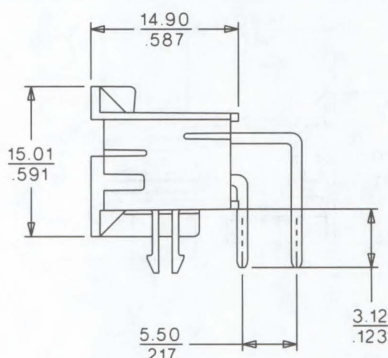
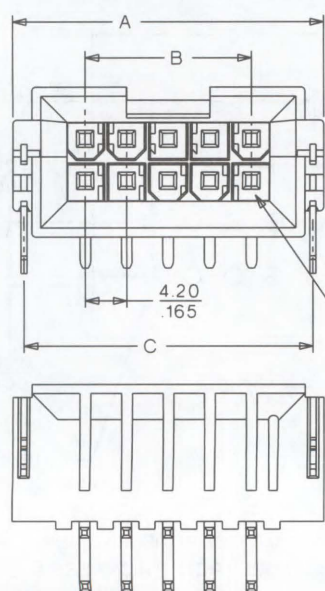
Mini-Fit, SMC™ Surface Mount Compatible Headers

43810

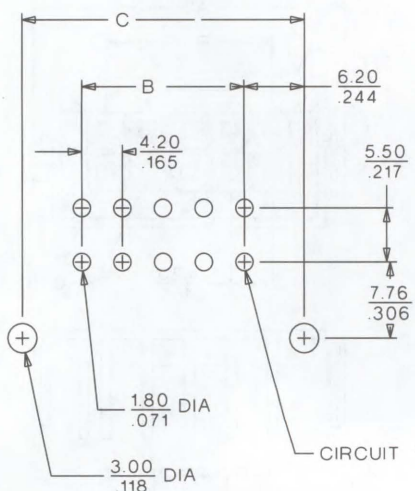
Right Angle, Dual Row For 1.60mm (.063") max. PCB Thickness



CATALOG DRAWING (FOR REFERENCE ONLY)



CIRCUIT 1



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

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated		A	B	C
	With Clip	Without Clip	With Clip	Without Clip			
4	• 43810-0001	• 43810-0199	• 43810-0012	• 43810-0210	18.81 (.740)	4.20 (.165)	16.60 (.653)
6	• 43810-0002	• 43810-0200	• 43810-0013	• 43810-0211	23.01 (.906)	8.40 (.331)	20.80 (.819)
10	• 43810-0004	• 43810-0202	• 43810-0015	• 43810-0213	31.41 (1.237)	16.80 (.661)	29.20 (1.150)
14	• 43810-0006	• 43810-0204	• 43810-0017	• 43810-0215	39.81 (1.567)	25.20 (.992)	37.60 (1.480)
18	• 43810-0008	• 43810-0206	• 43810-0019	• 43810-0217	48.21 (1.898)	33.60 (1.323)	46.00 (1.810)
24	• 43810-0011	• 43810-0209	• 43810-0022	• 43810-0220	60.81 (2.394)	46.20 (1.819)	58.60 (2.307)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Surface Mount Compatible
- Fully isolated terminals to protect contacts from damage
- A variety of board thicknesses available
- Patented metal retention clip holds product before and after the soldering process
- Blind-mating capabilities

Reference Information

Product Specification: PS-43810-0001

Packaging: Tray

Mates With: 42385, 42474, 44475 and 5557 dual row receptacles

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 9.0A (12.0A with HCS terminals)

Circuits	2-3	4-6	7-10	12-24
Amperes-BMI	9	8	7	6
Amperes-BMI with HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) per circuit max.

Unmating Force: 0.35kg (0.7 lb) per circuit min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

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

Contact: Brass

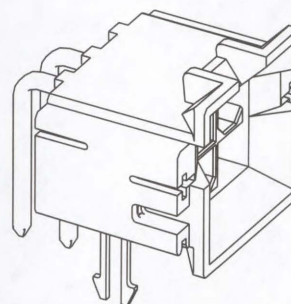
Plating: Tin, overall Gold

Operating Temperature: -40 to +105°C

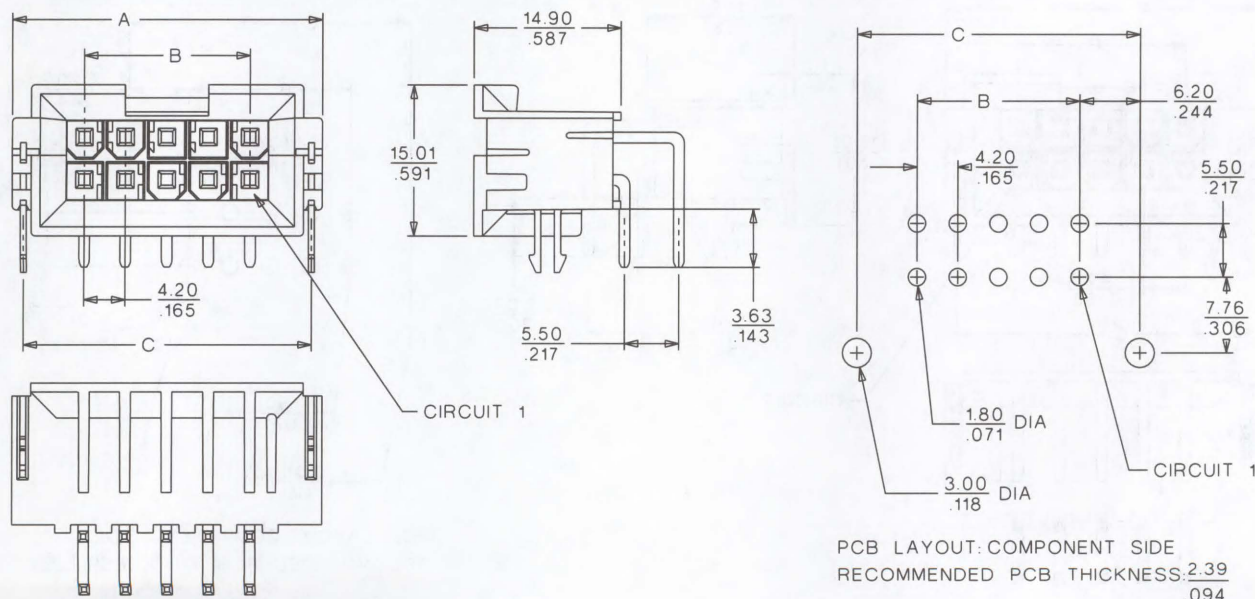
molex® Mini-Fit, SMC™ Surface Mount Compatible Headers

43810

Right Angle, Dual Row For 2.39mm (.094") max. PCB Thickness



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated		A	B	C
	With Clip	Without Clip	With Clip	Without Clip			
4	• 43810-0045	• 43810-0265	• 43810-0056	• 43810-0276	18.81 (.740)	4.20 (.165)	16.60 (.653)
6	• 43810-0046	• 43810-0266	• 43810-0057	• 43810-0277	23.01 (.906)	8.40 (.331)	20.80 (.819)
10	• 43810-0048	• 43810-0268	• 43810-0059	• 43810-0279	31.41 (1.237)	16.80 (.661)	29.20 (1.150)
14	• 43810-0050	• 43810-0270	• 43810-0061	• 43810-0281	39.81 (1.567)	25.20 (.992)	37.60 (1.480)
18	• 43810-0052	• 43810-0272	• 43810-0063	• 43810-0283	48.21 (1.898)	33.60 (1.323)	46.00 (1.810)
24	• 43810-0055	• 43810-0275	• 43810-0066	• 43810-0286	60.81 (2.394)	46.20 (1.819)	58.60 (2.307)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Surface Mount Compatible
- Fully isolated terminals to protect contacts from damage
- A variety of board thicknesses available
- Patented metal retention clip holds product before and after the soldering process
- Blind-mating capabilities

Reference Information

Product Specification: PS-43810-0001

Packaging: Tray

Mates With: 42385, 42474, 44475 and 5557 dual row receptacles

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 9.0A (12.0A with HCS terminals)

Circuits	2-3	4-6	7-10	12-24
Amperes-BMI	9	8	7	6
Amperes-BMI with HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) per circuit max.

Unmating Force: 0.35kg (0.7 lb) per circuit min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

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

Contact: Brass

Plating: Tin, overall Gold

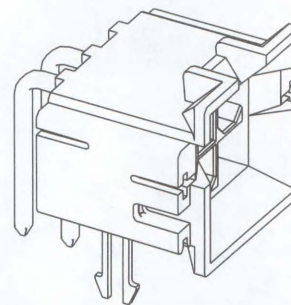
Operating Temperature: -40 to +105°C



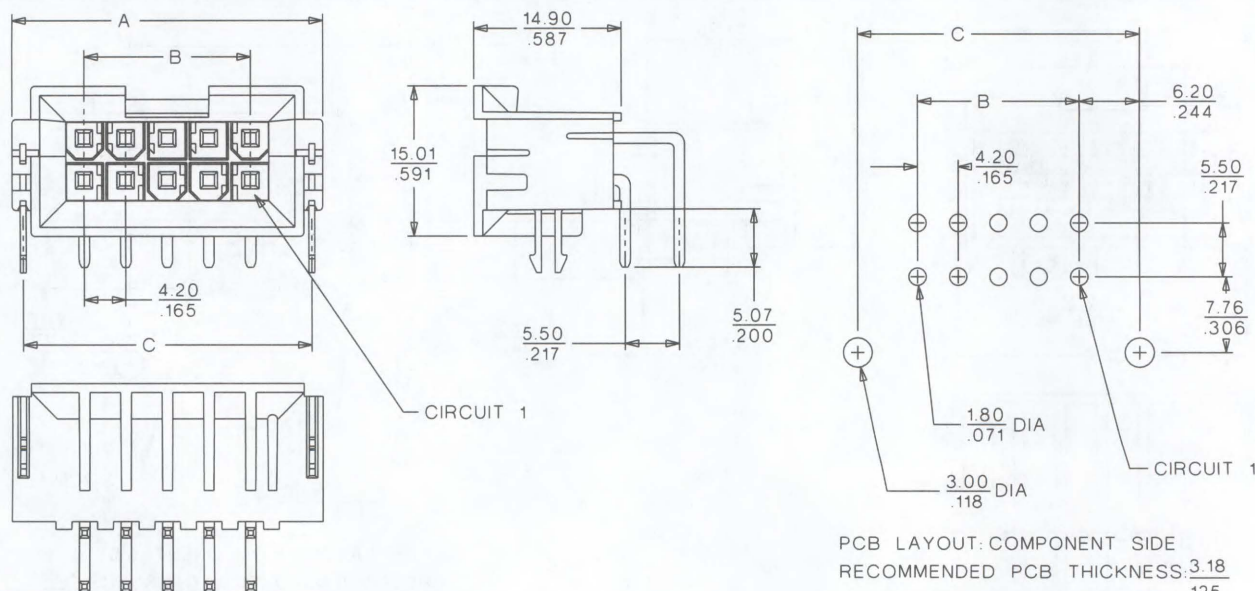
Mini-Fit, SMC™ Surface Mount Compatible Headers

43810

Right Angle, Dual Row For 3.18mm (.125") max. PCB Thickness



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated		A	B	C
	With Clip	Without Clip	With Clip	Without Clip			
4	• 43810-0089	• 43810-0331	• 43810-0100	• 43810-0342	18.81 (.740)	4.20 (.165)	16.60 (.653)
6	• 43810-0090	• 43810-0332	• 43810-0101	• 43810-0343	23.01 (.906)	8.40 (.331)	20.80 (.819)
10	• 43810-0092	• 43810-0334	• 43810-0103	• 43810-0345	31.41 (1.237)	16.80 (.661)	29.20 (1.150)
14	• 43810-0094	• 43810-0336	• 43810-0105	• 43810-0347	39.81 (1.567)	25.20 (.992)	37.60 (1.480)
18	• 43810-0096	• 43810-0338	• 43810-0107	• 43810-0349	48.21 (1.898)	33.60 (1.323)	46.00 (1.810)
24	• 43810-0099	• 43810-0341	• 43810-0110	• 43810-0352	60.81 (2.394)	46.20 (1.819)	58.60 (2.307)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Surface Mount Compatible
- Fully isolated terminals to protect contacts from damage
- Patented metal retention clip holds product before and after the soldering process
- Blind-mating capabilities

Reference Information

Product Specification: PS-43810-0001

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R75142

Mates With: 42385, 42474, 44475 and 5557 dual row receptacles

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 9.0A (12.0A with HCS terminals)

Circuits	2-3	4-6	7-10	12-24
Amperes-BMI	9	8	7	6
Amperes-BMI with HCS	12	11	10	9

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 5.0kg max.

Mating Force: 0.7kg (1.54 lb) per circuit max.

Unmating Force: 0.35kg (0.7 lb) per circuit min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

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

Contact: Brass

Plating: Tin, overall Gold

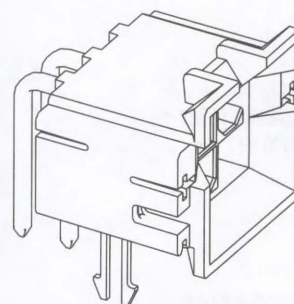
Operating Temperature: -40 to +105°C



Mini-Fit, SMC™ Surface Mount Compatible Headers

43810

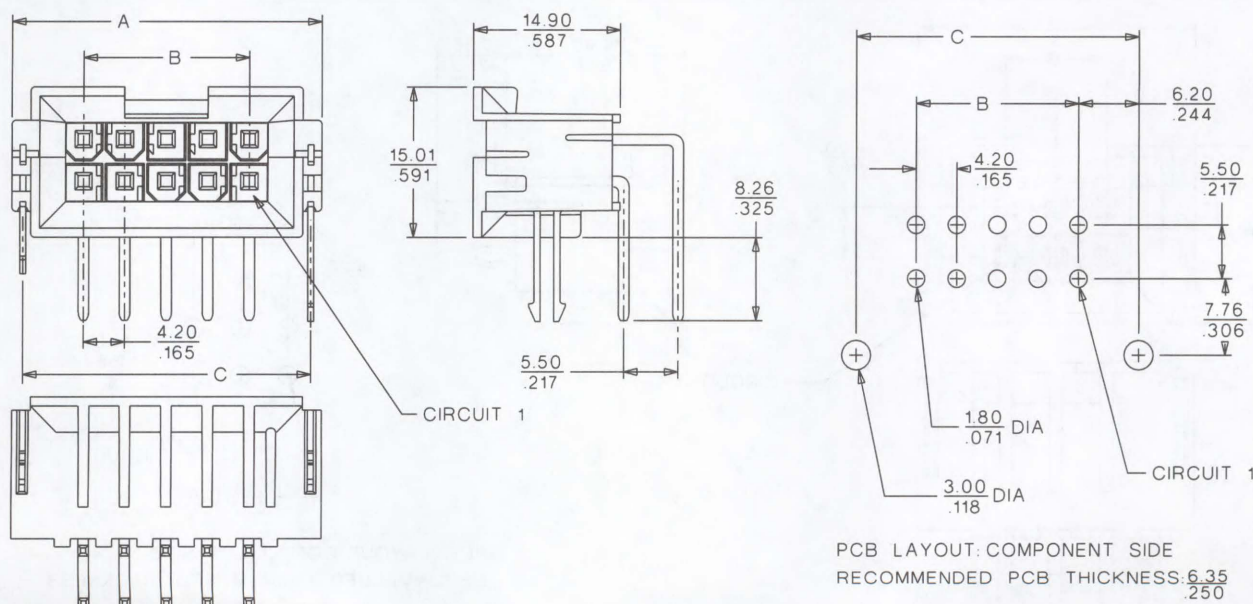
Right Angle, Dual Row for 6.35mm (.250") max. PCB Thickness



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Tin Plated		Gold Plated		A	B	C
	With Clip	Without Clip	With Clip	Without Clip			
4	• 43810-0353	• 43810-0375	• 43810-0364	• 43810-0386	18.81 (.740)	4.20 (.165)	16.60 (.653)
6	• 43810-0354	• 43810-0376	• 43810-0365	• 43810-0387	23.01 (.906)	8.40 (.331)	20.80 (.819)
10	• 43810-0356	• 43810-0378	• 43810-0367	• 43810-0389	31.41 (1.237)	16.80 (.661)	29.20 (1.150)
14	• 43810-0358	• 43810-0380	• 43810-0369	• 43810-0391	39.81 (1.567)	25.20 (.992)	37.60 (1.480)
18	• 43810-0360	• 43810-0382	• 43810-0371	• 43810-0393	48.21 (1.898)	33.60 (1.323)	46.00 (1.810)
24	• 43810-0363	• 43810-0385	• 43810-0374	• 43810-0396	60.81 (2.394)	46.20 (1.819)	58.60 (2.307)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Press-fit pin requiring no soldering
- Blind mating vertical header
- Designed for multiple board thicknesses of .094" and greater

Reference Information

Product Specification: PS-43879-001
 Packaging: Tray
 Mates With: 5557, 42385 and 42474 receptacles
 Designed In: Millimeters

Electrical

Voltage: 600V
 Current: 8.0A
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 1000 MΩ min.

Physical

Housing: 4/6 nylon, UL 94V-0
 Contact: Phosphor Bronze
 Plating: Tin or Gold
 Operating Temperature: -40 to +105°C*

Mechanical

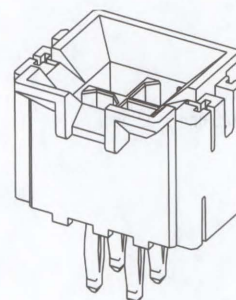
Mating Force: 6.85N (1.54 lb) max.
 Unmating Force: 3.43N (0.7 lb) min.
 Normal Force: 1.96N (0.44 lb) min.
 Durability: 30 cycles



4.20mm (.165") Pitch Mini-Fit, CPI™ Compliant Pin Interface

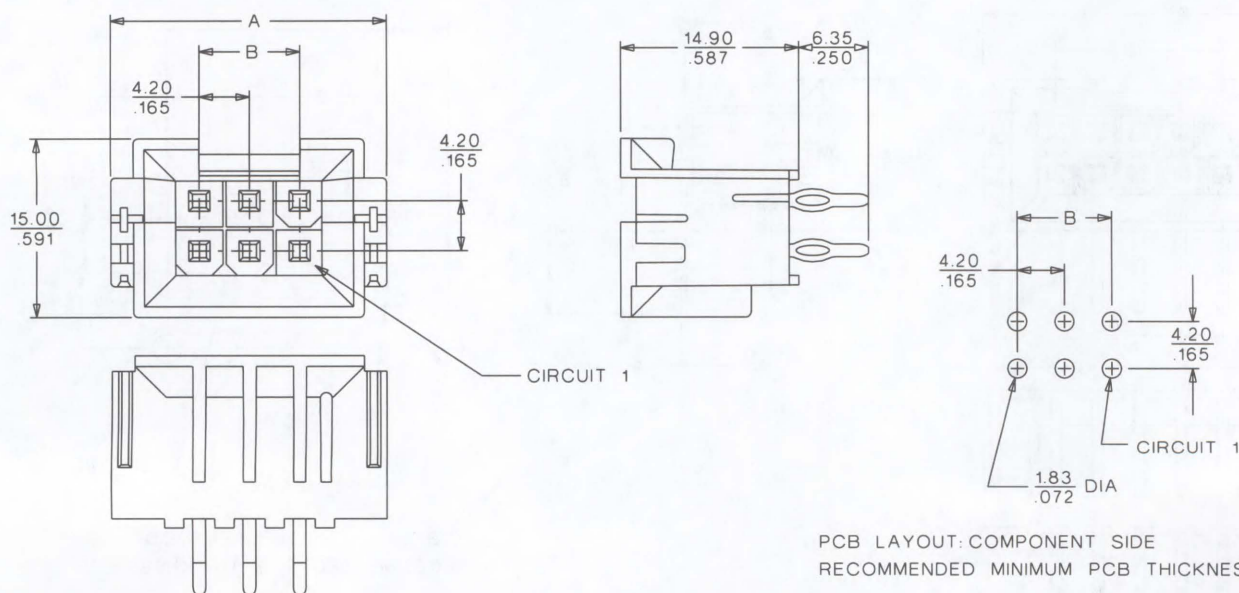
43879

Dual Row, Vertical Header



*Including +30°C terminal temperature at full current

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.		Dimension	
	Tin Plated	Gold Plated	A	B
4	43879-0022	43879-0033	18.81 (.740)	4.20 (.165)
6	43879-0023	43879-0034	23.01 (.906)	8.40 (.331)
10	43879-0025	43879-0036	31.41 (1.237)	16.80 (.661)
14	43879-0027	43879-0038	39.81 (1.567)	25.20 (.992)
18	43879-0029	43879-0040	48.21 (1.898)	33.60 (1.323)
24	43879-0032	43879-0043	60.81 (2.394)	46.20 (1.819)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Spring-loaded male contacts that prevent damage to the female contact
- Rated for 1000's of mating cycles
- Recommended for continuity testing
- Minimizes expense and downtime for test plug replacement

Reference Information

Product Specification: PS-44281
 Packaging Type: Bag
 UL File No.: E29179
 File No.: LR19980
 Mates with: 43838
 Use with: 5557 and 42474
 Designed In: Inches

Electrical

Electrical Voltage: 600V
 Dielectric Withstanding Voltage: No breakdown
 Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 142g
 Durability: 10,000 cycles

Physical

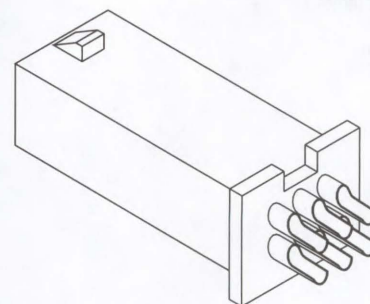
Housing: 4/6 nylon, UL 94V-0
 Contact: Beryllium Copper
 Plating: Gold
 Operating Temperature: -40 to +105°C



4.20mm (.165") Pitch
Mini-Fit™
Test Plug

44281

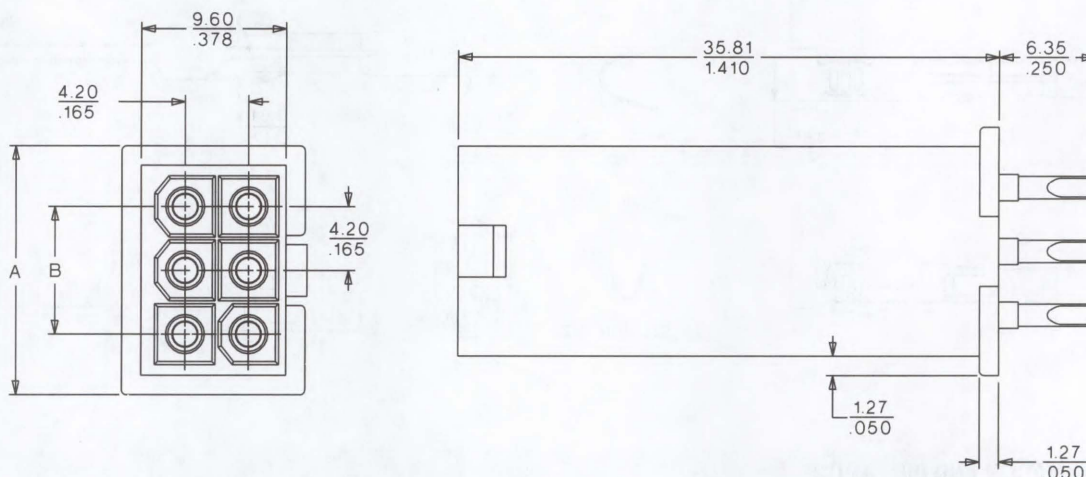
Dual Row



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
4	44281-0001	9.60 (.378)	4.20 (.166)
6	44281-0002	13.80 (.543)	8.40 (.331)
8	44281-0003	18.00 (.709)	12.60 (.496)
10	44281-0004	22.20 (.874)	16.80 (.661)
12	44281-0005	26.40 (1.039)	21.00 (.827)
14	44281-0006	30.60 (1.205)	25.20 (.992)
16	44281-0007	34.80 (1.370)	29.40 (1.157)
18	44281-0008	39.00 (1.535)	33.60 (1.323)
20	44281-0009	43.20 (1.701)	37.80 (1.488)
22	44281-0010	47.40 (1.866)	42.00 (1.654)
24	44281-0011	51.60 (2.031)	46.20 (1.819)
36	44281-0012	76.80 (3.023)	71.40 (2.810)
40	44281-0013	85.20 (3.353)	79.80 (3.140)

Important: Mini-Fit test plugs cannot be mated or unmated under load. All current must be shut off prior to mating or unmating. Product is intended for low level continuity testing only.

FEATURES AND SPECIFICATIONS

Features and Benefits

- Available in Tin or Gold platings
- Available in Brass or Phosphor Bronze base materials
- Accommodates 14 to 30 gauge wire
- Available in crimp or PC tail versions

Reference Information

Packaging: Bag or reel
 UL File No.: E29179
 CSA File No.: LR19980
 Designed In: Inches

Electrical

Current: Standard Terminal—12.0A max.*
 High Current Terminal—14.0A max.*
 Contact Resistance: 10mΩ max.

Mechanical

Contact Insertion Force: 2.3kg (5.0 lb) max.
 Contact Retention Force: 9.1kg (20.0 lb) min.
 Mating force: 1.59kg (3.5 lb) max.
 Unmating Force: 1.625kg (3.575 lb) max.
 Durability: Tin plating—25 cycles max.
 Gold plating—50 cycles max.

Physical

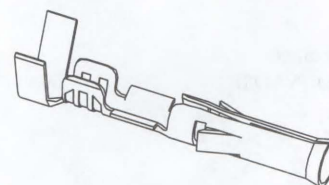
Contact: Brass or Phosphor Bronze
 Plating: Tin or Gold
 Operating Temperature: -40 to +105°C
 Strip Length: See tooling section

* Depending on circuit size and wire gauge; please refer to product specifications

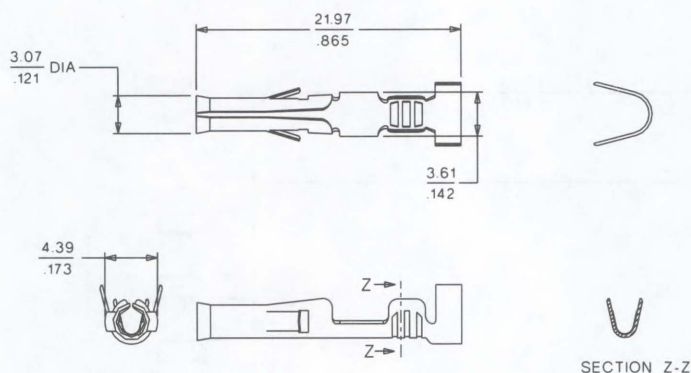


2.36mm (.093") Pin Diameter .093" Pin and Socket Female Terminals

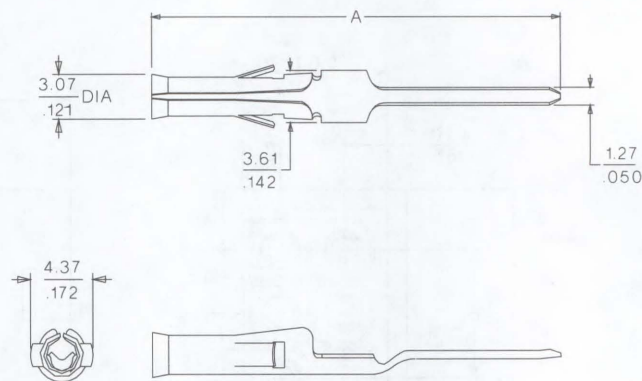
Standard .093" and 3191



STANDARD CATALOG DRAWING (FOR REFERENCE ONLY)



PC TAIL CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Type	Plating	Crimp Wire Size	Insulation Diameter	Series	Order No.	
					Chain Form	Loose Form
Standard Brass .010"	Tin	14-20	1.65/4.06 (.065/.160)	1189	• 02-09-1102	• 02-09-1104
		18-22	1.52/3.05 (.060/.120)	1381	• 02-09-1117	• 02-09-1119
		22-24	1.27/1.78 (.050/.070)	2871	02-09-1138	02-09-1139
		24-30	0.76/1.52 (.030/.060)	1433	• 02-09-1142	• 02-09-1144
	15μ" Gold	14-20	1.65/4.06 (.065/.160)	1189	• 02-09-5100	• 02-09-5106
		18-22	1.52/3.05 (.060/.120)	1381	• 02-09-5143	• 02-09-5142
		24-30	0.76/1.52 (.030/.060)	1433	• 02-09-5146	• 02-09-5147
	50μ" Gold	14-20	1.65/4.06 (.065/.160)	1189	• 02-09-5102	• 02-09-5111
		18-22	1.52/3.05 (.060/.120)	1381	• 02-09-5130	• 02-09-5133
.008" Low Engagement Force†	Tin	18-22	1.52/3.05 (.060/.120)	2273	02-09-1122	02-09-1123
.013" High Current/Low Force	Tin	14-18	3.56 (.140) max.	42477	• 02-09-1615	• 02-09-1616
PC Tail	For Standard .093" Housing	Tin		1377		• 02-09-1134
	For Standard .093" Housing	30μ" Gold		1377		• 02-09-5132
	For 3191 Housing	Tin		2605		• 02-09-1145
Phos-Bronze .010"	Tin	14-20	1.65/4.06 (.065/.160)	4550	02-09-1205	02-09-1206
		18-22	1.52/3.05 (.060/.120)	2151	02-09-1203	02-09-1204
	30μ" Gold	14-20	1.65/4.06 (.065/.160)	4550	02-09-5169	02-09-5170
Phos-Bronze .008"	Tin	14-20	1.65/4.06 (.065/.160)	6310	02-09-1209	02-09-1211
		18-22	1.52/3.05 (.060/.120)	6271	02-09-1208	02-09-1212

• US Standard Product, available through Molex franchised distributors

† Engagement force is approximately 2.5 lb per circuit. Current rating is derated from standard terminals by 2.0A per circuit.

FEATURES AND SPECIFICATIONS

Features and Benefits

- Available in Tin or Gold platings
- Available in Brass or Phosphor Bronze base materials
- Accommodates 14 to 30 gauge wire
- Available in crimp or PC tail versions

Reference Information

Packaging: Bag or reel
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical

Current: Standard terminal—12.0A max.*
High Current Terminal—14.0A max.*
Contact Resistance: 10mΩ max

Mechanical

Contact Insertion Force: 2.3kg (5.0 lb) max.
Contact Retention Force: 9.1kg (20.0 lb) min.
Mating Force: 1.59kg (3.5 lb) max.
Unmating Force: 1.625kg (3.575 lb) max.
Durability: Tin plating—25 cycles max.
Gold plating—50 cycles max.

Physical

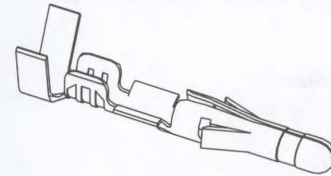
Contact: Brass or Phosphor Bronze
Plating: Tin or Gold
Operating Temperature: -40 to +105°C

* Depending on circuit size and wire gauge; please refer to product specifications



2.36mm (.093") Pin Diameter .093" Pin and Socket Male Terminals

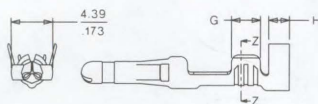
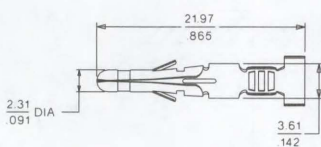
Standard .093" and 3191



Power Connectors

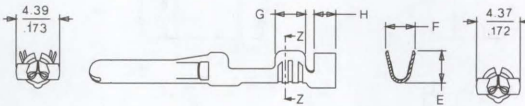
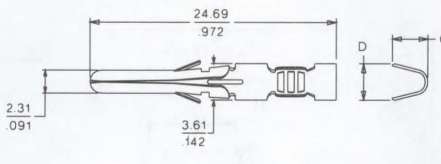
F

STANDARD



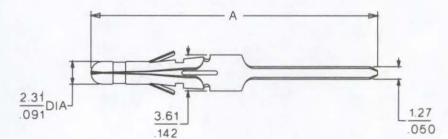
SECTION Z-Z

GROUNDING PIN



SECTION Z-Z

PC TAIL



ORDERING INFORMATION

Type		Plating	Crimp Wire Size	Insulation Diameter	Series	Order No.				
						Chain Form	Loose Form			
Standard Brass .010"		Tin	14-20	1.65/4.06 (.065/.160)	1190	• 02-09-2101	• 02-09-2103			
			18-22	1.52/3.05 (.060/.120)	1380	• 02-09-2116	• 02-09-2118			
			22-24	1.27/1.78 (.050/.070)	2870	02-09-2136	02-09-2137			
			24-30	0.76/1.52 (.030/.060)	1434	• 02-09-2141	• 02-09-2143			
		15μ" Gold	14-20	1.65/4.06 (.065/.160)	1190	• 02-09-6100	• 02-09-6106			
			18-22	1.52/3.05 (.060/.120)	1380	• 02-09-6122	• 02-09-6123			
			24-30	0.76/1.52 (.030/.060)	1434	• 02-09-6144	• 02-09-6145			
			50μ" Gold	14-20	1.65/4.06 (.065/.160)	1190	• 02-09-6101	• 02-09-6110		
		18-22		1.52/3.05 (.060/.120)	1380	• 02-09-6125	• 02-09-6126			
		.008" Low Engagement Force †		Tin	18-22	1.52/3.05 (.060/.120)	4272	02-09-1151	02-09-1149	
		Grounding Pin		Tin	14-18	1.65/3.56 (.065/.140)	1973-2	02-09-8108	02-09-8109	
					18-22	1.52/3.05 (.060/.120)	1973	02-09-8103	02-09-8104	
.013" High Current/Low Force		Tin	14-18	3.56 (.140) max.	42478	• 02-09-2611	• 02-09-2612			
PC Tail	For Standard .093" Housing	Tin			1376		• 02-09-2134			
	For Standard .093" Housing	30μ" Gold			1376		• 02-09-6132			
	For 3191 Housing	Tin			2606		• 02-09-8113			

• US Standard Product, available through Molex franchised distributors

† Engagement force is approximately 2.5 lb per circuit. Current rating is derated from standard terminals by 2.0A per circuit.

FEATURES AND SPECIFICATIONS

Features and Benefits

- Passive (friction) lock
- 1 to 15 circuit housings
- Panel and PCB mountable
- 1-piece strain reliefs available (42148 Series)
- Mating headers available
- Male and female terminals may be used in receptacle housing

Reference Information

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: Standard .093" plug, 3099 headers
and 42148 strain relief

Use With: Standard .093" terminal

Designed In: Inches

Electrical

Voltage: 250V

Current: 12.0A max.*

Dielectric Withstanding Voltage: 1500V AC rms

Mechanical

Contact Retention to Housing: 20 lb min.

Physical

Housing: Nylon, UL 94V-2

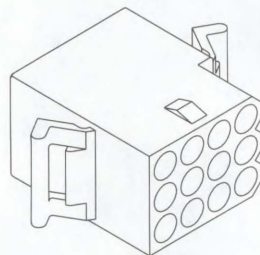
Operating Temperature: -40 to +105°C

* Depending on circuit size and wire gauge; please refer to product specifications

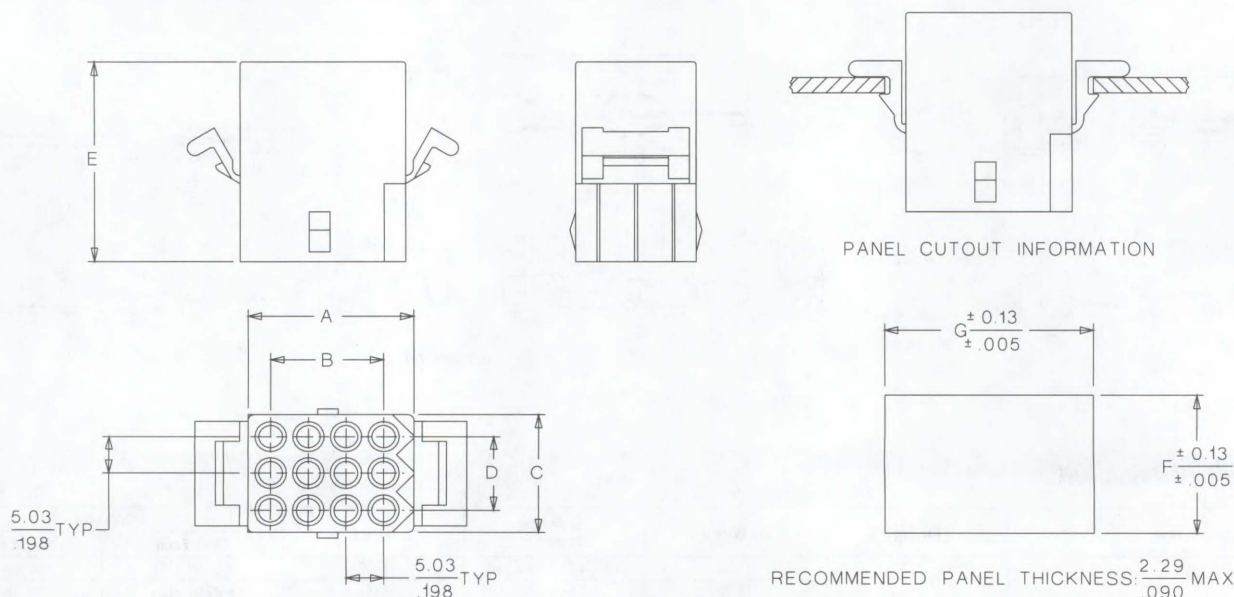


5.03mm (.198") Pitch .093 Pin and Socket Receptacle

Standard .093"



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Series No.	Order No.		Amperes per Circuit [†]	Dimension						
		Panel Mount	Free Hanging		A	B	C	D	E	F	G
1	1951	N/A	• 03-09-1014	12			7.90 (.310)		47.10 (1.860)		
1	1619	N/A	• 03-09-1011	12			5.80 (.230)		26.20 (1.030)		
2	1545	• 03-09-1027	• 03-09-1022	12	13.60 (.540)	6.30 (.248)	6.40 (.250)		26.20 (1.030)	7.92 (.312)	18.42 (.725)
3	1396	• 03-09-1081	• 03-09-1032	12	17.00 (.670)	10.06 (.396)	6.10 (.240)		25.70 (1.010)	7.92 (.312)	21.10 (.830)
4 (1 x 4)	1490	• 03-09-1041	• 03-09-1042	9	22.10 (.870)	15.09 (.594)	6.00 (.240)		26.20 (1.030)	7.92 (.312)	26.37 (1.038)
4 (2 x 2)	2163	• 03-09-1040	• 03-09-1049	9	11.00 (.430)	5.03 (.198)	11.00 (.430)	5.03 (.198)	26.20 (1.030)	15.24 (.600)	12.70 (.500)
5	2629	N/A	• 03-09-1054	9	27.20 (1.070)	20.12 (.792)	6.20 (.240)		25.40 (1.000)		
6	1261	• 03-09-1061	• 03-09-1064	9	11.00 (.430)	5.03 (.198)	16.00 (.630)	10.06 (.396)	25.90 (1.020)	15.24 (.600)	17.22 (.678)
9	1292	• 03-09-1091	• 03-09-1094	9	17.00 (.670)	10.06 (.396)	16.00 (.630)	10.06 (.396)	26.20 (1.030)	18.42 (.725)	21.03 (.828)
12	1360	• 03-09-1125	• 03-09-1126	7.5	22.10 (.870)	15.09 (.594)	16.00 (.630)	10.06 (.396)	25.90 (1.020)	18.42 (.725)	26.67 (1.050)
15	1375	• 03-09-1154	• 03-09-1157	7.5	27.10 (1.070)	20.12 (.792)	16.00 (.630)	10.06 (.396)	25.90 (1.020)	18.42 (.725)	31.50 (1.240)

• US Standard Product, available through Molex franchised distributors

† Rating based on fully loaded housings

FEATURES AND SPECIFICATIONS

Features and Benefits

- Passive (friction) lock
- 1 to 15 circuit housings
- Panel and PCB mountable
- 1-piece strain reliefs available (42148 Series)
- Male and female terminals may be used in plug housing

Reference Information

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: Standard .093" receptacle and 42148 strain relief

Use With: Standard .093" terminal

Designed In: Inches

Electrical

Voltage: 250V

Current: 12.0A max.*

Dielectric Withstanding Voltage: 1500V AC rms

Mechanical

Contact Retention to Housing: 20 lb min.

Physical

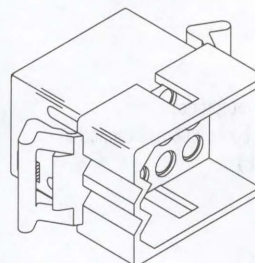
Housing: Nylon, UL 94V-2

Operating Temperature: -40 to +105°C

* Depending on circuit size and wire gauge; please refer to product specifications

molex® 5.03mm (.198") Pitch
.093" Pin and Socket Plug

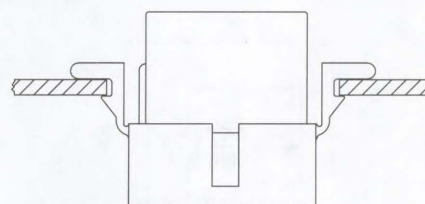
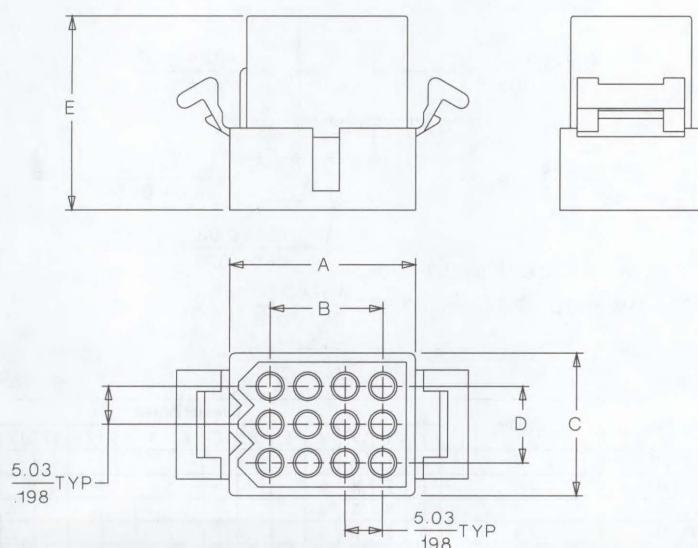
Standard .093"



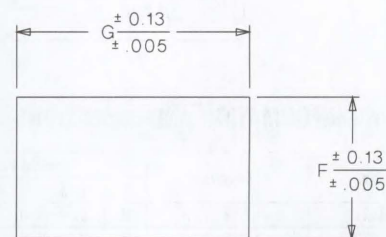
Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



PANEL CUTOUT INFORMATION



RECOMMENDED PANEL THICKNESS: $\frac{2.29}{.090}$ MAX

ORDERING INFORMATION AND DIMENSIONS

Circuits	Series No.	Order No.		Amperes per Circuit†	Dimension						
		Panel Mount	Free Hanging		A	B	C	D	E	F	G
1	1951	N/A	• 03-09-2014	12			11.20 (.440)		57.20 (2.250)		
1	1619	N/A	• 03-09-2011	12			9.10 (.360)		25.40 (1.000)		
2	1545	• 03-09-2021	• 03-09-2022	12	16.30 (.640)	6.30 (.248)	8.90 (.350)		25.40 (1.000)	9.53 (.375)	20.32 (.800)
3	1396	• 03-09-2031	• 03-09-2032	12	19.60 (.770)	10.06 (.396)	8.60 (.340)		25.40 (1.000)	9.53 (.375)	23.70 (.933)
4 (1 x 4)	1490	• 03-09-2041	• 03-09-2042	9	24.70 (.970)	15.09 (.594)	8.60 (.340)		25.40 (1.000)	9.53 (.375)	28.73 (1.131)
4 (2 x 2)	2163	• 03-09-2040	• 03-09-2049	9	13.70 (.540)	5.03 (.198)	13.70 (.540)	5.03 (.198)	26.00 (1.020)	17.65 (.695)	14.10 (.555)
5	2629	N/A	• 03-09-2057	9	30.00 (1.180)	20.12 (.792)	8.60 (.340)		25.40 (1.000)		
6	1261	• 03-09-2061	• 03-09-2062	9	13.70 (.540)	5.03 (.198)	18.60 (.730)	10.06 (.396)	25.40 (1.000)	17.65 (.695)	19.05 (.750)
9	1292††	• 03-09-2091	• 03-09-2092	9	19.60 (.770)	10.06 (.396)	18.50 (.730)	10.06 (.396)	25.40 (1.000)	16.76 (.660)	23.80 (.937)
12	1360	• 03-09-2122	• 03-09-2121	7.5	24.90 (.980)	15.09 (.594)	18.80 (.740)	10.06 (.396)	24.90 (.980)	19.30 (.760)	29.34 (1.155)
15	1375	• 03-09-2159†	• 03-09-2158	7.5	29.70 (1.170)	20.12 (.792)	18.80 (.740)	10.06 (.396)	24.90 (.980)	19.30 (.760)	34.11 (1.343)

• US Standard Product, available through Molex franchised distributors

† Rating based on fully loaded housings and 14 AWG wire

‡ Vertical headers may be assembled using PC tail terminals in standard housings

†† Version with optional pre-bent ears

FEATURES AND SPECIFICATIONS

Features and Benefits

- 3, 4, 6, 9, 12 and 15 circuits available
- Pre-assembled
- Intermix of male and female terminals for polarization
- Polarized housing design assures proper mating

Reference Information

Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: Standard .093" receptacles
 Use With: 1840 header as a board-to-board connector
 (contact Molex for details)
 Designed In: Inches

Electrical

Voltage: 250V
 Current: 5.0A max.
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC rms

Mechanical

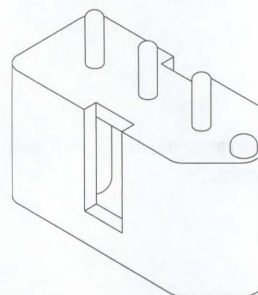
Mating Force: 3.5 lb max.
 Unmating Force: 1.5 lb min.
 Durability: 25 cycles

Physical

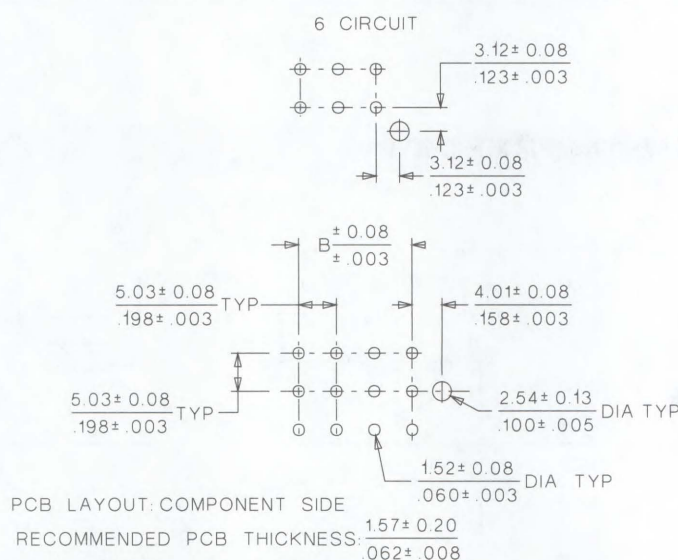
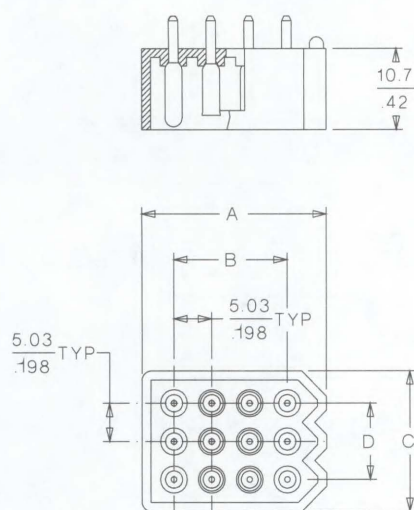
Housing: Polyester, UL 94V-0
 Contact: Male—Brass, Female—Phosphor Bronze
 Plating: Electro-Tin
 Operating Temperature: -40 to +105°C

molex® 5.03mm (.198") Pitch .093" Pin and Socket Shrouded Header

3099



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Circuits	Terminal Pattern						Order No.	Circuits	Terminal Pattern														
		1	2	3	4	5	6			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
10-18-1031	3	M	B	M				10-18-1049	4	M	F	M	F											
10-18-1032	3	M	M	M				10-18-1050	4	F	F	M	M											
10-18-1033	3	F	M	M				10-18-1040	4	F	M	B	B											
10-18-1034	3	M	F	M				50-29-1041	4	B	B	B	B											
10-18-1035	3	M	M	F				10-18-1061	6	M	M	M	M	M	M									
10-18-1036	3	M	F	B				10-18-1063	6	M	F	M	M	F	M									
10-18-1037	3	M	F	F				38-00-0589	6	F	M	M	M	F	M									
10-18-1038	3	F	F	F				38-00-0590	6	M	M	M	F	M	M									
50-29-1031	3	B	B	B				10-18-1064	6	M	M	M	M	M	F									
10-18-1041	4	M	M	M	M			10-18-1065	6	F	M	M	M	M	M									
10-18-1042	4	F	F	F	F			50-29-1061	6	B	B	B	B	B	B									
10-18-1043	4	F	M	M	M			10-18-1090	9	M	M	M	M	M	M	M	M	M						
10-18-1044	4	M	F	F	F			50-29-1409	9	B	B	B	B	B	B	B	B	B						
10-18-1045	4	M	M	F	F			10-18-1120	12	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
10-18-1046	4	M	M	M	F			50-29-1412	12	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
10-18-1047	4	M	F	M	M			10-18-1150	15	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
10-18-1048	4	M	M	F	M			50-29-1415	15	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B

Order No.	Dimension			
	A	B	C	D
3099-3	19.60 (.770)	10.06 (.396)	8.50 (.340)	
3099-4	24.60 (.970)	15.09 (.594)	8.50 (.340)	
3099-6	13.70 (.540)	5.03 (.198)	18.80 (.740)	10.06 (.396)
3099-9	19.60 (.770)	10.06 (.396)	18.50 (.730)	10.06 (.396)
3099-12	24.80 (.980)	15.09 (.594)	18.80 (.740)	10.06 (.396)
3099-15	29.80 (1.17)	20.12 (.792)	18.80 (.740)	10.06 (.396)

* Used for assembling blank housings and loose terminals

M = Male terminal, F = Female terminal, B = Blank, no terminal

Assembly Tooling*

Description	Order No.
Arbor Press with Universal Tool Kit	11-20-1172

Order No. for Loose Terminals

Male	16-06-0002
Female	43080-0001

FEATURES AND SPECIFICATIONS

Features and Benefits

- Positive lock
- Fully isolated terminals
- Polarized housing assures proper mating
- Male and female terminals may be used in receptacle housing

Reference Information

Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R75107
 Mates With: 5219 header and 3191 plug
 Use With: Standard .093" terminal
 Designed In: Inches

Electrical

Voltage: 600V
 Current: 12.0A max.*
 Dielectric Withstanding Voltage: 5000V AC rms

Mechanical

Contact Retention to Housing: 20 lb min.

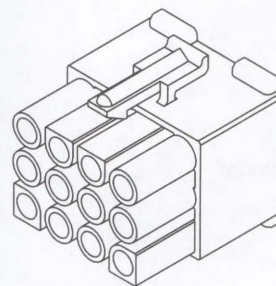
Physical

Housing: Nylon, UL 94V-0 or 94V-2
 Operating Temperature: -40 to +105°C

* Depending on circuit size and wire gauge; please refer to product specifications

molex® 6.71mm (.264") Pitch
**.093" Pin and Socket
 Receptacle**

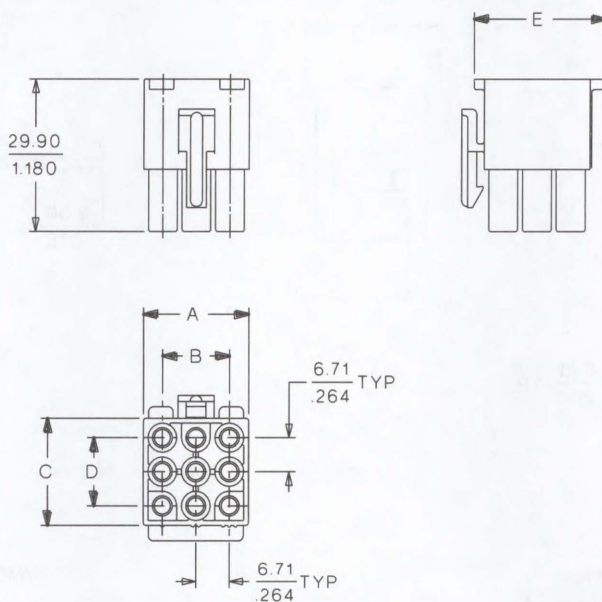
3191



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Amperes per Circuit	Dimension				
	94V-2	94V-0		A	B	C	D	E
1	• 19-09-1019	• 19-09-1016	12	7.60 (.300)		7.60 (.300)		10.62 (.418)
2	• 19-09-1029	• 19-09-1026	12	14.30 (.560)	6.71 (.264)	7.60 (.300)		12.70 (.500)
3	• 19-09-1039	• 19-09-1036	11	21.00 (.830)	13.42 (.528)	7.60 (.300)		12.70 (.500)
4	• 19-09-1049	• 19-09-1046	9	27.70 (1.090)	20.13 (.792)	7.60 (.300)		12.70 (.500)
6	• 19-09-1069	• 19-09-1066	9	21.00 (.830)	13.42 (.528)	14.30 (.560)	6.71 (.264)	19.38 (.763)
9	• 19-09-1099	• 19-09-1096	9	21.00 (.830)	13.42 (.528)	21.00 (.830)	13.42 (.528)	26.20 (1.030)
12	• 19-09-1129	• 19-09-1126	9	27.70 (1.090)	20.13 (.792)	21.00 (.830)	13.42 (.528)	26.20 (1.030)
15	• 19-09-1159	• 19-09-1156	9	34.40 (1.350)	26.84 (1.056)	21.00 (.830)	13.42 (.528)	26.20 (1.030)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Positive lock
- Fully isolated terminals
- Polarized housing assures proper mating
- Male and female terminals may be used in plug housing

Reference Information

Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R75107
 Mates With: 3191 receptacle
 Use With: Standard .093" terminal
 Designed In: Inches

Electrical

Voltage: 600V
 Current: 12.0A max.*
 Dielectric Withstanding Voltage: 5000V AC rms

Mechanical

Contact Retention to Housing: 20 lb min.

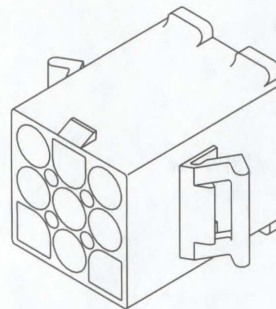
Physical

Housing: Nylon, UL 94V-0 or 94V-2
 Operating Temperature: -40 to +105°C

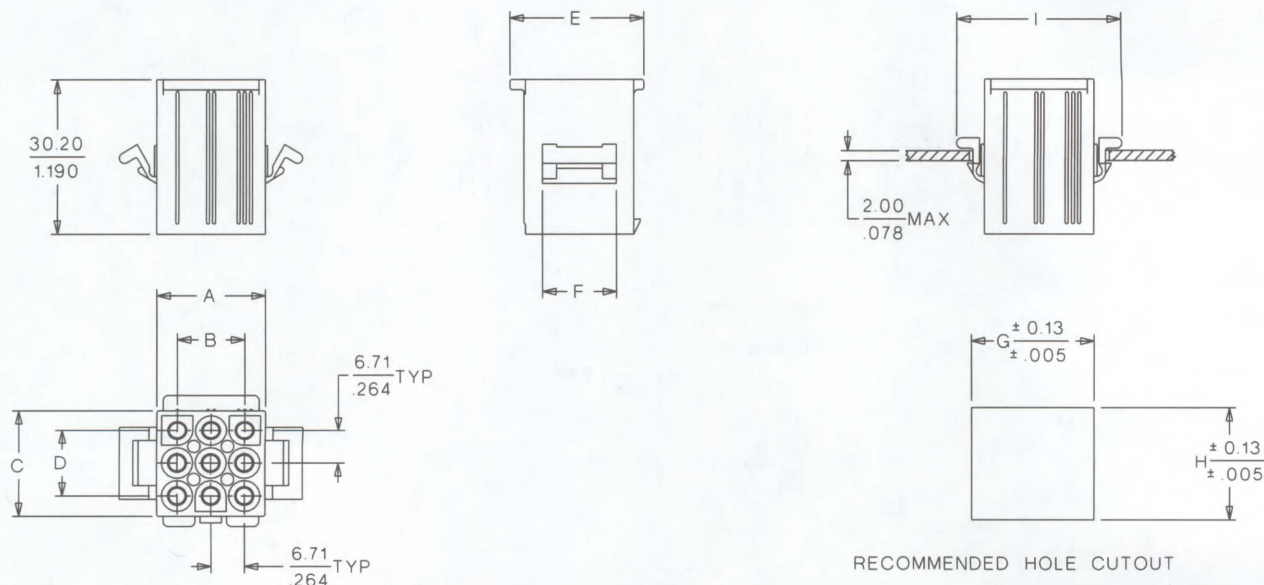
* Depending on circuit size and wire gauge; please refer to product specifications

molex® 6.71 mm (.264") Pitch .093" Pin and Socket Plug

3191



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Amperes Per Circuit	Dimension							
	Panel Mount		Free Hanging			A	B	C	D	E	F	G	H
	94V-2	94V-0	94V-2	94V-0									
1	• 19-09-2018	• 19-09-2017	• 19-09-2019	• 19-09-2016	12	8.10 (.320)				11.15 (.439)	6.35 (.250)	12.30 (.484)	10.00 (.394)
2	• 19-09-2028	• 19-09-2027	• 19-09-2029	• 19-09-2026	12	14.90 (.590)	6.71 (.264)	8.10 (.320)		13.30 (.520)	8.20 (.320)	20.32 (.800)	9.27 (.365)
3	• 19-09-2038	• 19-09-2037	• 19-09-2039	• 19-09-2036	11	21.59 (.850)	13.42 (.528)	8.20 (.320)		13.30 (.520)	8.20 (.320)	25.90 (1.020)	10.00 (.394)
4	• 19-09-2048	• 19-09-2047	• 19-09-2049	• 19-09-2046	9	28.30 (1.110)	20.13 (.792)	8.20 (.320)		13.30 (.520)	8.20 (.320)	32.26 (1.270)	10.00 (.394)
6	• 19-09-2068	• 19-09-2067	• 19-09-2069	• 19-09-2066	9	21.60 (.850)	13.42 (.528)	14.90 (.590)	6.71 (.264)	19.96 (.790)	14.70 (.580)	26.60 (1.047)	17.30 (.681)
9	• 19-09-2098	• 19-09-2097	• 19-09-2099	• 19-09-2096	9	21.60 (.850)	13.42 (.528)	21.60 (.850)	13.42 (.528)	26.70 (1.050)	14.70 (.580)	26.62 (1.048)	23.09 (.909)
12	• 19-09-2128	• 19-09-2127	• 19-09-2129	• 19-09-2126	9	28.20 (1.110)	20.13 (.792)	22.10 (.870)	13.42 (.528)	26.70 (1.050)	14.70 (.580)	33.02 (1.300)	23.10 (.910)
15	• 19-09-2158	• 19-09-2157	• 19-09-2159	• 19-09-2156	9	35.10 (1.380)	26.84 (1.056)	22.10 (.870)	13.42 (.528)	26.70 (1.050)	14.70 (.580)	39.42 (1.552)	23.11 (.910)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Positive lock
- Fully isolated terminals
- Polarized housing assures proper mating

Reference Information

Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R75107
 Mates With: 3191 receptacle
 Designed In: Inches

Electrical

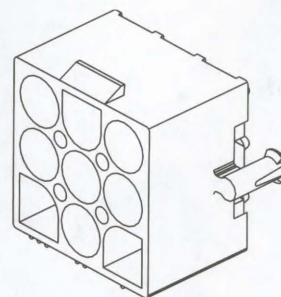
Voltage: 600V
 Current: 12.0A max.
 Dielectric Withstanding Voltage: 5000V AC rms

Physical

Housing: Nylon, UL 94V-2
 Contact: Brass
 Plating: Tin
 Operating Temperature: -40 to +105°C

molex® 6.71mm (.264") Pitch
 .093" Pin and Socket
 Header

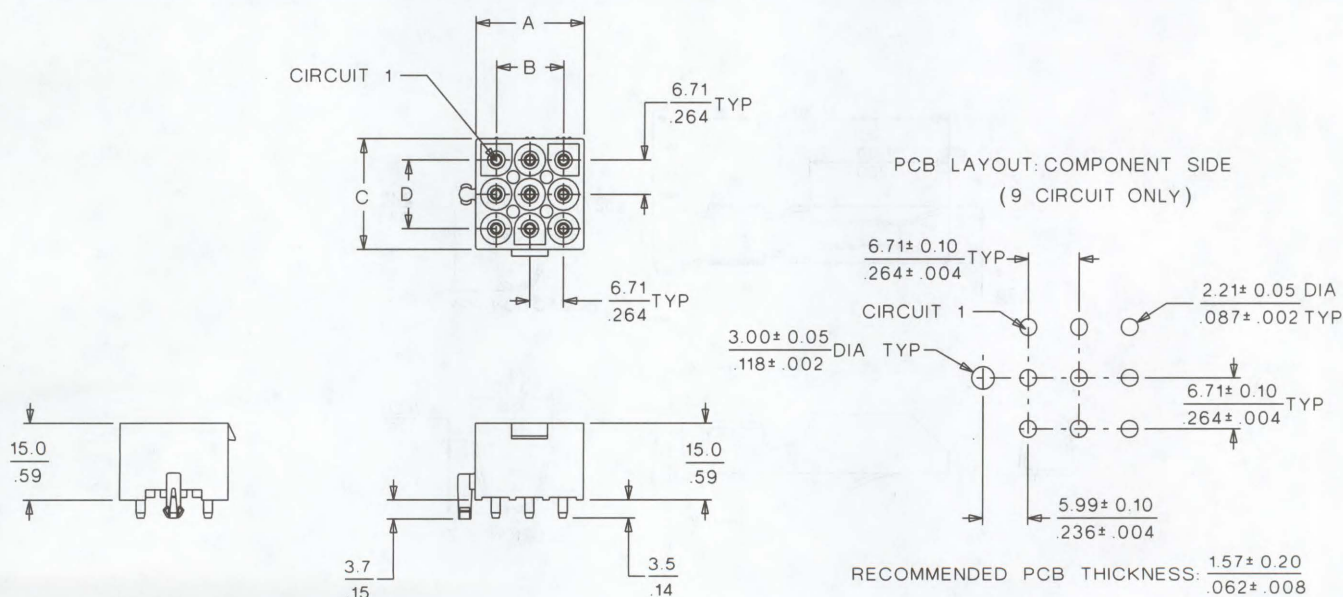
5219



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Amperes Per Circuit	Dimension			
			A	B	C	D
2	15-31-1026	12	14.30 (.560)	6.71 (.264)	7.60 (.300)	
3	15-31-1036	11	21.00 (.830)	13.42 (.528)	7.60 (.300)	
4	15-31-1046	9	27.70 (1.090)	20.13 (.792)	7.60 (.300)	
6	15-31-1066	9	21.00 (.830)	13.42 (.528)	14.30 (.560)	6.71 (.264)
9	15-31-1096	9	21.00 (.830)	13.42 (.528)	21.00 (.830)	13.42 (.528)

FEATURES AND SPECIFICATIONS

Features and Benefits

- 3 points of contact for optimum reliability
- Locking tab secures terminal to housing

Reference Information

Product Specification: PS-35183

Packaging: Reel

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R9651149

Use With: 35183

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 7.0A

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 49.0N (11.0 lb) min.

Wire Pull-Out Force: 20 AWG—83.4N (18.7 lb) min.

Mating Force: 19.6N (4.4 lb) max.

Unmating Force: 5.9N (1.3 lb) min.

Durability: 30 cycles

Physical

Contact: Brass

Plating: Tin

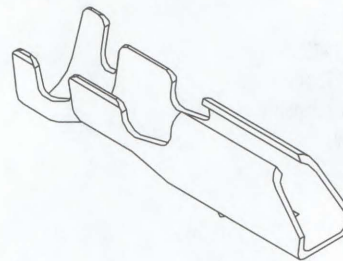
Insulation Diameter: 1.50 to 2.70mm (.059 to .106") max.

Strip Length: 3.50 to 4.50mm (.138 to .177")

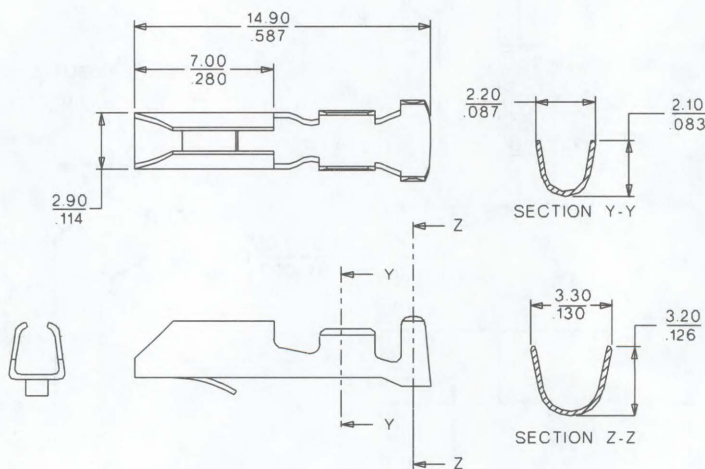
Wire Gauge: 20 to 24 AWG

Operating Temperature: -25 to +85°C

molex® 8.00mm (.315") Pitch Wire-to-Board Crimp Terminal

35716

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.
35716-0110

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 1 to 5 circuits
- For 2.36mm (.093") diameter pins
- Polarization through varied spacing between circuits 1 and 2
- Fully isolated terminals to protect contact from damage

Reference Information

Product Specification: PS-35183

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R9651149

Mates With: 35309

Use With: 35716

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 7.0A

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 100 MΩ min.

Mechanical

Contact Retention to Housing: 49.0N (11.0 lb) min.

Mating Force: 19.6N (4.4 lb) max.

Unmating Force: 5.9N (1.3 lb) min.

Durability: 30 cycles

Physical

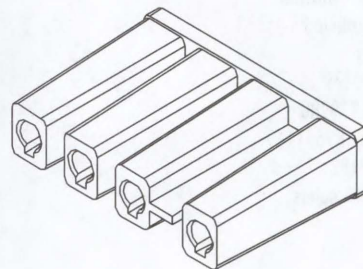
Housing: Gray PPO, UL 94V-1

Operating Temperature: -25 to +85°C



8.00mm (.315") Pitch Wire-to-Board Housing

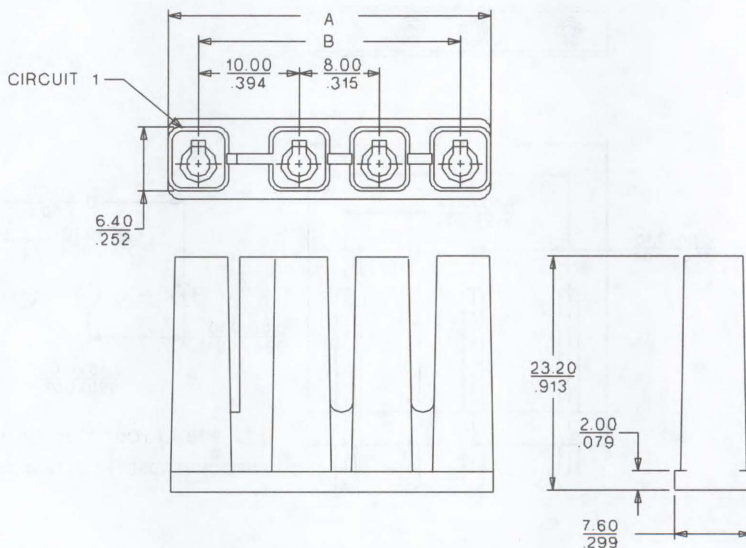
35183



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
1	35183-0117	6.00 (.236)	
2	35183-0217	15.80 (.622)	10.00 (.394)
3	35183-0317	24.00 (.945)	18.00 (.709)
4	35183-0417	32.00 (1.260)	26.00 (1.024)
5	35183-0517	40.00 (1.575)	34.00 (1.339)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 1 to 5 circuits
- Uses 2.36mm (.093") diameter pins
- Polarization through varied spacing between circuits 1 and 2

Reference Information

Product Specification: PS-35183
 Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R9651149
 Mates With: 35183
 Designed In: Millimeters

Electrical

Voltage: 250V
 Current: 7.0A
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 100 MΩ min.

Mechanical

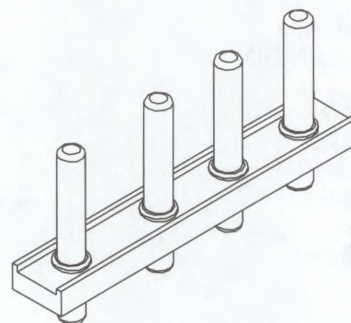
Contact Retention to Housing: 49.0N (11.0 lb) min.
 Mating Force: 19.6N (4.4 lb) max.
 Unmating Force: 5.9N (1.3 lb) min.
 Durability: 30 cycles

Physical

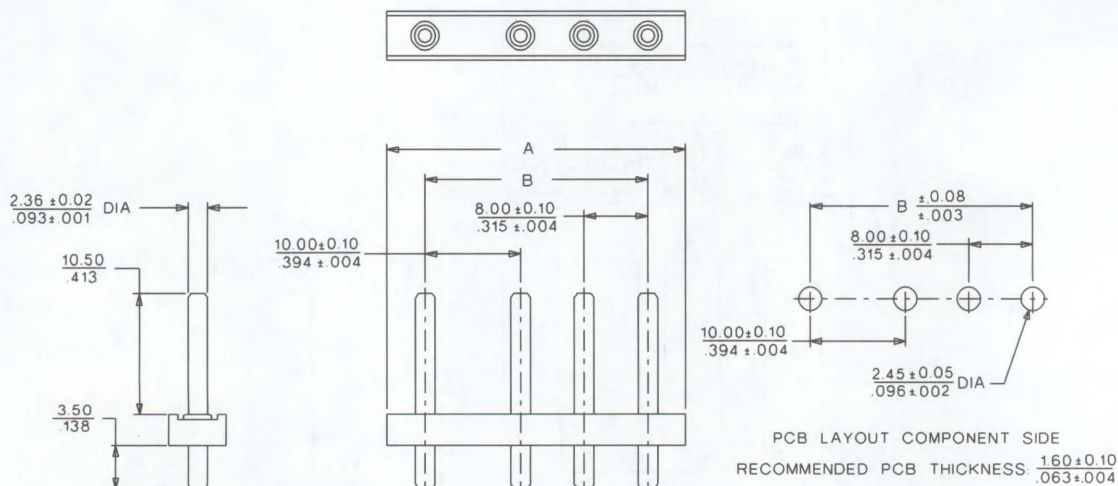
Housing: Natural 6/6 nylon, UL 94V-0
 Operating Temperature: -25 to +85°C

molex® 8.00mm (.315") Pitch Wire-to-Board Header

35309



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
1	35309-0110	8.00 (.315)	
2	35309-0210	18.00 (.709)	10.00 (.394)
3	35309-0310	26.00 (1.024)	18.00 (.709)
4	35309-0410	34.00 (1.339)	26.00 (1.024)
5	35309-0610	42.00 (1.654)	34.00 (1.339)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Crimp equivalent of 70156
- Wire range 14 to 20 AWG and 18 to 22 AWG available
- Wire-to-board and wire-to-wire connector system
- Crimp version
- Wire connectors have end grips for easy unmating
- Detents provide firm positive fit

Reference Information

Product Specification: PS-8981-4M/4P

Packaging: Terminal—Reel

Housing—Bag

UL File No.: E29179

CSA File No.: LR19980A

Mates With: 8981 4M/4V/4S/4R

Designed In: Inches

Electrical

Voltage: 250V AC

Current:

AWG	14	16	18	22
Amperes	10.0	10.0	8.0	6.0

Contact Resistance: 25mΩ max.

Dielectric Withstanding Voltage: 250V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 44.13N (9.92 lb) min.

Mating Force: 98.07N (22.05 lb) max.

Unmating Force: 24.52N (5.51 lb) min.

Durability: 50 cycles

Physical

Housing: Natural nylon, UL 94V-0

Contact: Phosphor Bronze or Brass (See Table)

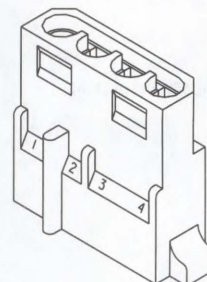
Plating: Tin over Copper

Operating Temperature: -10 to +85°C



5.08mm (.200") Pitch Disk Drive Power Connection System Crimp Terminal and Housing

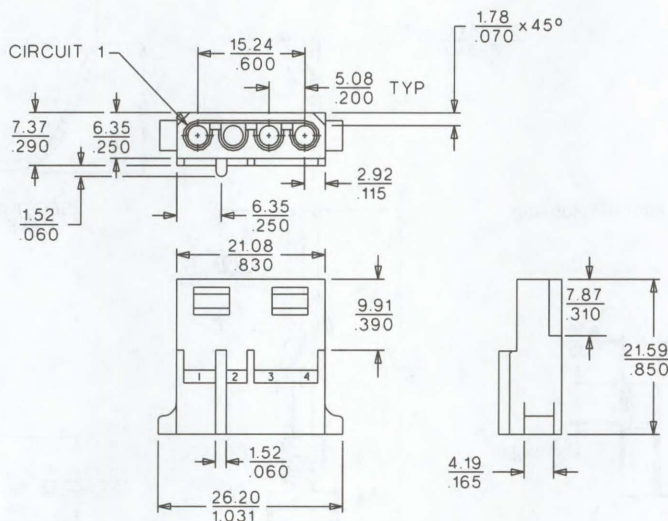
8981



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Housing Order No.
15-24-4048

Terminal			
Order No.	Packaging	Contact	Wire Gauge
02-08-1201	Chain	Phosphor Bronze	14-20 AWG
02-08-1202	Loose	Phosphor Bronze	14-20 AWG
02-08-1215	Chain	Brass	14-20 AWG
02-08-1216	Loose	Brass	14-20 AWG

FEATURES AND SPECIFICATIONS

Features and Benefits

- Wire range 14 to 20 AWG and 18 to 22 AWG available
- Wire-to-board and wire-to-wire connector system
- Crimp version
- Wire connectors have end grips for easy unmating
- Detents provide firm positive fit

Reference Information

Product Specification: PS-8981-4M/4P

Packaging: Terminal—Reel

Housing—Bag

Tooling Information: Crimp hand tool, see end of section

UL File No.: E29179

CSA File No.: LR19980A

Mates With: 70156 and 8981-04P

Designed In: Inches



5.08mm (.200") Pitch
Disk Drive Power
Connection System
Crimp Terminal and Housing

8981-04M

AWG	14	16	18	22
Amperes	10.0	10.0	8.0	6.0

Contact Resistance: 25mΩ max.

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 4.5kg min.

Mating Force: 10kg max.

Unmating Force: 2.5kg min.

Durability: 50 cycles

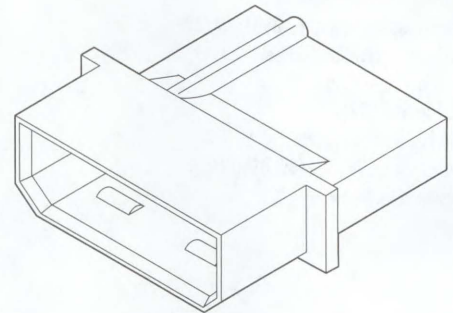
Physical

Housing: Natural nylon, UL 94V-2

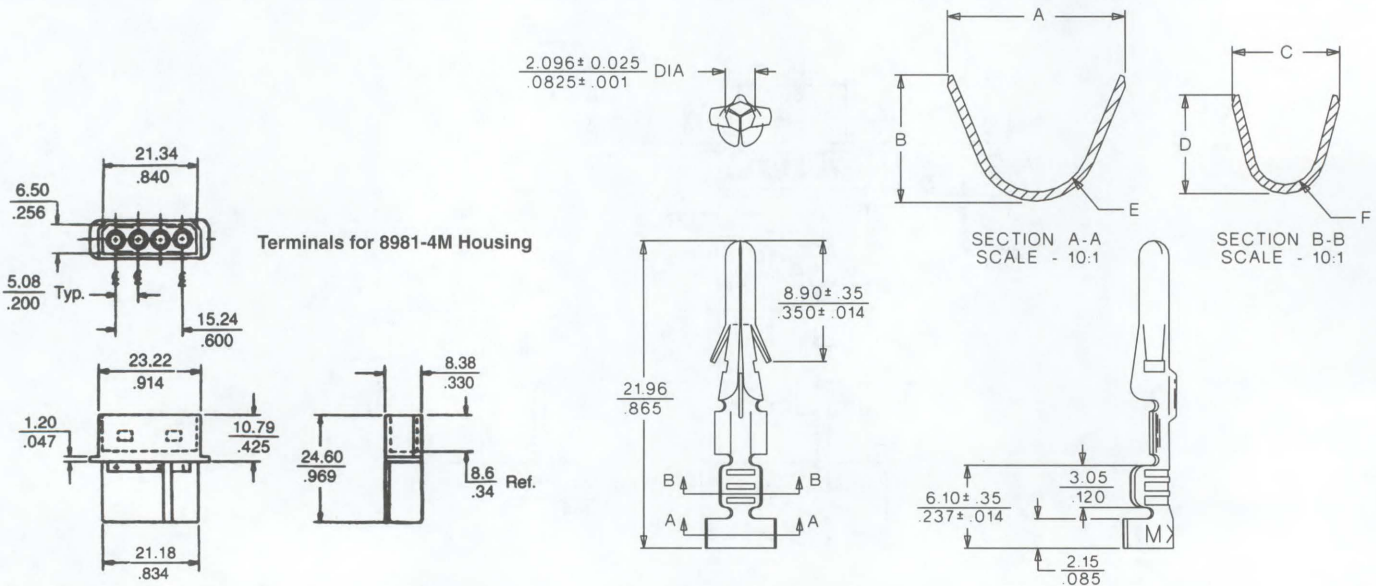
Contact: Phosphor Bronze

Plating: Tin/Lead over Nickel

Operating Temperature: -40 to +105°C



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Housing	
Engineering No.	Order No.
8981-04M	15-24-4047

Terminal							
Engineering No.	Order No.	Packaging	AWG	A	B	C	D
8980-6C	02-08-1234	Chain	14-20	4.44 (.175)	3.39 (.133)	3.02 (.119)	3.61 (.142)
8980-6C1	02-08-1236	Chain	18-22	3.28 (.129)	2.58 (.102)	2.44 (.096)	2.58 (.102)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Wire-to-wire and wire-to-board insulation displacement
- End grips for easy unmating
- Housing detent provides positive retention to mating connector
- Locking IDT wire strain relief cover
- IDT equivalent to 8981-4P

Reference Information

Product Specification: PS-70156

Packaging: Bulk

UL File No.: E29179

CSA File No.: LR19980

Mates With: 8981 style disk drive power headers and

71156 male IDT connector

Designed In: Inches

Electrical

Voltage: 250V

Current:

AWG	16	18	20	22
Amperes	8.0	8.0	6.5	6.0

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 5000 MΩ min.

Mechanical

Contact Retention to Housing: 44.5N (10.0 lb) min.

Mating Force: 17.8N (4.0 lb) max.

Unmating Force: 6.7N (1.5 lb) min.

Physical

Housing: White thermoplastic, UL 94V-0

Natural thermoplastic, UL 94V-2

Contact: Phosphor Bronze

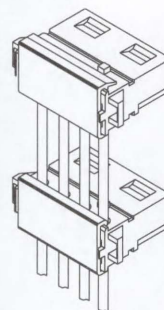
Plating: Tin

Operating Temperature: -40 to +85°C

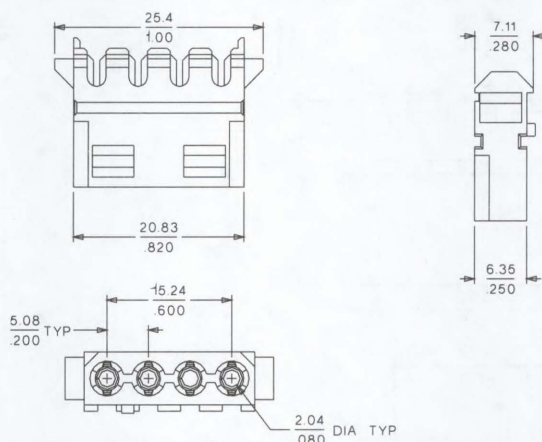


5.08mm (.200") Pitch Disk Drive Power Connection System Connector

70156 Female IDT



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Connectors Only, 94V-0		
Order No.	Wire Type	Color Code
• 15-24-3053	16 AWG stranded	Yellow
• 15-24-3050	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-3051	20 AWG stranded	Blue
• 15-24-3052	22 AWG solid, fused and stranded	Black

Connectors Only, 94V-2		
Order No.	Wire Type	Color Code
• 15-24-3000	16 AWG stranded	Yellow
• 15-24-2000	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-2001	20 AWG stranded	Blue
• 15-24-2002	22 AWG solid, fused and stranded	Black

Strain Relief Covers Only (Black)	
Feed-Through	Feed-To
• 15-05-7011	• 15-05-7012

• US Standard Product, available through Molex franchised distributors

Note: Covers must be used with connectors to retain wires

Kit with Connector and Wire Strain Relief, 94V-0			
Order No.	Cover Type	Wire Type	Color Code
• 15-24-3030	Feed-Through	16 AWG stranded	Yellow
• 15-24-3031	Feed-To	16 AWG stranded	Yellow
• 15-24-3032	Feed-Through	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-3033	Feed-To	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-3034	Feed-Through	20 AWG stranded	Blue
• 15-24-3035	Feed-To	20 AWG stranded	Blue
• 15-24-3036	Feed-Through	22 AWG solid, fused and stranded	Black
• 15-24-3037	Feed-To	22 AWG solid, fused and stranded	Black

Kit with Connector and Wire Strain Relief, 94V-2			
Order No.	Cover Type	Wire Type	Color Code
• 15-24-3001	Feed-Through	16 AWG stranded	Yellow
• 15-24-3002	Feed-To	16 AWG stranded	Yellow
• 15-24-2003	Feed-Through	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-2004	Feed-To	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-2005	Feed-Through	20 AWG stranded	Blue
• 15-24-2006	Feed-To	20 AWG stranded	Blue
• 15-24-2007	Feed-Through	22 AWG solid, fused and stranded	Black
• 15-24-2008	Feed-To	22 AWG solid, fused and stranded	Black

FEATURES AND SPECIFICATIONS

Features and Benefits

- Wire-to-wire insulation displacement
- End grips for easy unmating
- Housing detents provide positive retention
- Locking IDT wire strain relief cover
- IDT equivalent to 8981-4M

Reference Information

Product Specification: PS-71156
 Packaging: Bulk
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: 70156 and 8981-04P
 Designed In: Inches

Electrical

Voltage: 250V
 Current:

AWG	16	18	20	22
Amperes	8.0	8.0	6.5	6.0

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 5000 MΩ min.

Mechanical

Contact Retention to Housing: 44.5N (10.0 lb) min.

Mating Force: 17.8N (4.0 lb) max.

Unmating Force: 6.7N (1.5 lb) min.

Physical

Housing: White thermoplastic, UL 94V-0

Contact: Phosphor Bronze

Plating: Tin

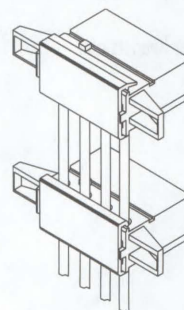
Operating Temperature: -40 to +85°C



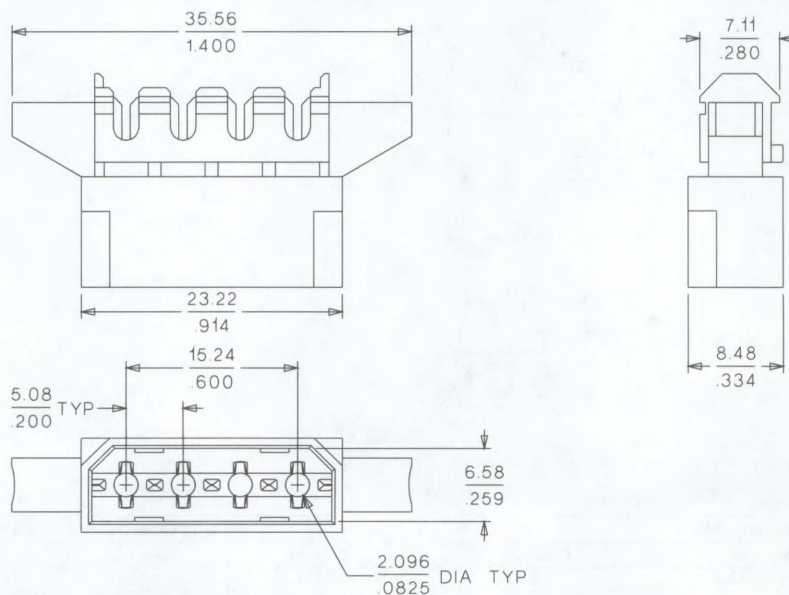
5.08mm (.200") Pitch Disk Drive Power Connection System Connector

71156

Male IDT



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Kit with Connector and Wire Strain Relief			
Order No.	Cover Type	Wire Type	Color Code
• 15-24-3040	Feed-Through	16 AWG stranded	Yellow
• 15-24-3041	Feed-To	16 AWG stranded	Yellow
• 15-24-3042	Feed-Through	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-3043	Feed-To	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-3044	Feed-Through	20 AWG stranded	Blue
• 15-24-3045	Feed-To	20 AWG stranded	Blue
• 15-24-3046	Feed-Through	22 AWG solid, fused and stranded	Black
• 15-24-3047	Feed-To	22 AWG solid, fused and stranded	Black

Connectors Only		
Order No.	Wire Type	Color Code
• 15-24-3303	16 AWG stranded	Yellow
• 15-24-3300	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-3301	20 AWG stranded	Blue
• 15-24-3302	22 AWG solid, fused and stranded	Black

Strain Relief Covers Only (Black)	
Feed-Through	Feed-To
• 15-05-7011	• 15-05-7012

• US Standard Product, available through Molex franchised distributors

Note: Covers must be used with connectors to retain wires

FEATURES AND SPECIFICATIONS

Features and Benefits

- Antiwicking PC tails
- Surface Mount Compatible

Reference Information

Product Specification: PS-8981-4V4/4R1P
 Packaging: Bag (8981-4V6 in tray)
 UL File No.: E29179
 CSA File No.: LR19980A
 Mates With: 70156 and 8981-04P
 Designed In: Inches

Electrical

Voltage: 250V
 Current: 10.0A
 Contact Resistance: 15mΩ max.
 Dielectric Withstanding Voltage: 1500V AC
 Insulation Resistance: 5000 MΩ min.

Mechanical

Contact Retention to Housing: 4 lb min.
 Mating Force: 12 lb max.
 Unmating Force: 12 lb min.
 Durability: 25 cycles

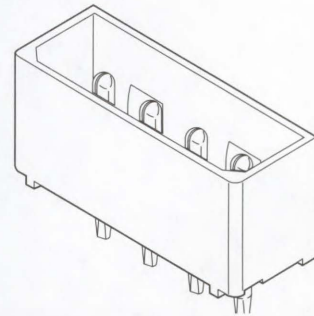
Physical

Housing: High-temperature thermoplastic
 Contact: Phosphor Bronze
 Plating: Tin/Lead over Nickel
 Operating Temperature: -40 to +85°C



5.08mm (.200") Pitch Disk Drive Power Connection System Header

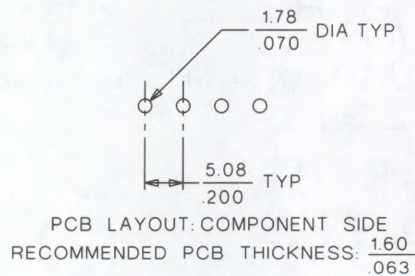
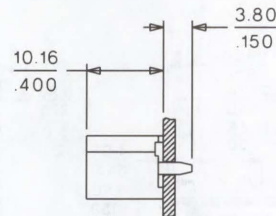
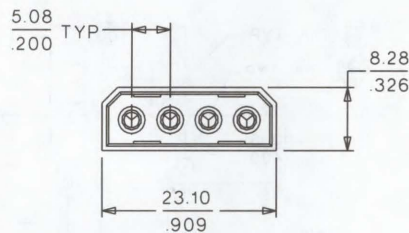
A-8981-04V4/04V5/04V6 High Temperature Version Vertical



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Engineering No.	Order No.	PC Tail Length	Peg
A-8981-04V4	15-24-4157	2.12 (.083)	No
A-8981-04V5	15-24-4345	3.58 (.141)	No
A-8981-04V6	15-24-4342	2.12 (.083)	Yes

Note: 8981-4V5 drawing shown for reference

FEATURES AND SPECIFICATIONS

Features and Benefits

- Snap-in retention locks for secure peg retention
- Sturdy locating pegs provide added stability

Reference Information

Product Specification: PS-8981-4V/4R

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980A

Mates With: 70156/8981-4P

Designed In: Inches

Electrical

Voltage: 250V AC

Current: 6.5A

Contact Resistance: 15mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 500 MΩ min.

Mechanical

Contact Retention to Housing: 17.79N (4.0 lb) min.

Mating Force: 17.79N (4.0 lb) max.

Unmating Force: 6.67N (1.5 lb) min.

Durability: 50 cycles

Physical

Housing: Natural 6/6 nylon, UL 94V-2

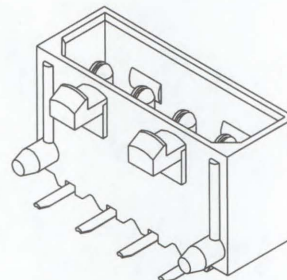
Contact: Phosphor Bronze

Plating: Tin/Lead over Copper

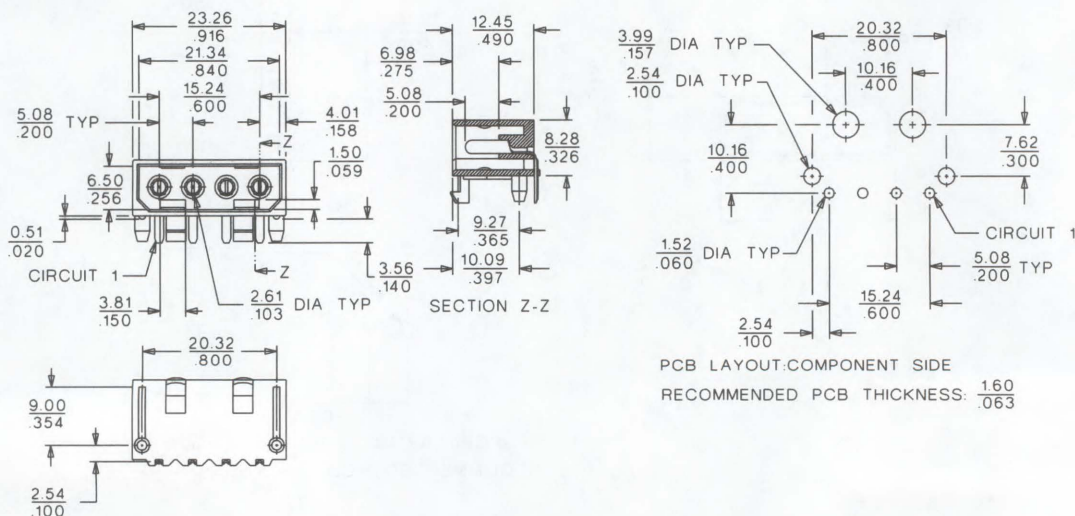
Operating Temperature: -40 to +105°C

molex® 5.08mm (.200") Pitch Disk Drive Power Connection System Header

8981 Right Angle



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	PC Tail Length
15-24-4041	3.56 (.140)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Double-slot orientation
- Gull-wing solder tails provide PCB retention

Reference Information

Product Specification: PS-8981-4SM
 Packaging: Tray
 UL File No.: E29179
 CSA File No.: LR19980A
 Mates With: 70156/8981-4P and 8980-R
 Designed In: Inches

Electrical

Voltage: 250V AC
 Current: 6.5A
 Contact Resistance: 5mΩ max.
 Dielectric Withstanding Voltage: 1500V AC
 Insulation Resistance: 500 MΩ min.

Mechanical

Contact Retention to Housing: 22.24N (5.0 lb) min.
 Mating Force: 17.79N (4.0 lb) max.
 Unmating Force: 6.67N (1.5 lb) min.
 Durability: 25 cycles

Physical

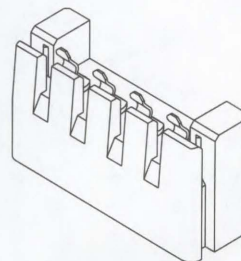
Housing: Black 30% glass filled,
 high temperature thermoplastic, UL 94V-0
 Contact: Phosphor Bronze
 Plating: Tin/Lead over Nickel
 Operating Temperature: -40 to +105°C



5.08mm (.200") Pitch Disk Drive Power Connection System Header

8981

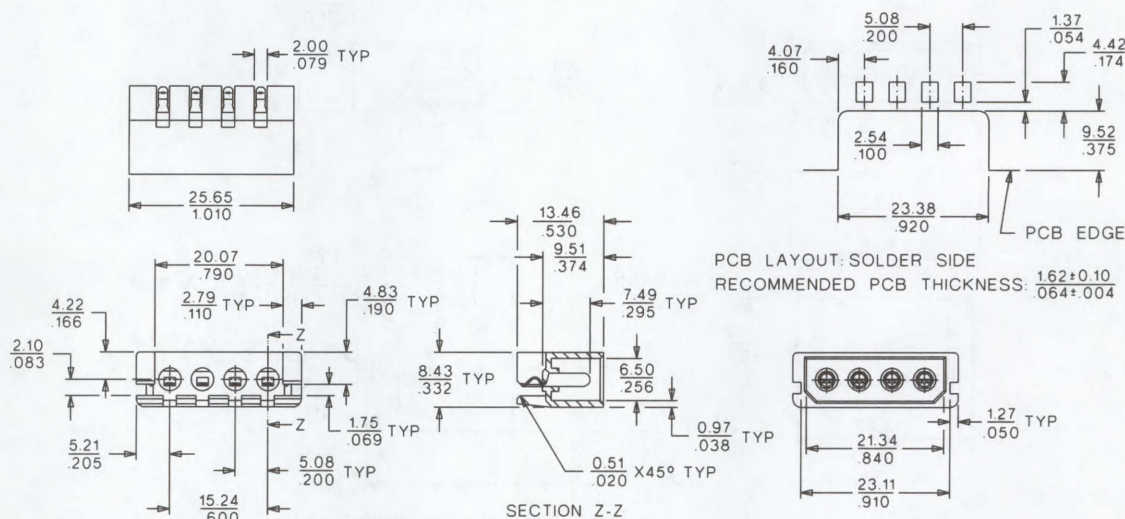
**Right Angle
 Standard Profile, SMT**



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.
15-24-4055

FEATURES AND SPECIFICATIONS

Features and Benefits

- Pre-assembled with metal strap for secure PCB retention

Reference Information

UL File No.: E29179

CSA File No.: LR19980

Mates With: 70156

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 5.0A

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 4 lb min.

Mating Force: 4 lb max.

Unmating Force: 1.5 lb min.

Physical

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

Contact: Phosphor Bronze

Plating: Tin

Band: Brass, pre-Tinned

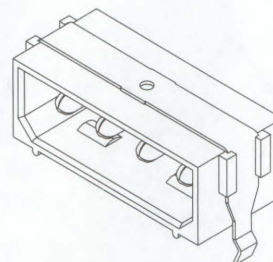
Operating Temperature: -40 to +80°C



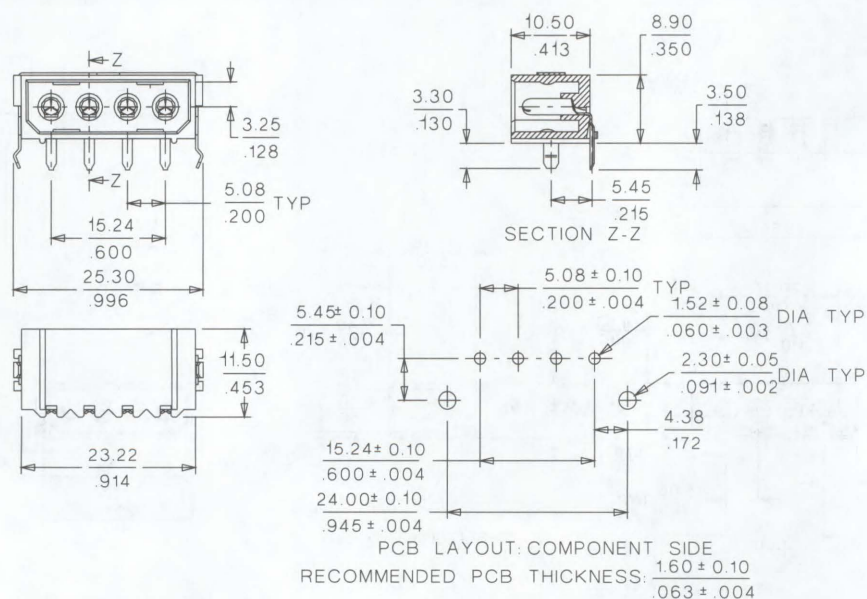
5.08mm (.200") Pitch Disk Drive Power Connection System Header

53109

Right Angle with Strap Standard Polarization



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Engineering No.	Order No.	PC Tail Length
53109-0410 Standard Polarization	53109-0410	3.50 (.138)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Pre-assembled with metal strap for secure PCB retention

Reference Information

UL File No.: E29179
CSA File No.: LR19980
Mates With: 70156
Designed In: Millimeters

Electrical

Voltage: 250V
Current: 5.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 4 lb min.
Mating Force: 4 lb max.
Unmating Force: 1.5 lb min.

Physical

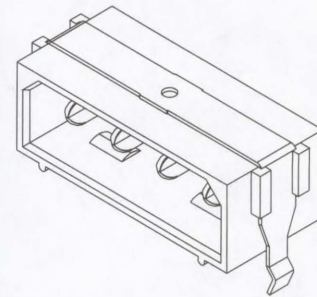
Housing: 6/6 nylon, UL 94V-2
Contact: Phosphor Bronze
Plating: Tin
Band: Brass, pre-Tinned
Operating Temperature: -40 to +80°C



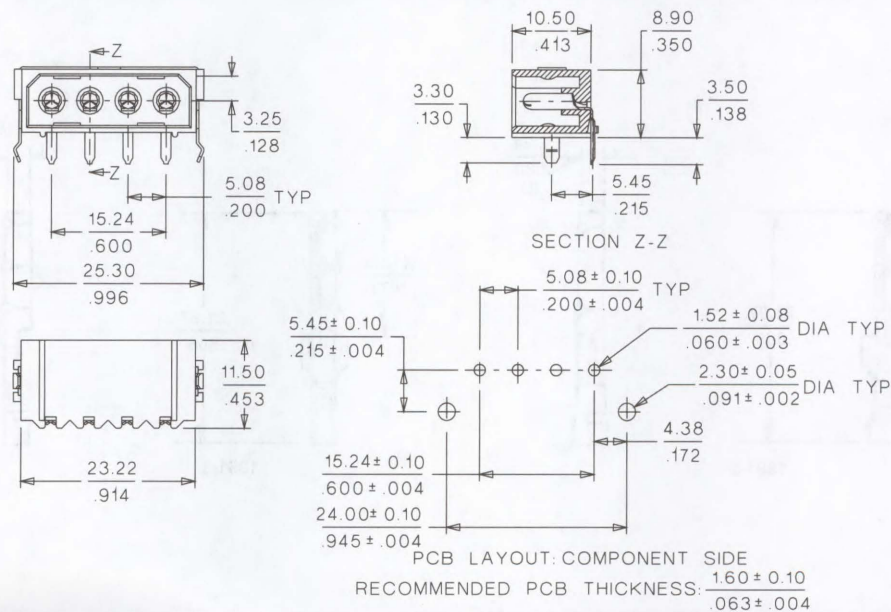
5.08mm (.200") Pitch Disk Drive Power Connection System Header

53113

**Right Angle with Strap
Reverse Polarization**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Engineering No.	Order No.	PC Tail Length
53113-0410 Reverse Polarization	53113-0410	3.50 (.138)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Single-point contact connection to PC board
- Ideal for test set-ups or side connections to PC boards
- No housing required

Molex 1881 Claspcon crimp-type terminals are designed for a single contact connection to a .093" dia. pin (16-06-0005) that has been inserted into a PC board. This type of interconnection is especially useful for test set-ups or side connections that must be made on the PC board. Two sizes are available, depending on specified wire size, both in Tin-plated Brass. Order mating .093" PC pin below.

Reference Information

Packaging: Bag or reel
UL File No.: E29179
CSA File No.: LR19980A
Mates With: .093" round pins
Designed In: Inches

Electrical

Current: 6.0A

Physical

Contact: Brass
Plating: Tin

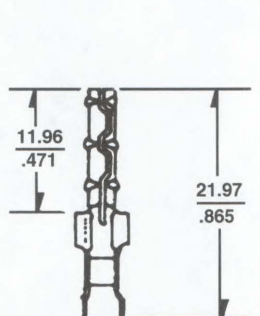
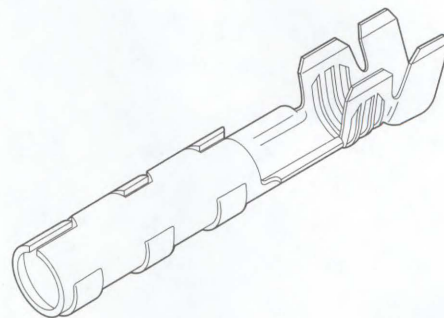


Claspcon™

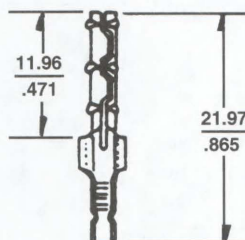
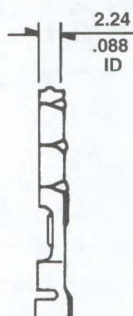
Wire-to-Board
Crimp Terminal Sockets

1881

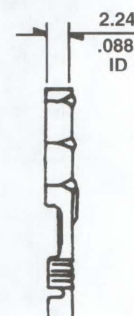
For Round Pins



1881-2



1881-3



ORDERING INFORMATION AND DIMENSIONS

Crimp Wire Size AWG	Insulation Diameter	Engineering No.	1881 Order No.		.093" PC Pin Ordering Information	
			Reel Form	Bag Form	Staking Length	Order No.
16-24	3.50 (.138) max.	1881-2	02-08-1101	02-08-1102	2.78 (.109)	16-06-0005
24-30	0.76-1.52 (.030-.060)	1881-3	02-08-1103	02-08-1104		

Recommended wire range assumes stranded wire

See the Application Tooling section of this catalog for presses and automatic crimping equipment, Molex Mini-Mac and TM-42

FEATURES AND SPECIFICATIONS

Features and Benefits

- Single-point contact connection to PC board
- Ideal for test set-ups or side connections to PC boards
- No housing required

Claspcan crimp-type terminals connect to a single circuit 1.14mm (.045") wire pin. The pin may be positioned anywhere on a PC board, thus eliminating the need to run a circuit to the PC board edge. The terminal may be specified in either reel or bag form for automatic or single crimping.

Reference Information

Packaging: Bag or reel
UL File No.: E29179
Mates With: .045" pins
Designed In: Inches

Electrical

Current: 6.0A

Physical

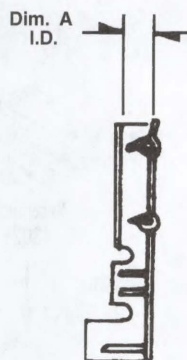
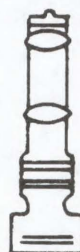
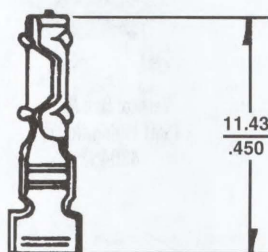
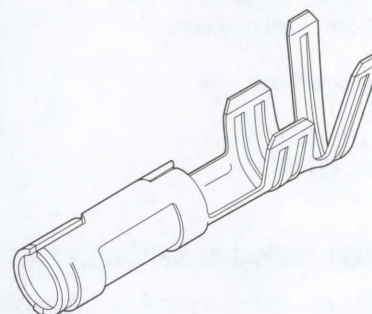
Contact: Brass or Phosphor Bronze
Plating: Tin



Claspcan™ Wire-to-Board Crimp Terminal Sockets

2107

For Round or Square Pins



ORDERING INFORMATION AND DIMENSIONS

.045" Pin Style	Crimp Wire Size AWG	Insulation Diameter	Order No.				Dimension A
			Brass		Phosphor Bronze		
			Reel Form	Bag Form	Reel Form	Bag Form	
Round	18-24	1.52-3.05 (.060-.120)	02-05-1104	02-05-1105	02-05-1204	02-05-1205	1.12 (.044)
	24-30	0.76-1.52 (.030-.060)	02-05-1116	02-05-1117	02-05-1216	02-05-1217	1.12 (.044)
Square	18-24	1.52-3.05 (.060-.120)	02-05-1106	02-05-1107	02-05-1207	02-05-1208	1.37 (.054)
	24-30	0.76-1.52 (.030-.060)	02-05-1115	02-05-1119			1.37 (.054)

Recommended wire range assumes stranded wire

See the Application Tooling section of this catalog for presses and automatic crimping equipment, Molex Mini-Mac and TM-42

FEATURES AND SPECIFICATIONS

Features and Benefits

- Fully isolated contacts
- Positive locks
- Polyester housings
- SMT/SMC headers
- SMT lead coplanarity of .006" max.
- Up to 5.0A per circuit
- 250V rating
- Dual row and inline configurations
- Tape and reel packaging for SMT lead styles
- Meets EIA standard 481 requirements

Reference Information

UL File No.: E29179
CSA File No.: LR19980A
TUV License No.: R95107

Materials

Terminals: Phosphor Bronze
Plating: Tin or Gold
Housings: Polyester 94V-0
Headers: High Temperature LCP

Mechanical

Temperature Rise: 30°C max. (carrying rated current load)
Mating Force: 1.0 lb max.

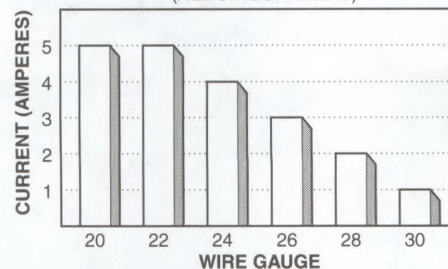
Electrical

Voltage: 250V AC (RMS) or DC
Current: Up to 5.0A (see graph below)
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 1000 MΩ min.



3.00mm (.118") Pitch Micro-Fit 3.0™ Signal Connector System Introduction

MICRO-FIT RATING CHART
(ALL CIRCUIT SIZES)



ORDERING INFORMATION AND DIMENSIONS

The Micro-Fit 3.0 is a unique interconnect system designed to meet the need for a signal connector and incorporates many of the features previously found only on larger power connectors.

The Micro-Fit 3.0 is on a 3.00mm grid spacing and is a fitting choice when you need compact signal connectors capable of carrying 5 amperes of current. The housing features fully isolated contacts on each side of the connection offering electrical and mechanical protection to the terminals. The phosphor bronze "box" type female terminal accepts 20-30

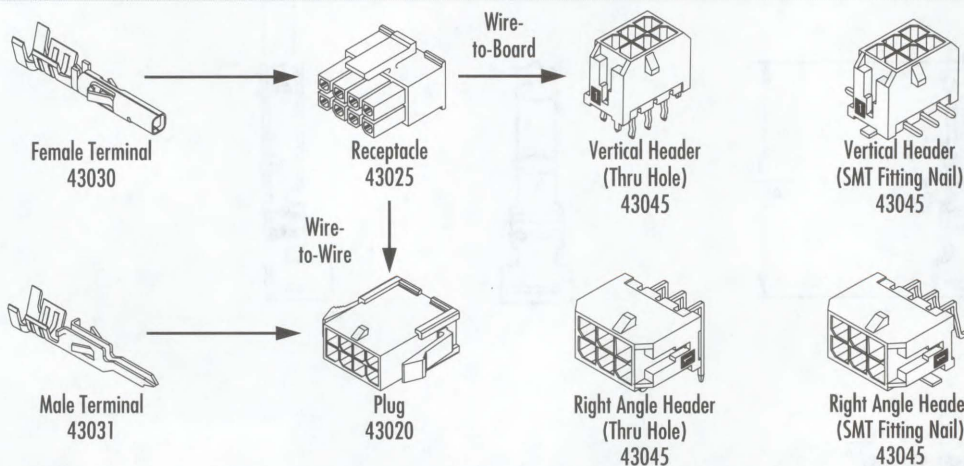
AWG wire and provides four points of contact for high reliability.

A positive latch on the 94V-0 polyester housings prevent accidental disconnection caused by rough handling. These versatile connectors provide increased design flexibility and lower applied costs through surface mount technology that permits using both sides of the PCB. For stability and reliable performance, true surface mount vertical and right angle headers are molded from a high temperature 94V-0 LCP,

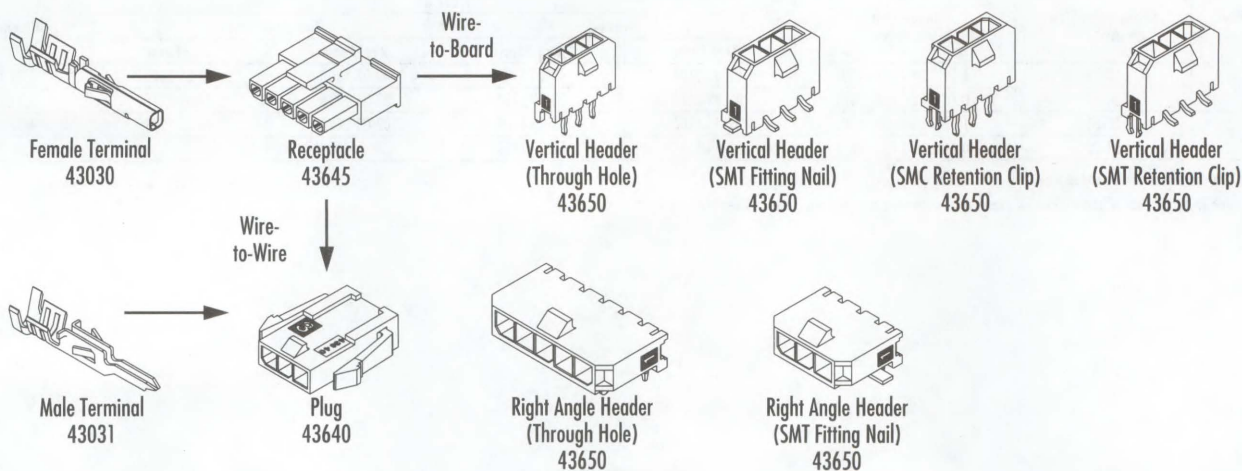
provide SMT coplanarity of .006" maximum and include optional retention features such as solderable clips, nails and pegs. True surface mount versions are packaged in tape and reel for robotic placement to the PCB.

Circuit sizes are available from 2 to 24 for wire-to-wire and wire-to-board applications. The Micro-Fit 3.0 interconnect system is now available in dual row and inline configurations; making the Micro-Fit "The Perfect Fit" for all your interconnect needs.

Dual Row



Single Row



FEATURES AND SPECIFICATIONS

Features and Benefits

- 4 points of contact for optimum reliability
- Box-type spring contact for high normal force
- Locking tang secures terminal in housing

Reference Information

Product Specification: PS-43045/PS-43650

Packaging: Bag or reel

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R95107

Use With: 43025 and 43645 receptacles

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 5.0A max.

Contact Resistance: 10mΩ max.

Mechanical

Contact Insertion Force: 1.5kgf max. (3.30 lb)

Contact Retention to Housing: 2.5kgf min. (5.50 lb)

Crimping Pull-Out Force:

Wire Gauge (AWG)	Kgf min. (lb)
20	6.0 (13.2)
22	4.5 (9.9)
24	3.6 (7.9)
26	2.7 (5.9)
28	1.8 (3.9)
30	1.4 (3.0)

Mating Force: 1.0kgf max. (2.2 lb) per contact

Normal Force: 375gf max. (0.32 lb)

Physical

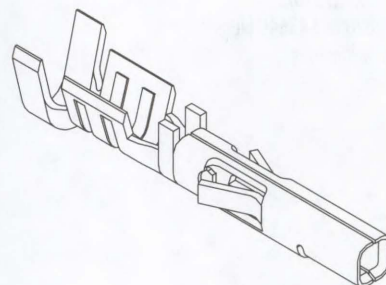
Contact: Copper/Tin alloy

Plating: Tin or Gold



3.00mm (.118") Pitch Micro-Fit 3.0™ Terminal

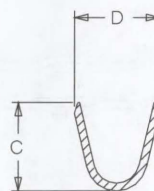
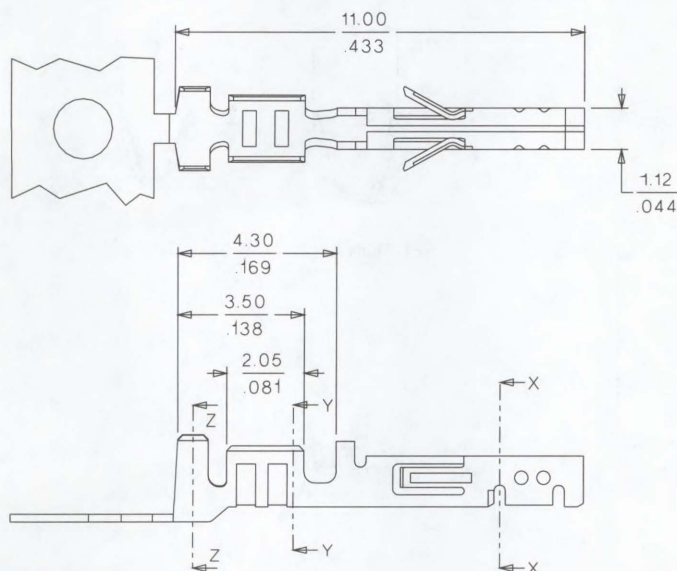
43030 Female



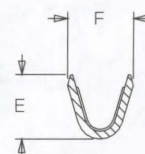
Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



SECTION Z-Z



SECTION Y-Y



SECTION X-X

ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG	Plating	Order No.		Dimension			
		Reel	Bag	C	D	E	F
20-24	Tin	• 43030-0001	• 43030-0007	2.29 (.090)	2.54 (.100)	1.91 (.075)	2.08 (.082)
26-30	Tin	• 43030-0004	• 43030-0010	1.91 (.075)	2.10 (.083)	1.47 (.058)	1.65 (.065)
20-24	15μ" Gold	• 43030-0002	• 43030-0008	2.29 (.090)	2.54 (.100)	1.91 (.075)	2.08 (.082)
26-30	15μ" Gold	• 43030-0005	• 43030-0011	1.91 (.075)	2.10 (.083)	1.47 (.058)	1.65 (.065)
20-24	30μ" Gold	• 43030-0003	• 43030-0009	2.29 (.090)	2.54 (.100)	1.91 (.075)	2.08 (.082)
26-30	30μ" Gold	• 43030-0006	• 43030-0012	1.91 (.075)	2.10 (.083)	1.47 (.058)	1.65 (.065)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Box-type spring contact for high normal force
- Locking tang secures terminal in housing

Reference Information

Product Specification: PS-43045/PS-43650

Packaging: Bag or reel

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R95107

Use With: 43020 and 43640 plugs

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 5.0A max.

Contact Resistance: 10mΩ max.

Mechanical

Contact Insertion Force: 1.5kgf max. (3.30 lb)

Contact Retention to Housing: 2.5kgf min. (5.50 lb)

Crimping Pull-Out Force:

Wire Gauge	Kgf min. (lb)
20	6.0 (13.2)
22	4.5 (9.9)
24	3.6 (7.9)
26	2.7 (5.9)
28	1.8 (3.9)
30	1.4 (3.0)

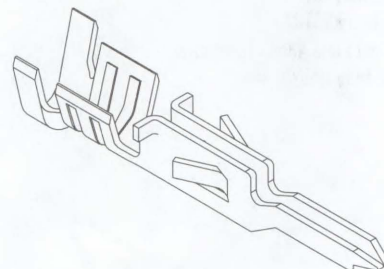
Physical

Contact: Phosphor Bronze

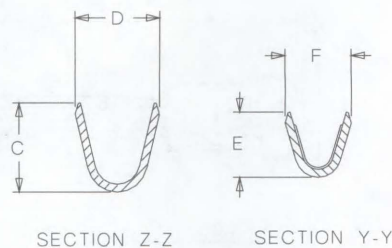
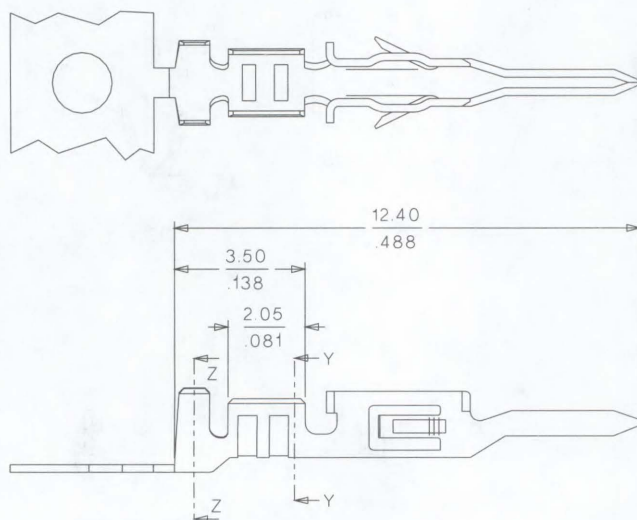
Plating: Tin or Gold



3.00mm (.118") Pitch
Micro-Fit 3.0™
Terminal

43031**Male**

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG	Plating	Order No.		Dimension			
		Reel	Bag	C	D	E	F
20-24	Tin	• 43031-0001	• 43031-0007	2.29 (.090)	2.54 (.100)	1.91 (.075)	2.08 (.082)
26-30	Tin	• 43031-0004	• 43031-0010	1.91 (.075)	2.10 (.083)	1.47 (.058)	1.65 (.065)
20-24	15μ" Gold	• 43031-0002	• 43031-0008	2.29 (.090)	2.54 (.100)	1.91 (.075)	2.08 (.082)
26-30	15μ" Gold	• 43031-0005	• 43031-0011	1.91 (.075)	2.10 (.083)	1.47 (.058)	1.65 (.065)
20-24	30μ" Gold	• 43031-0003	• 43031-0009	2.29 (.090)	2.54 (.100)	1.91 (.075)	2.08 (.082)
26-30	30μ" Gold	• 43031-0006	• 43031-0012	1.91 (.075)	2.10 (.083)	1.47 (.058)	1.65 (.065)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Positive latching to mating headers or plugs
- Fully isolated contacts
- Fully polarized to mating headers and plugs
- Integral pull tabs for ease in unmating

Physical

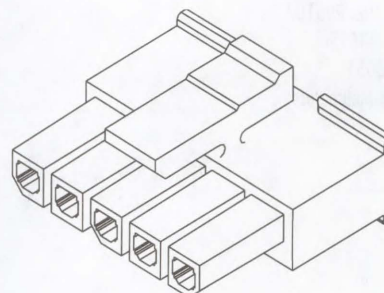
Housing: Polyester, UL 94V-0



3.00mm (.118") Pitch Micro-Fit 3.0™ Wire-to-Wire Receptacle

43645

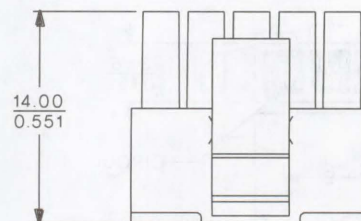
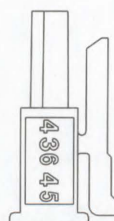
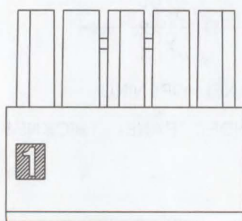
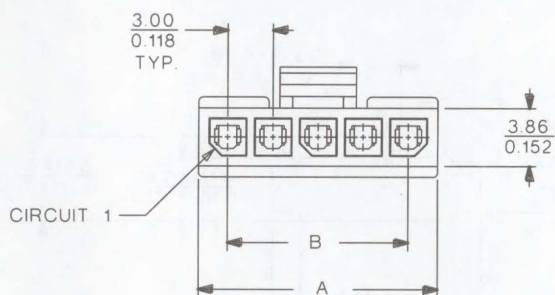
Single Row



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	43645-0200	6.85 (.270)	3.00 (.118)
3	43645-0300	9.85 (.388)	6.00 (.236)
4	43645-0400	12.85 (.506)	9.00 (.354)
5	43645-0500	15.85 (.624)	12.00 (.472)
6	43645-0600	18.85 (.742)	15.00 (.591)
7	43645-0700	21.85 (.860)	18.00 (.709)
8	43645-0800	24.85 (.978)	21.00 (.827)
9	43645-0900	27.85 (1.096)	24.00 (.945)
10	43645-1000	30.85 (1.215)	27.00 (1.063)
11	43645-1100	33.85 (1.333)	30.00 (1.181)
12	43645-1200	36.85 (1.457)	33.00 (1.299)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Fully isolated contacts
- Fully polarized to mating receptacle
- Integral pull tabs for ease in unmating
- Optional panel mount ears

Reference Information

Product Specification: PS-43650

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R95107

Mates With: 43645

Use With: 43031

Designed In: Millimeters

Physical

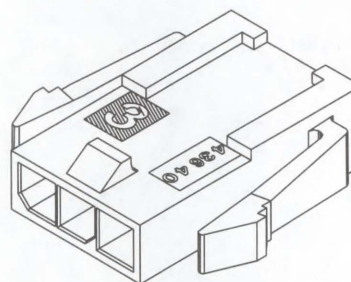
Housing: Polyester, UL 94V-0



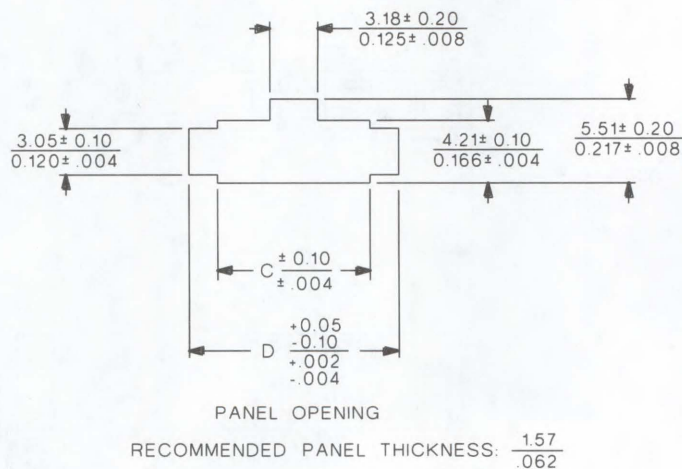
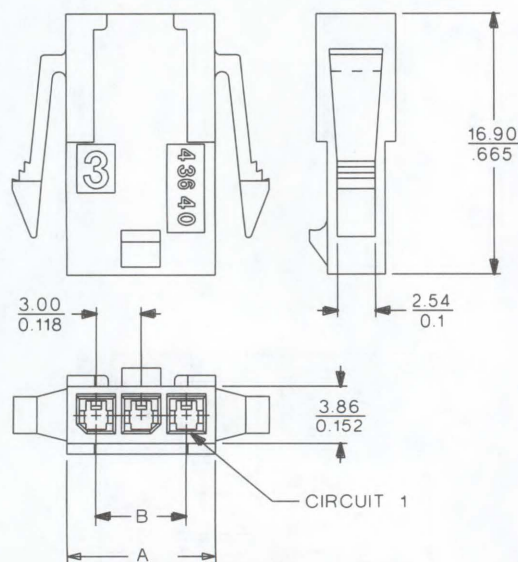
3.00mm (.118") Pitch Micro-Fit 3.0™ Wire-to-Wire Plug

43640

Single Row, with or without Panel Mount Ears



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension			
	Panel Mount	Free Hanging	A	B	C	D
2	43640-0200	43640-0201	6.85 (.270)	3.00 (.118)	7.21 (.284)	10.90 (.429)
3	43640-0300	43640-0301	9.85 (.388)	6.00 (.236)	10.21 (.402)	13.89 (.547)
4	43640-0400	43640-0401	12.85 (.506)	9.00 (.354)	13.21 (.520)	16.89 (.665)
5	43640-0500	43640-0501	15.85 (.624)	12.00 (.472)	16.21 (.638)	19.89 (.783)
6	43640-0600	43640-0601	18.85 (.742)	15.00 (.591)	19.21 (.756)	22.89 (.901)
7	43640-0700	43640-0701	21.85 (.860)	18.00 (.709)	22.20 (.874)	25.88 (1.019)
8	43640-0800	43640-0801	24.85 (.978)	21.00 (.827)	25.20 (.992)	28.88 (1.137)
9	43640-0900	43640-0901	27.85 (1.096)	24.00 (.945)	28.20 (1.110)	31.88 (1.255)
10	43640-1000	43640-1001	30.85 (1.215)	27.00 (1.063)	31.22 (1.229)	34.87 (1.373)
11	43640-1100	43640-1101	33.85 (1.333)	30.00 (1.181)	34.22 (1.347)	37.87 (1.491)
12	43640-1200	43640-1201	36.85 (1.451)	33.00 (1.299)	37.22 (1.465)	40.87 (1.609)

FEATURES AND SPECIFICATIONS

Features and Benefits

- "Offset Terminal Retention" for optimum retention to PC board during wave soldering
- Fully polarized to mating receptacle
- Peg feature provides polarization to PCB
- Surface Mount Compatible

Reference Information

Product Specification: PS-43650
 Packaging: Tray
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R95107
 Mates With: 43645
 Designed In: Millimeters

Electrical

Voltage: 250V
 Current: 5.0A max.
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC
 Insulation Resistance: 1000 MΩ min.

Mechanical

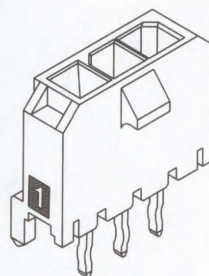
Insertion Force to PCB: 7.5kgf max. (16.5 lb)

Physical

Housing: High temperature LCP, UL 94V-0
 Contact: Brass
 Plating: Tin or Gold

molex® 3.00mm (.118") Pitch Micro-Fit 3.0™ Wire-to-Board Header

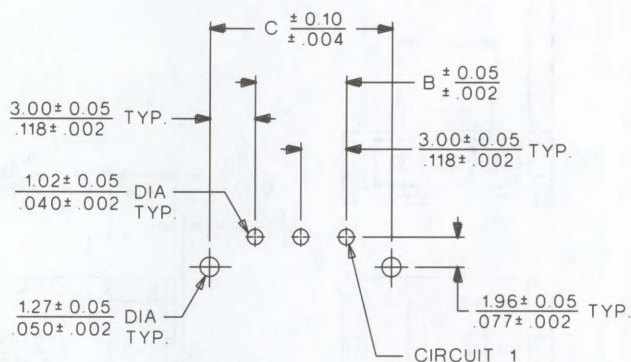
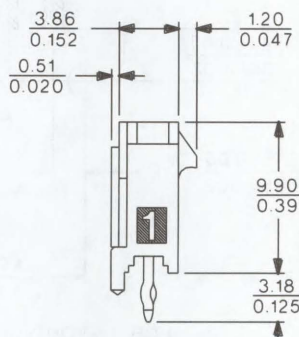
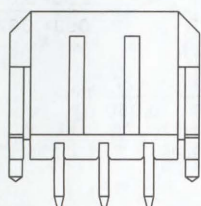
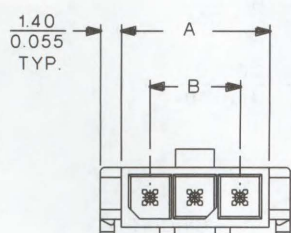
43650 Single Row Vertical



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED PCB THICKNESS: $\frac{1.57}{.062}$

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.						Dimension		
	Standard "OTR" Version			Straight Tail Version			A	B	C
	Tin	15μ" Gold	30μ" Gold	Tin	15μ" Gold	30μ" Gold			
2	43650-0215	43650-0216	43650-0217	43650-0227	43650-0228	43650-0229	6.85 (.270)	3.00 (.118)	9.00 (.354)
3	43650-0315	43650-0316	43650-0317	43650-0327	43650-0328	43650-0329	9.85 (.388)	6.00 (.236)	12.00 (.472)
4	43650-0415	43650-0416	43650-0417	43650-0427	43650-0428	43650-0429	12.85 (.506)	9.00 (.354)	15.00 (.591)
5	43650-0515	43650-0516	43650-0517	43650-0527	43650-0528	43650-0529	15.85 (.624)	12.00 (.472)	18.00 (.708)
6	43650-0615	43650-0616	43650-0617	43650-0627	43650-0628	43650-0629	18.85 (.742)	15.00 (.591)	21.00 (.827)
7	43650-0715	43650-0716	43650-0717	43650-0727	43650-0728	43650-0729	21.85 (.860)	18.00 (.709)	24.00 (.945)
8	43650-0815	43650-0816	43650-0817	43650-0827	43650-0828	43650-0829	24.85 (.978)	21.00 (.827)	27.00 (1.063)
9	43650-0915	43650-0916	43650-0917	43650-0927	43650-0928	43650-0929	27.85 (1.096)	24.00 (.945)	30.00 (1.181)
10	43650-1015	43650-1016	43650-1017	43650-1027	43650-1028	43650-1029	30.85 (1.215)	27.00 (1.063)	33.00 (1.299)
11	43650-1115	43650-1116	43650-1117	43650-1127	43650-1128	43650-1129	33.85 (1.333)	30.00 (1.181)	36.00 (1.417)
12	43650-1215	43650-1216	43650-1217	43650-1227	43650-1228	43650-1229	36.85 (1.451)	33.00 (1.299)	39.00 (1.535)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Solderable retention clip provides optimum retention to PCB
- Fully polarized to mating receptacle
- Tape and reel packaging eliminates handling and provides for higher insertion speeds compared to tray packing or hand assembly

Reference Information

Product Specification: PS-43650
 Packaging: Tape and reel
 UL File No.: E29179
 CSA File No.: LR19980A
 Mates With: 43645
 Designed In: Millimeters

Electrical

Voltage: 250V
 Current: 5.0A max.
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC
 Insulation Resistance: 1000 MΩ min.

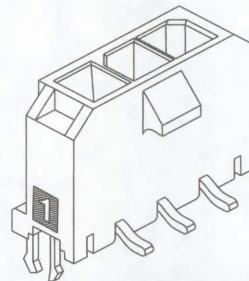
Physical

Housing: High temperature LCP, UL 94V-0
 Contact: Brass
 Plating: Tin or Gold

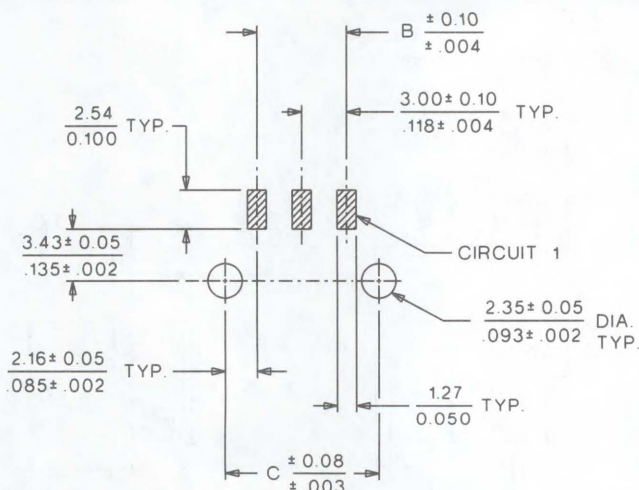
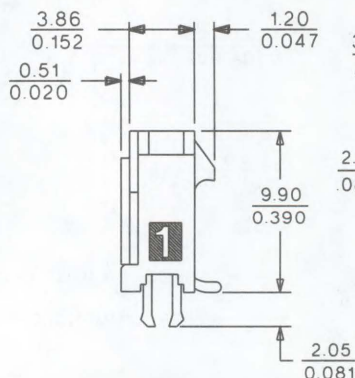
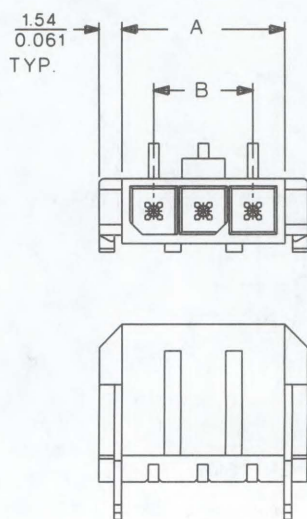
molex® 3.00mm (.118") Pitch
Micro-Fit 3.0™
Wire-to-Board
Header

43650

Single Row
Vertical, SMT
With Solderable Retention Clip



CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE
 RECOMMENDED PCB THICKNESS: 1.57 (.062)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension		
	Tin	15μ" Gold	30μ" Gold	A	B	C
2	43650-0221	43650-0222	43650-0223	6.85 (.270)	3.00 (.118)	7.30 (.287)
3	43650-0321	43650-0322	43650-0323	9.85 (.388)	6.00 (.236)	10.30 (.405)
4	43650-0421	43650-0422	43650-0423	12.85 (.506)	9.00 (.354)	13.30 (.524)
5	43650-0521	43650-0522	43650-0523	15.85 (.624)	12.00 (.472)	16.30 (.642)
6	43650-0621	43650-0622	43650-0623	18.85 (.742)	15.00 (.591)	19.30 (.760)
7	43650-0721	43650-0722	43650-0723	21.85 (.860)	18.00 (.709)	22.30 (.878)
8	43650-0821	43650-0822	43650-0823	24.85 (.978)	21.00 (.827)	25.30 (.996)
9	43650-0921	43650-0922	43650-0923	27.85 (1.096)	24.00 (.945)	28.30 (1.114)
10	43650-1021	43650-1022	43650-1023	30.85 (1.215)	27.00 (1.063)	31.30 (1.232)
11	43650-1121	43650-1122	43650-1123	33.85 (1.333)	30.00 (1.181)	34.30 (1.350)
12	43650-1221	43650-1222	43650-1223	36.85 (1.451)	33.00 (1.299)	37.30 (1.469)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Solderable fitting nail provides retention to PCB
- Fully polarized to mating receptacle
- Tape and reel packaging eliminates handling and provides for higher insertion speeds compared to tray packing or hand assembly

Reference Information

Product Specification: PS-43650
 Packaging: Tape and reel
 UL File No.: E29179
 CSA File No.: LR19980A
 Mates With: 43645
 Designed In: Millimeters

Electrical

Voltage: 250V
 Current: 5.0A max.
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC
 Insulation Resistance: 1000 MΩ min.

Physical

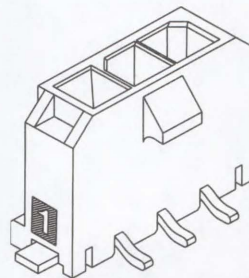
Housing: High temperature LCP, UL 94V-0
 Contact: Brass
 Plating: Tin or Gold



3.00mm (.118") Pitch Micro-Fit 3.0™ Wire-to-Board Header

43650

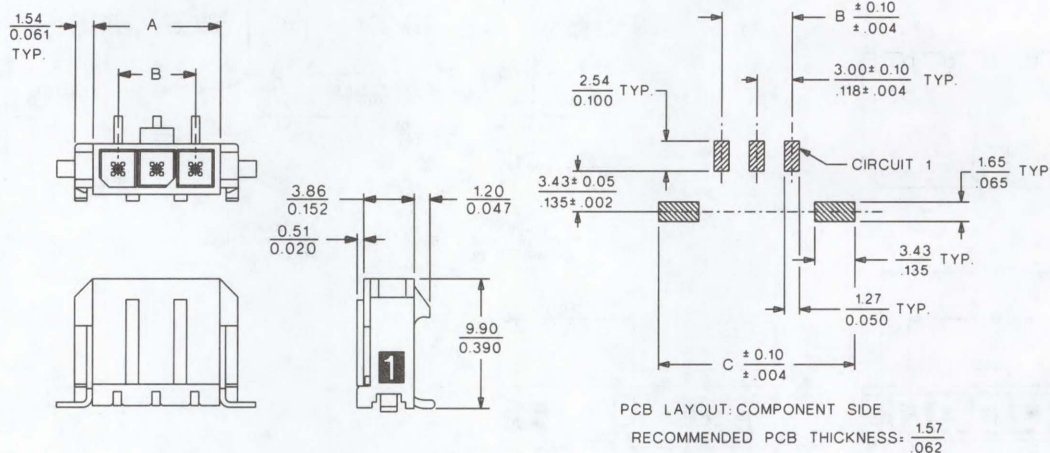
**Single Row
 Vertical, SMT
 With Solderable Fitting Nail**



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension		
	Tin	15μ" Gold	30μ" Gold	A	B	C
2	43650-0224	43650-0225	43650-0226	6.85 (.270)	3.00 (.118)	14.20 (.559)
3	43650-0324	43650-0325	43650-0326	9.85 (.388)	6.00 (.236)	17.20 (.677)
4	43650-0424	43650-0425	43650-0426	12.85 (.506)	9.00 (.354)	20.20 (.795)
5	43650-0524	43650-0525	43650-0526	15.85 (.624)	12.00 (.472)	23.20 (.913)
6	43650-0624	43650-0625	43650-0626	18.85 (.742)	15.00 (.591)	26.20 (1.031)
7	43650-0724	43650-0725	43650-0726	21.85 (.860)	18.00 (.709)	29.20 (1.150)
8	43650-0824	43650-0825	43650-0826	24.85 (.978)	21.00 (.827)	32.20 (1.268)
9	43650-0924	43650-0925	43650-0926	27.85 (1.096)	24.00 (.945)	35.20 (1.386)
10	43650-1024	43650-1025	43650-1026	30.85 (1.215)	27.00 (1.063)	38.20 (1.504)
11	43650-1124	43650-1125	43650-1126	33.85 (1.333)	30.00 (1.181)	41.20 (1.622)
12	43650-1224	43650-1225	43650-1226	36.85 (1.451)	33.00 (1.299)	44.20 (1.740)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Snap-in peg locks header to PCB for optimum retention
- Fully polarized to mating receptacle
- Surface Mount Compatible

Reference Information

Product Specification: PS-43650

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R95107

Mates With: 43645

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 5.0A max.

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 1000 MΩ min.

Physical

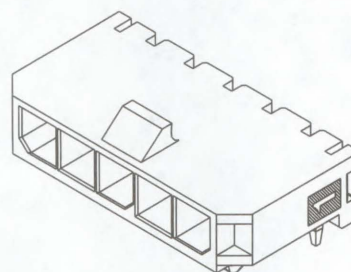
Housing: High temperature LCP, UL 94V-0

Contact: Brass

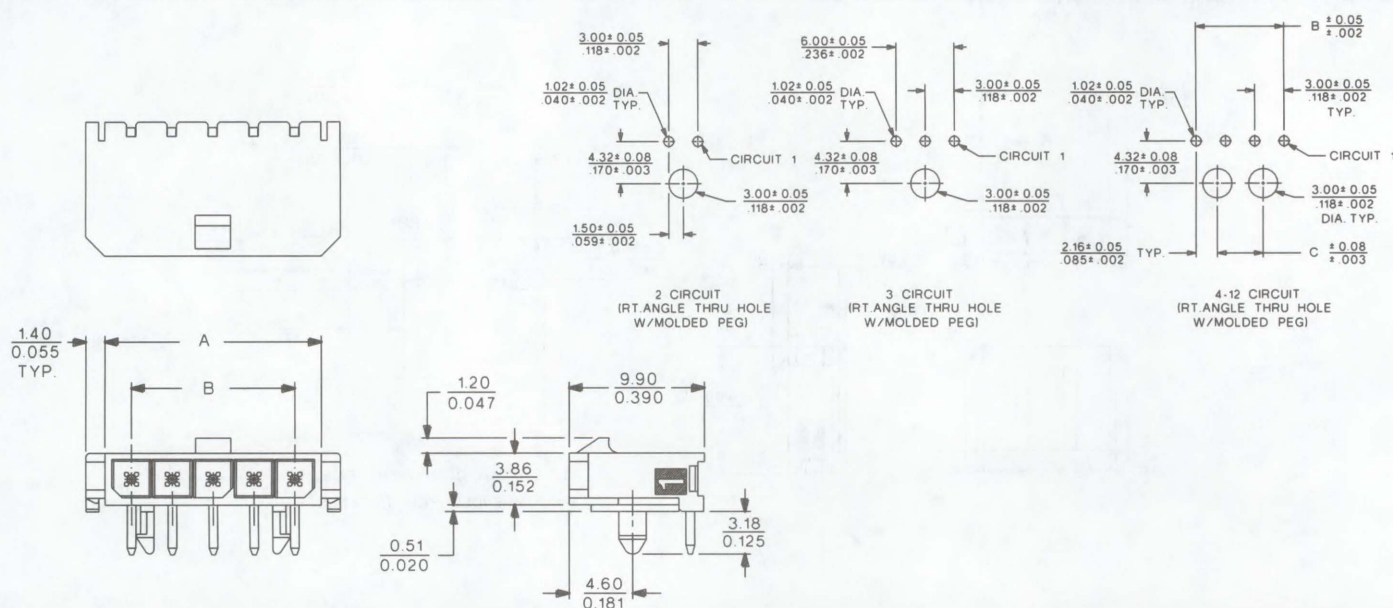
Plating: Tin or Gold

molex® 3.00mm (.118") Pitch Micro-Fit 3.0™ Wire-to-Board Header

43650

Single Row
Right Angle

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension		
	Tin	15μ" Gold	30μ" Gold	A	B	C
2	43650-0200	43650-0201	43650-0202	6.85 (.270)	3.00 (.118)	
3	43650-0300	43650-0301	43650-0302	9.85 (.388)	6.00 (.236)	
4	43650-0400	43650-0401	43650-0402	12.85 (.506)	9.00 (.354)	4.70 (.185)
5	43650-0500	43650-0501	43650-0502	15.85 (.624)	12.00 (.472)	7.70 (.303)
6	43650-0600	43650-0601	43650-0602	18.85 (.742)	15.00 (.591)	10.70 (.421)
7	43650-0700	43650-0701	43650-0702	21.85 (.860)	18.00 (.709)	13.70 (.539)
8	43650-0800	43650-0801	43650-0802	24.85 (.978)	21.00 (.827)	16.70 (.657)
9	43650-0900	43650-0901	43650-0902	27.85 (1.096)	24.00 (.945)	19.70 (.775)
10	43650-1000	43650-1001	43650-1002	30.85 (1.215)	27.00 (1.063)	22.70 (.893)
11	43650-1100	43650-1101	43650-1102	33.85 (1.333)	30.00 (1.181)	25.70 (1.011)
12	43650-1200	43650-1201	43650-1202	36.85 (1.451)	33.00 (1.299)	28.70 (1.129)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Solderable retention clip provides optimum retention to PCB
- Fully polarized to mating receptacle
- Tape and reel packaging eliminates handling and provides higher insertion speed compared to tray packing or hand assembly

Reference Information

Product Specification: PS-43650
 Packaging: Tape and reel
 UL File No.: E29179
 CSA File No.: LR19980A
 TUV License No.: R95107
 Mates With: 43645
 Designed In: Millimeters

Electrical

Voltage: 250V
 Current: 5.0A max.
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC
 Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 7.5kgf max. (16.5 lb)

Physical

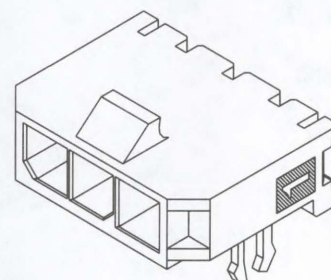
Housing: High temperature LCP, UL 94V-0
 Contact: Brass
 Plating: Tin or Gold



3.00mm (.118") Pitch Micro-Fit 3.0™ Wire-to-Board Header

43650

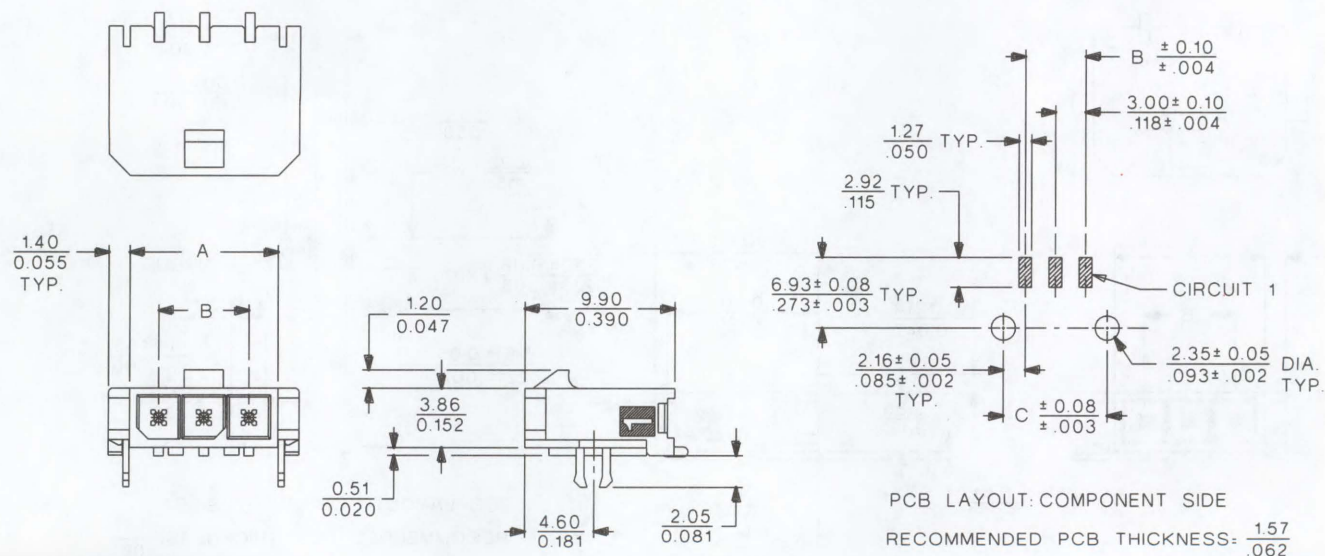
**Single Row, Right Angle, SMT
With Solderable Retention Clip**



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension		
	Tin	15μ" Gold	30μ" Gold	A	B	C
2	43650-0209	43650-0210	43650-0211	6.85 (.270)	3.00 (.118)	7.30 (.287)
3	43650-0309	43650-0310	43650-0311	9.85 (.388)	6.00 (.236)	10.30 (.405)
4	43650-0409	43650-0410	43650-0411	12.85 (.506)	9.00 (.354)	13.30 (.524)
5	43650-0509	43650-0510	43650-0511	15.85 (.624)	12.00 (.472)	16.30 (.642)
6	43650-0609	43650-0610	43650-0611	18.85 (.742)	15.00 (.591)	19.30 (.760)
7	43650-0709	43650-0710	43650-0711	21.85 (.860)	18.00 (.709)	22.30 (.878)
8	43650-0809	43650-0810	43650-0811	24.85 (.978)	21.00 (.827)	25.30 (.996)
9	43650-0909	43650-0910	43650-0911	27.85 (1.096)	24.00 (.945)	28.30 (1.114)
10	43650-1009	43650-1010	43650-1011	30.85 (1.215)	27.00 (1.063)	31.30 (1.232)
11	43650-1109	43650-1110	43650-1111	33.85 (1.333)	30.00 (1.181)	34.30 (1.350)
12	43650-1209	43650-1210	43650-1211	36.85 (1.451)	33.00 (1.299)	37.30 (1.469)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Solderable fitting nail provides retention to PCB
- Fully polarized to mating receptacle
- Tape and reel packaging eliminates handling and provides higher insertion speeds compared to tray packing or hand assembly

Reference Information

Product Specification: PS-43650
 Packaging: Tape and reel for robotic placement
 UL File No.: E29179
 CSA File No.: LR19980A
 TUV License No.: R95107
 Mates With: 43645
 Designed In: Millimeters

Electrical

Voltage: 250V
 Current: 5.0A max.
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC
 Insulation Resistance: 1000 MΩ min.

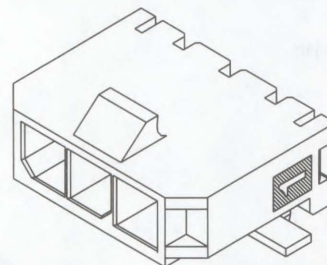
Physical

Housing: High temperature LCP, UL 94V-0
 Contact: Brass
 Plating: Tin or Gold

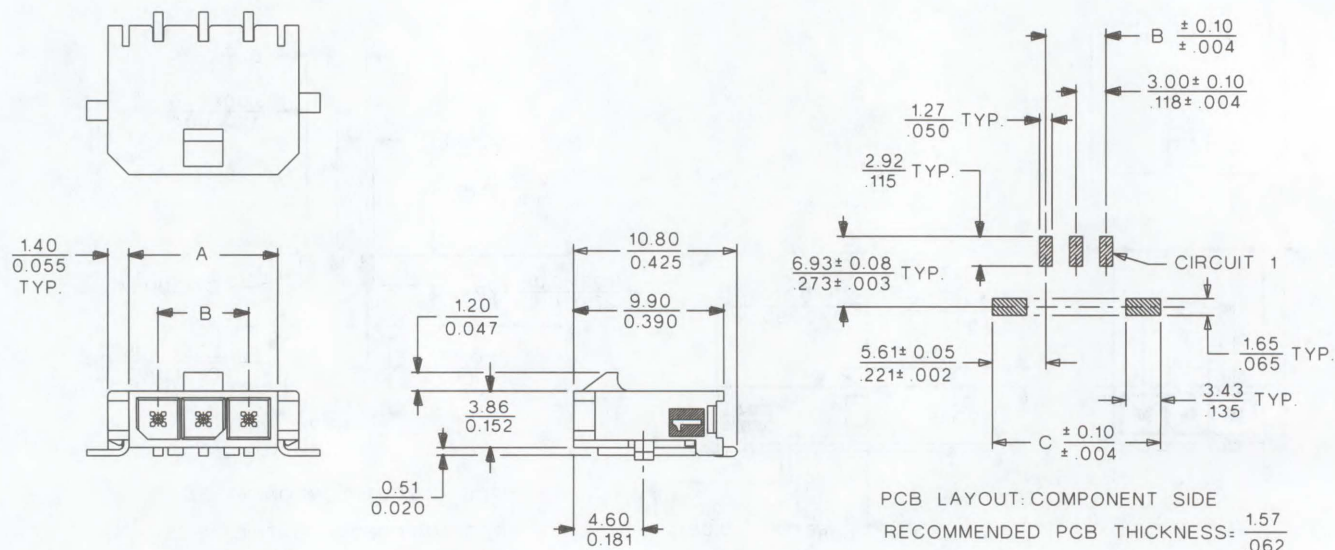
molex® 3.00mm (.118") Pitch Micro-Fit 3.0™ Wire-to-Board Header

43650

Single Row
 Right Angle, SMT
 With Solderable Fitting Nail



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension		
	Tin	15μ" Gold	30μ" Gold	A	B	C
2	43650-0212	43650-0213	43650-0214	6.85 (.270)	3.00 (.118)	14.20 (.559)
3	43650-0312	43650-0313	43650-0314	9.85 (.388)	6.00 (.236)	17.20 (.677)
4	43650-0412	43650-0413	43650-0414	12.85 (.506)	9.00 (.354)	20.20 (.795)
5	43650-0512	43650-0513	43650-0514	15.85 (.624)	12.00 (.472)	23.20 (.913)
6	43650-0612	43650-0613	43650-0614	18.85 (.742)	15.00 (.591)	26.20 (1.031)
7	43650-0712	43650-0713	43650-0714	21.85 (.860)	18.00 (.709)	29.20 (1.150)
8	43650-0812	43650-0813	43650-0814	24.85 (.978)	21.00 (.827)	32.20 (1.268)
9	43650-0912	43650-0913	43650-0914	27.85 (1.096)	24.00 (.945)	35.20 (1.386)
10	43650-1012	43650-1013	43650-1014	30.85 (1.215)	27.00 (1.063)	38.20 (1.504)
11	43650-1112	43650-1113	43650-1114	33.85 (1.333)	30.00 (1.181)	41.20 (1.622)
12	43650-1212	43650-1213	43650-1214	36.85 (1.451)	33.00 (1.299)	44.20 (1.740)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Positive latching to mating headers or plugs
- Fully isolated contacts
- Fully polarized to mating headers and plugs
- Integral pull tabs for ease in unmating

Reference Information

Product Specification: PS-43045

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R95107

Mates With: 43020 and 43045

Use With: 43030

Designed In: Millimeters

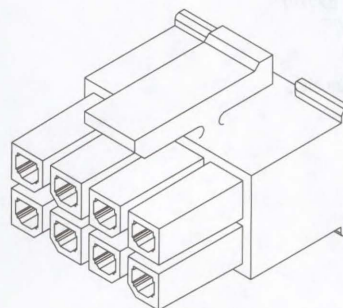
Physical

Housing: Polyester, UL 94V-0

molex® 3.00mm (.118") Pitch Micro-Fit 3.0™ Wire-to-Wire Receptacle

43025

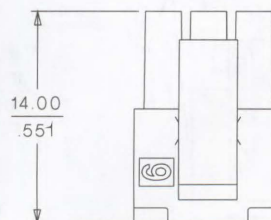
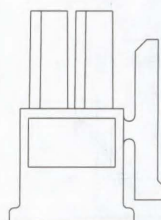
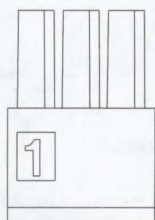
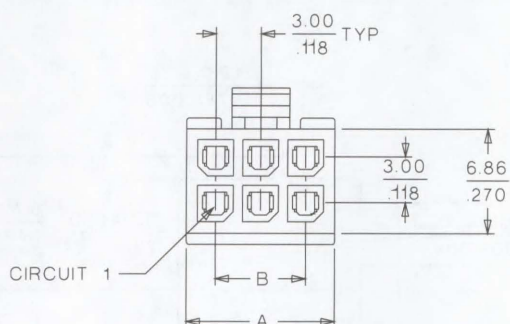
Dual Row



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	• 43025-0200	3.85 (.152)	
4	• 43025-0400	6.85 (.270)	3.00 (.118)
6	• 43025-0600	9.85 (.388)	6.00 (.236)
8	• 43025-0800	12.85 (.506)	9.00 (.354)
10	• 43025-1000	15.85 (.624)	12.00 (.472)
12	• 43025-1200	18.85 (.742)	15.00 (.591)
14	• 43025-1400	21.85 (.860)	18.00 (.709)
16	• 43025-1600	24.85 (.978)	21.00 (.827)
18	• 43025-1800	27.85 (1.096)	24.00 (.945)
20	• 43025-2000	30.85 (1.215)	27.00 (1.063)
22	• 43025-2200	33.85 (1.333)	30.00 (1.181)
24	• 43025-2400	36.85 (1.451)	33.00 (1.299)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Fully isolated contacts
- Fully polarized to mating receptacle
- Integral pull tabs for ease in unmating
- Optional panel mount ears

Reference Information

Product Specification: PS-43045

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R95107

Mates With: 43025

Use With: 43031

Designed In: Millimeters

Physical

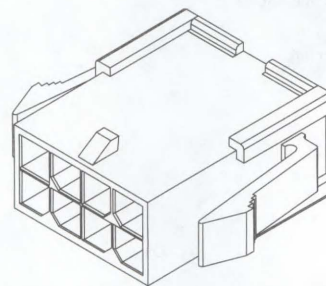
Housing: Polyester, UL 94V-0



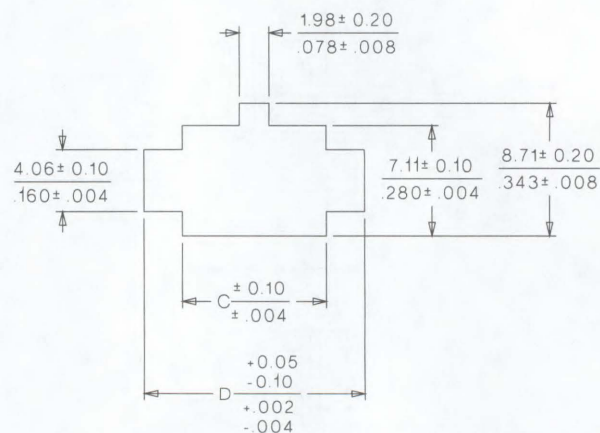
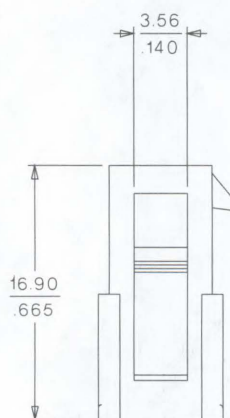
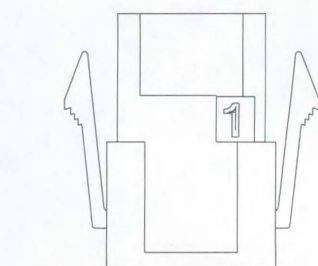
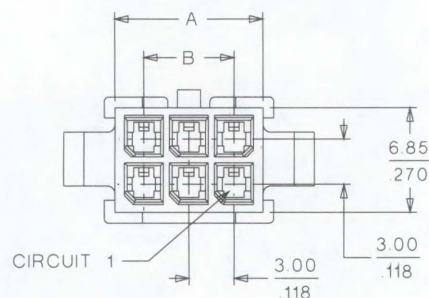
3.00mm (.118") Pitch Micro-Fit 3.0™ Wire-to-Wire Plug

43020

Dual Row, with or without Panel Mount Ears



CATALOG DRAWING (FOR REFERENCE ONLY)



PANEL OPENING

RECOMMENDED PANEL THICKNESS: $\frac{1.57}{.062}$

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension			
	Panel Mount	Free Hanging	A	B	C	D
2	• 43020-0200	• 43020-0201	3.86 (.152)		4.21 (.166)	7.90 (.311)
4	• 43020-0400	• 43020-0401	6.85 (.270)	3.00 (.118)	7.21 (.284)	10.90 (.429)
6	• 43020-0600	• 43020-0601	9.85 (.388)	6.00 (.236)	10.21 (.402)	13.89 (.547)
8	• 43020-0800	• 43020-0801	12.85 (.506)	9.00 (.354)	13.21 (.520)	16.89 (.665)
10	• 43020-1000	• 43020-1001	15.85 (.624)	12.00 (.472)	16.21 (.638)	19.89 (.783)
12	• 43020-1200	• 43020-1201	18.85 (.742)	15.00 (.591)	19.21 (.756)	22.89 (.901)
14	• 43020-1400	• 43020-1401	21.85 (.860)	18.00 (.709)	22.20 (.874)	25.88 (1.019)
16	• 43020-1600	• 43020-1601	24.85 (.978)	21.00 (.827)	25.20 (.992)	28.88 (1.137)
18	• 43020-1800	• 43020-1801	27.85 (1.096)	24.00 (.945)	28.20 (1.110)	31.88 (1.255)
20	• 43020-2000	• 43020-2001	30.85 (1.215)	27.00 (1.063)	31.22 (1.229)	34.87 (1.373)
22	• 43020-2200	• 43020-2201	33.85 (1.333)	30.00 (1.181)	34.22 (1.347)	37.87 (1.491)
24	• 43020-2400	• 43020-2401	36.85 (1.451)	33.00 (1.299)	37.22 (1.465)	40.87 (1.609)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- "Offset Terminal Retention" for optimum retention to PC board during wave soldering
- Fully polarized to mating receptacle
- Peg feature provides polarization to PCB
- Surface Mount Compatible

Reference Information

Product Specification: PS-43045

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R95107

Mates With: 43025

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 5.0A max.

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 7.5kgf max. (16.5 lb)

Physical

Housing: High temperature LCP, UL 94V-0

Contact: Brass

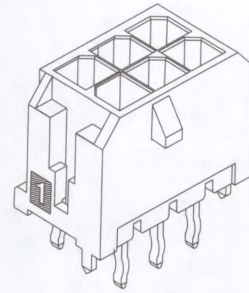
Plating: Tin or Gold



3.00mm (.118") Pitch Micro-Fit 3.0™ Wire-to-Board Header

43045

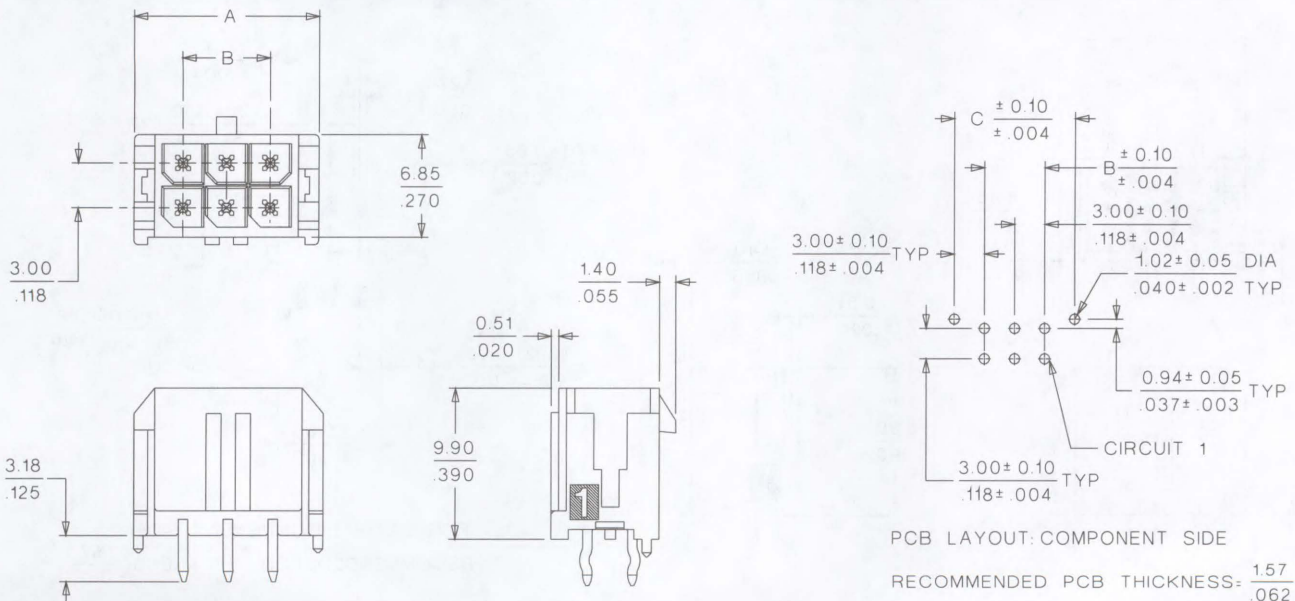
Dual Row Vertical



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.						Dimension		
	Standard "OTR" Version			Straight Tail Version			A	B	C
	Tin	15μ" Gold	30μ" Gold	Tin	15μ" Gold	30μ" Gold			
2	• 43045-0212	• 43045-0213	• 43045-0214	43045-0227	43045-0228	43045-0229	6.65 (.262)		6.00 (.236)
4	• 43045-0412	• 43045-0413	• 43045-0414	43045-0427	43045-0428	43045-0429	9.65 (.380)	3.00 (.118)	9.00 (.354)
6	• 43045-0612	• 43045-0613	• 43045-0614	43045-0627	43045-0628	43045-0629	12.65 (.498)	6.00 (.236)	12.00 (.472)
8	• 43045-0812	• 43045-0813	• 43045-0814	43045-0827	43045-0828	43045-0829	15.65 (.616)	9.00 (.354)	15.00 (.591)
10	• 43045-1012	• 43045-1013	• 43045-1014	43045-1027	43045-1028	43045-1029	18.65 (.734)	12.00 (.472)	18.00 (.709)
12	• 43045-1212	• 43045-1213	• 43045-1214	43045-1227	43045-1228	43045-1229	21.65 (.852)	15.00 (.591)	21.00 (.827)
14	• 43045-1412	• 43045-1413	• 43045-1414	43045-1427	43045-1428	43045-1429	24.65 (.970)	18.00 (.709)	24.00 (.945)
16	• 43045-1612	• 43045-1613	• 43045-1614	43045-1627	43045-1628	43045-1629	27.65 (1.088)	21.00 (.827)	27.00 (1.063)
18	• 43045-1812	• 43045-1813	• 43045-1814	43045-1827	43045-1828	43045-1829	30.65 (1.206)	24.00 (.945)	30.00 (1.181)
20	• 43045-2012	• 43045-2013	• 43045-2014	43045-2027	43045-2028	43045-2029	33.65 (1.325)	27.00 (1.063)	33.00 (1.299)
22	• 43045-2212	• 43045-2213	• 43045-2214	43045-2227	43045-2228	43045-2229	36.65 (1.443)	30.00 (1.181)	36.00 (1.417)
24	• 43045-2412	• 43045-2413	• 43045-2414	43045-2427	43045-2428	43045-2429	39.65 (1.561)	33.00 (1.299)	39.00 (1.535)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Solderable retention clip provides optimum retention to PCB
- Fully polarized to mating receptacle
- Tape and reel packaging eliminates handling and provides for higher insertion speeds compared to tray packing or hand assembly

Reference Information

Product Specification: PS-43045
 Packaging: Tape and reel
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R95107
 Mates With: 43025
 Designed In: Millimeters

Electrical

Voltage: 250V
 Current: 5.0A max.
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC
 Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 7.5kgf max. (16.5 lb)

Physical

Housing: High temperature LCP, UL 94V-0
 Contact: Brass
 Plating: Tin or Gold

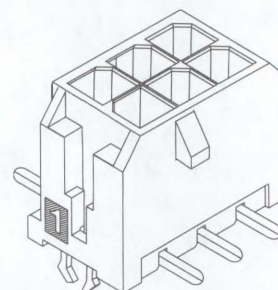


3.00mm (.118")

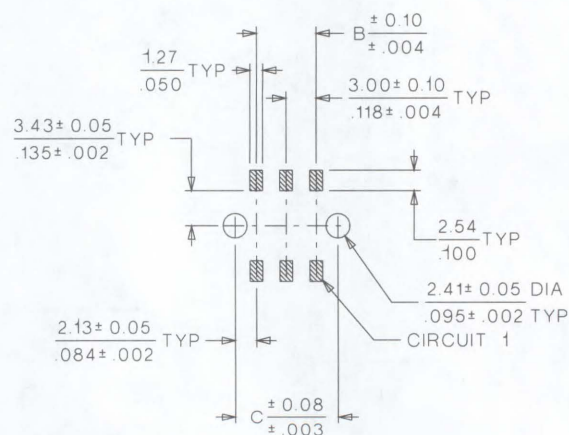
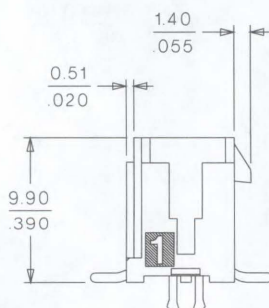
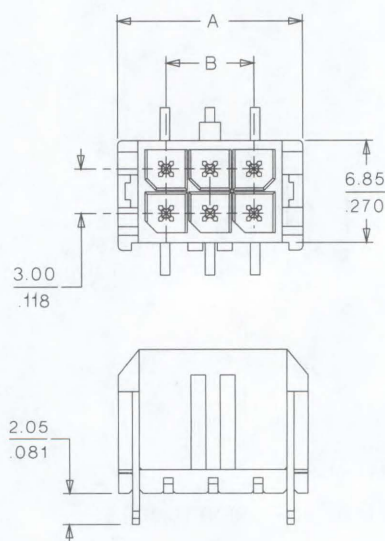
Micro-Fit 3.0™

Wire-to-Board
Header

43045

Dual Row, Vertical, SMT
With Solderable Retention Clip

CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE
 RECOMMENDED PCB THICKNESS: $\frac{1.57}{.062}$

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension		
	Tin	15μ" Gold	30μ" Gold	A	B	C
2	43045-0215	43045-0216	43045-0217	6.65 (.262)		4.30 (.169)
4	43045-0415	43045-0416	43045-0417	9.65 (.380)	3.00 (.118)	7.30 (.287)
6	43045-0615	43045-0616	43045-0617	12.65 (.498)	6.00 (.236)	10.30 (.406)
8	43045-0815	43045-0816	43045-0817	15.65 (.616)	9.00 (.354)	13.30 (.524)
10	43045-1015	43045-1016	43045-1017	18.65 (.734)	12.00 (.472)	16.30 (.642)
12	43045-1215	43045-1216	43045-1217	21.65 (.852)	15.00 (.591)	19.30 (.760)
14	43045-1415	43045-1416	43045-1417	24.65 (.970)	18.00 (.709)	22.30 (.878)
16	43045-1615	43045-1616	43045-1617	27.65 (1.088)	21.00 (.827)	25.30 (.996)
18	43045-1815	43045-1816	43045-1817	30.65 (1.206)	24.00 (.945)	28.30 (1.114)
20	43045-2015	43045-2016	43045-2017	33.65 (1.325)	27.00 (1.063)	31.30 (1.232)
22	43045-2215	43045-2216	43045-2217	36.65 (1.443)	30.00 (1.181)	34.30 (1.350)
24	43045-2415	43045-2416	43045-2417	39.65 (1.561)	33.00 (1.299)	37.30 (1.469)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Solderable fitting nail provides retention to PCB
- Fully polarized to mating receptacle
- Tape and reel packaging eliminates handling and provides for higher PCB board placement speeds compared to tray packing or hand assembly

Reference Information

Product Specification: PS-43045

Packaging: Tape and reel

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R95107

Mates With: 43025

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 5.0A max.

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 1000 MΩ min.

Physical

Housing: High temperature LCP, UL 94V-0

Contact: Brass

Plating: Tin or Gold



3.00mm (.118") Pitch

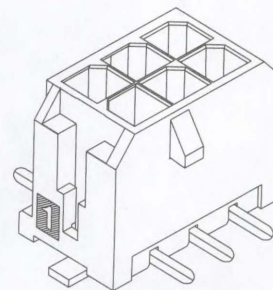
Micro-Fit 3.0™

Wire-to-Board

Header

43045

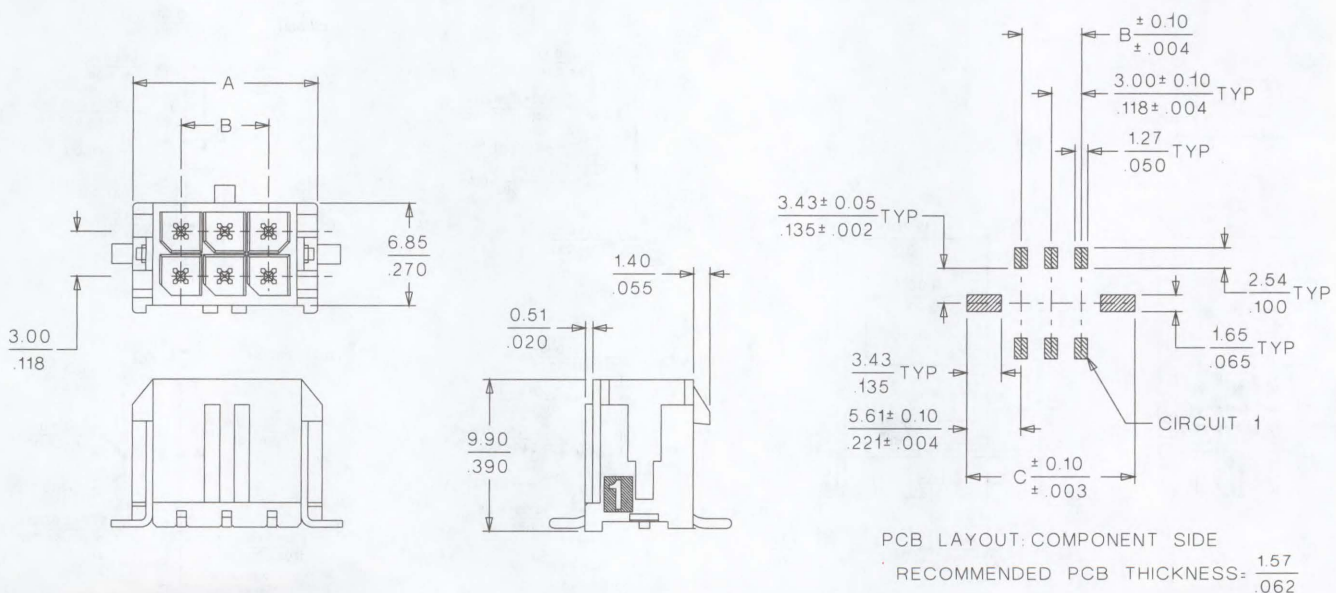
**Dual Row, Vertical, SMT
With Solderable Fitting Nail**



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension		
	Tin	15μ" Gold	30μ" Gold	A	B	C
2	43045-0218	43045-0219	43045-0220	6.65 (.262)		11.20 (.441)
4	43045-0418	43045-0419	43045-0420	9.65 (.380)	3.00 (.118)	14.20 (.559)
6	43045-0618	43045-0619	43045-0620	12.65 (.498)	6.00 (.236)	17.20 (.677)
8	43045-0818	43045-0819	43045-0820	15.65 (.616)	9.00 (.354)	20.20 (.795)
10	43045-1018	43045-1019	43045-1020	18.65 (.734)	12.00 (.472)	23.20 (.913)
12	43045-1218	43045-1219	43045-1220	21.65 (.852)	15.00 (.591)	26.20 (1.031)
14	43045-1418	43045-1419	43045-1420	24.65 (.970)	18.00 (.709)	29.20 (1.150)
16	43045-1618	43045-1619	43045-1620	27.65 (1.088)	21.00 (.827)	32.20 (1.268)
18	43045-1818	43045-1819	43045-1820	30.65 (1.206)	24.00 (.945)	35.20 (1.386)
20	43045-2018	43045-2019	43045-2020	33.65 (1.325)	27.00 (1.063)	38.20 (1.504)
22	43045-2218	43045-2219	43045-2220	36.65 (1.443)	30.00 (1.181)	41.20 (1.622)
24	43045-2418	43045-2419	43045-2420	39.65 (1.561)	33.00 (1.299)	44.20 (1.740)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Snap-in peg locks header to PCB for optimum retention
- Fully polarized to mating receptacle
- Surface Mount Compatible

Reference Information

Product Specification: PS-43045

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R95107

Mates With: 43025

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 5.0A max.

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 7.5kgf max. (16.5 lb)

Physical

Housing: High temperature LCP, UL 94V-0

Contact: Brass

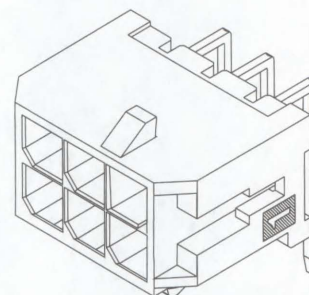
Plating: Tin or Gold



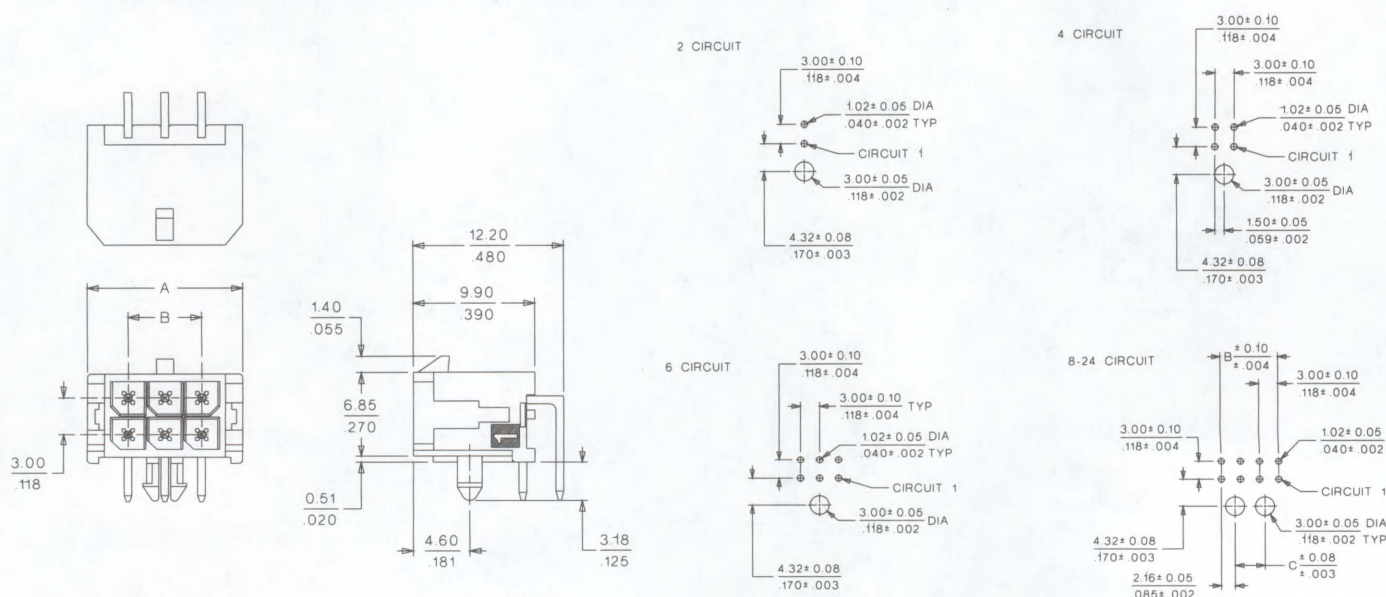
3.00mm (.118") Pitch Micro-Fit 3.0™ Wire-to-Board Header

43045

Dual Row Right Angle



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension		
	Tin	15μ" Gold	30μ" Gold	A	B	C
2	• 43045-0200	43045-0201	• 43045-0202	6.65 (.262)		
4	• 43045-0400	43045-0401	• 43045-0402	9.65 (.380)	3.00 (.118)	
6	• 43045-0600	43045-0601	• 43045-0602	12.65 (.498)	6.00 (.236)	
8	• 43045-0800	43045-0801	• 43045-0802	15.65 (.616)	9.00 (.354)	4.70 (.185)
10	• 43045-1000	43045-1001	• 43045-1002	18.65 (.734)	12.00 (.472)	7.70 (.303)
12	• 43045-1200	43045-1201	• 43045-1202	21.65 (.852)	15.00 (.591)	10.70 (.421)
14	• 43045-1400	43045-1401	• 43045-1402	24.65 (.970)	18.00 (.709)	13.70 (.539)
16	• 43045-1600	43045-1601	• 43045-1602	27.65 (1.088)	21.00 (.827)	16.70 (.657)
18	• 43045-1800	43045-1801	• 43045-1802	30.65 (1.206)	24.00 (.945)	19.70 (.776)
20	• 43045-2000	43045-2001	• 43045-2002	33.65 (1.325)	27.00 (1.063)	22.70 (.894)
22	• 43045-2200	43045-2201	• 43045-2202	36.65 (1.443)	30.00 (1.181)	25.70 (1.012)
24	• 43045-2400	43045-2401	• 43045-2402	39.65 (1.561)	33.00 (1.299)	28.70 (1.130)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Solderable retention clip provides optimum retention to PCB
- Fully polarized to mating receptacle
- Tape and reel packaging eliminates handling and provides higher insertion speed compared to tray packing or hand assembly

Reference Information

Product Specification: PS-43045
 Packaging: Tape and reel
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R95107
 Mates With: 43025
 Designed In: Millimeters

Electrical

Voltage: 250V
 Current: 5.0A max.
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC
 Insulation Resistance: 1000 MΩ min.

Mechanical

Insertion Force to PCB: 7.5kgf max. (16.5 lb)

Physical

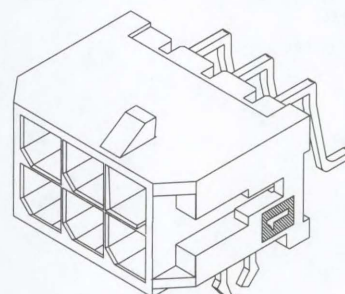
Housing: High temperature LCP, UL 94V-0
 Contact: Brass
 Plating: Tin or Gold



3.00mm (.118") Pitch Micro-Fit 3.0™ Wire-to-Board Header

43045

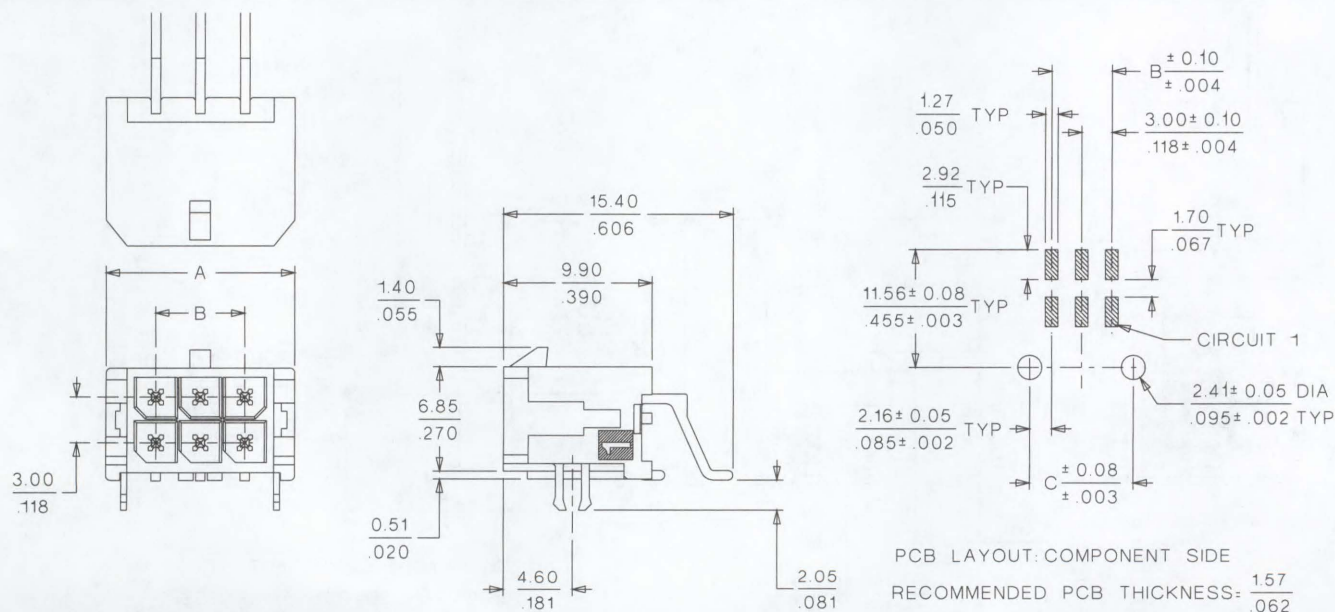
**Dual Row, Right Angle, SMT
 With Solderable Retention Clip**



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension		
	Tin	15μ" Gold	30μ" Gold	A	B	C
2	43045-0206	43045-0207	43045-0208	6.65 (.262)		4.30 (.169)
4	43045-0406	43045-0407	43045-0408	9.65 (.380)	3.00 (.118)	7.30 (.287)
6	43045-0606	43045-0607	43045-0608	12.65 (.499)	6.00 (.236)	10.30 (.406)
8	43045-0806	43045-0807	43045-0808	15.65 (.616)	9.00 (.354)	13.30 (.524)
10	43045-1006	43045-1007	43045-1008	18.65 (.734)	12.00 (.472)	16.30 (.642)
12	43045-1206	43045-1207	43045-1208	21.65 (.852)	15.00 (.591)	19.30 (.760)
14	43045-1406	43045-1407	43045-1408	24.65 (.970)	18.00 (.709)	22.30 (.878)
16	43045-1606	43045-1607	43045-1608	27.65 (1.088)	21.00 (.827)	25.30 (.996)
18	43045-1806	43045-1807	43045-1808	30.65 (1.206)	24.00 (.945)	28.30 (1.114)
20	43045-2006	43045-2007	43045-2008	33.65 (1.325)	27.00 (1.063)	31.30 (1.232)
22	43045-2206	43045-2207	43045-2208	36.65 (1.443)	30.00 (1.181)	34.30 (1.350)
24	43045-2406	43045-2407	43045-2408	39.65 (1.561)	33.00 (1.299)	37.30 (1.469)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Solderable fitting nail provides retention to PCB
- Fully polarized to mating receptacle
- Tape and reel packaging eliminates handling and provides higher insertion speeds compared to tray packing or hand assembly

Reference Information

Product Specification: PS-43045
 Packaging: Tape and reel
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: 43025
 Designed In: Millimeters

Electrical

Voltage: 250V
 Current: 5.0A max.
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC
 Insulation Resistance: 1000 MΩ min.

Physical

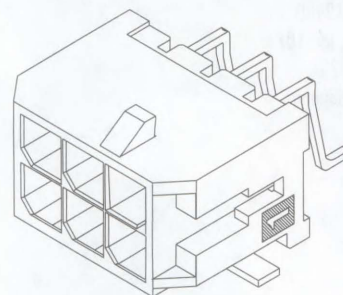
Housing: High temperature LCP, UL 94V-0
 Contact: Brass
 Plating: Tin or Gold



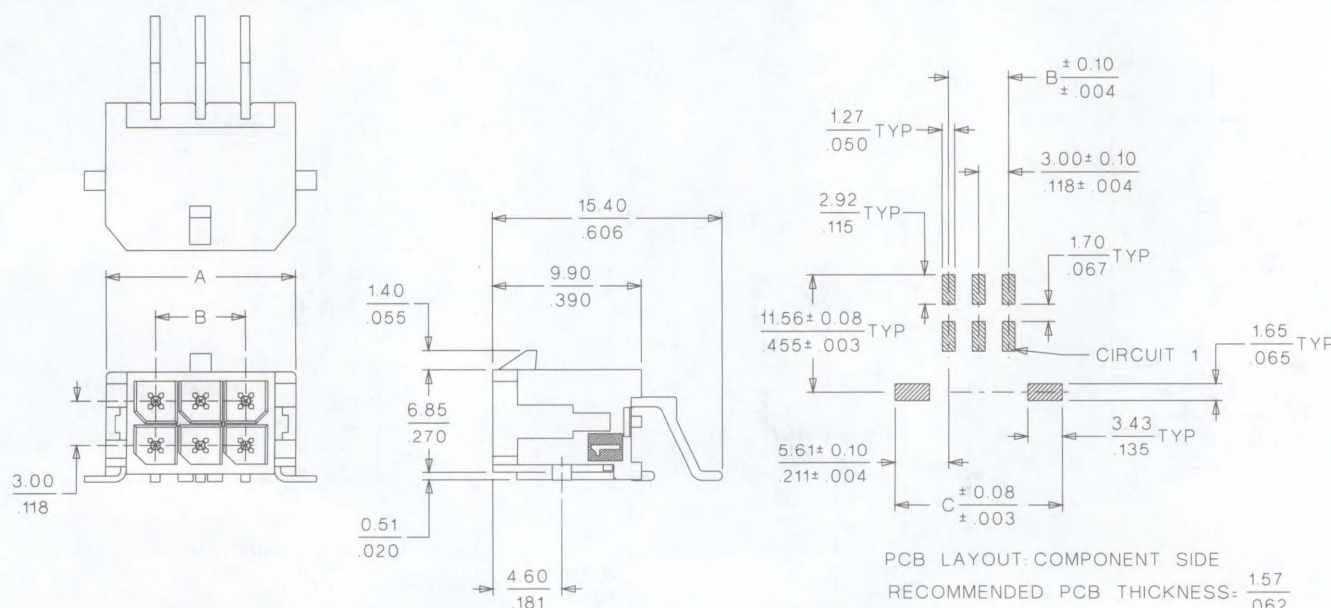
3.00mm (.118") Pitch Micro-Fit 3.0™ Wire-to-Board Header

43045

Dual Row, Right Angle, SMT With Solderable Fitting Nail



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension		
	Tin	15μ" Gold	30μ" Gold	A	B	C
2	43045-0209	43045-0210	43045-0211	6.65 (.262)		11.20 (.441)
4	43045-0409	43045-0410	43045-0411	9.65 (.380)	3.00 (.118)	14.20 (.559)
6	43045-0609	43045-0610	43045-0611	12.65 (.499)	6.00 (.236)	17.20 (.677)
8	43045-0809	43045-0810	43045-0811	15.65 (.616)	9.00 (.354)	20.20 (.795)
10	43045-1009	43045-1010	43045-1011	18.65 (.734)	12.00 (.472)	23.20 (.913)
12	43045-1209	43045-1210	43045-1211	21.65 (.852)	15.00 (.591)	26.20 (1.031)
14	43045-1409	43045-1410	43045-1411	24.65 (.970)	18.00 (.709)	29.20 (1.150)
16	43045-1609	43045-1610	43045-1611	27.65 (1.088)	21.00 (.827)	32.20 (1.268)
18	43045-1809	43045-1810	43045-1811	30.65 (1.206)	24.00 (.945)	35.20 (1.386)
20	43045-2009	43045-2010	43045-2011	33.65 (1.325)	27.00 (1.063)	38.20 (1.504)
22	43045-2209	43045-2210	43045-2211	36.65 (1.443)	30.00 (1.181)	41.20 (1.622)
24	43045-2409	43045-2410	43045-2411	39.65 (1.561)	33.00 (1.299)	44.20 (1.740)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Rated for 10,000 mating cycles
- Minimal expense and downtime for test plug replacement
- Gold-plated, beryllium copper contacts are precision made for long life
- To be used for continuity testing only*
- Micro-Fit dual row sizes available for every application: 4 to 24 circuits
- Mismatching prevented because plug is fully polarized to mating receptacle

Reference Information

Product Specification: PS-44242

Packaging: Box

Mates with: 43025

Designed in: Inches

Electrical

Current: 2.5A max.

Contact Resistance: 35mΩ max.

Mechanical

Contact Retention to Housing: 5.0kgf

Durability: 10,000 cycles

Physical

Housing: Black unfilled polyester, UL 94V-2

Contact: Heat-treated Beryllium Copper

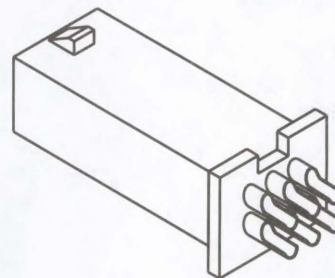
Plating: Gold over hard Nickel

Operating Temperature: -40 to +105°C

molex® 3.00mm (.118") Pitch
Micro-Fit 3.0™
Test Plug

44242

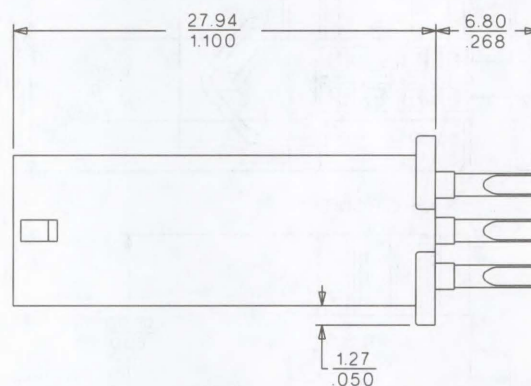
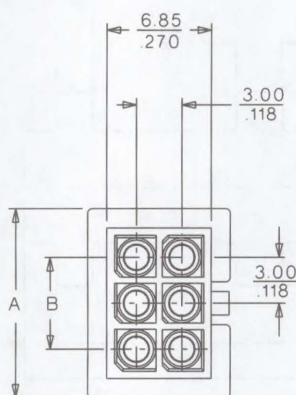
Dual Row



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
4	44242-0001
6	44242-0002
8	44242-0003
10	44242-0004
12	44242-0005
14	44242-0006
16	44242-0007
18	44242-0008
20	44242-0009
22	44242-0010
24	44242-0011

* Important: Micro-Fit test headers cannot be mated or unmated under load. All current must be shut off prior to mating or unmating.

FEATURES AND SPECIFICATIONS

Features and Benefits

- Connectors float in panel cutout up to 1.27mm (.050") in any direction
- 4 to 24 circuits for design flexibility
- Use standard Micro-Fit terminals to reduce inventory
- Innovative panel mounting design holds connectors firmly in place
- Fully isolated contacts prevent terminal damage
- Fully polarized to completely prevent mismatching

Reference Information

Product Specification: PS-44300

Packaging: Bag

Mates with: 44300

Use with: 43030

Designed in: Millimeters

Electrical

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 14.7N (3.30 lb)

Contact Retention to Housing: 24.5N (5.51 lb)

Physical

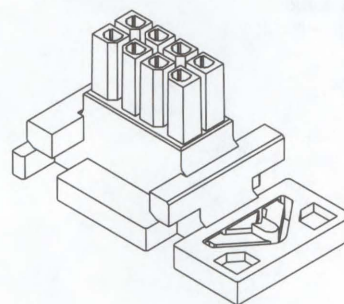
Housing: Polyester, UL 94V-0

Operating Temperature: -40 to +105°C

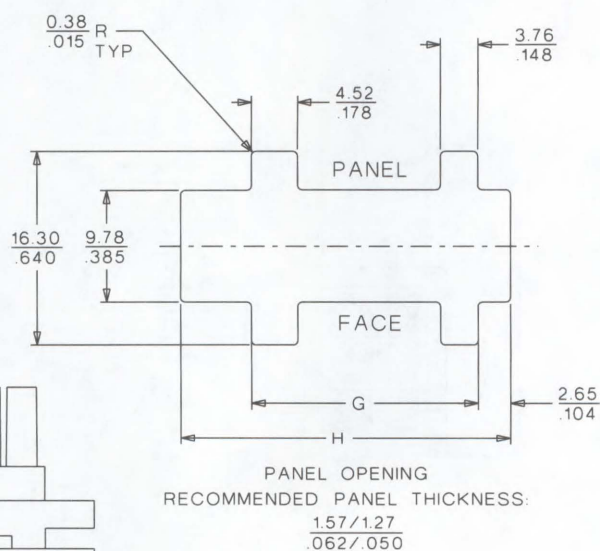
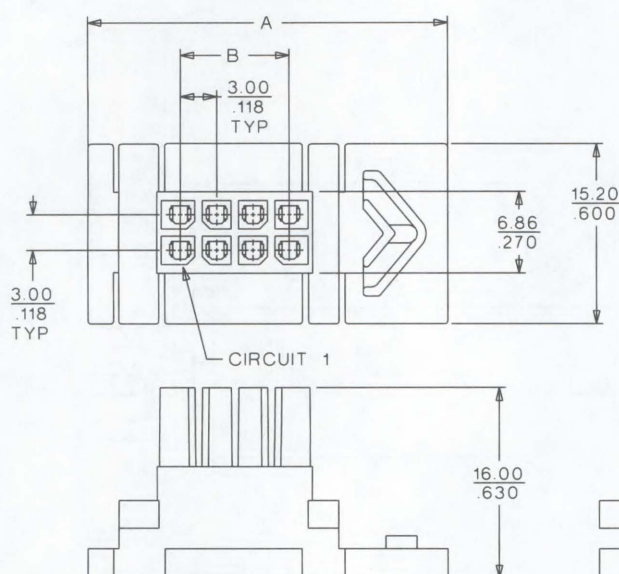


3.00mm (.118") Micro-Fit 3.0, BMI™ Panel-to-Panel Receptacle

44133 Dual Row



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	G	H
4	44133-0400	24.60 (.970)	3.00 (.118)	13.46 (.530)	22.10 (.870)
6	44133-0600	27.70 (1.090)	6.00 (.236)	16.46 (.648)	25.10 (.988)
8	44133-0800	30.70 (1.210)	9.00 (.354)	19.46 (.766)	28.10 (1.106)
10	44133-1000	33.80 (1.330)	12.00 (.472)	22.46 (.884)	31.10 (1.224)
12	44133-1200	36.80 (1.450)	15.00 (1.591)	25.46 (1.002)	34.10 (1.343)
14	44133-1400	39.90 (1.570)	18.00 (.709)	28.46 (1.120)	37.10 (1.461)
16	44133-1600	42.90 (1.690)	21.00 (.827)	31.46 (1.239)	40.10 (1.579)
18	44133-1800	46.00 (1.810)	24.00 (.945)	34.46 (1.357)	43.10 (1.697)
20	44133-2000	49.00 (1.930)	27.00 (1.063)	37.46 (1.475)	46.10 (1.815)
22	44133-2200	51.80 (2.040)	30.00 (1.181)	40.46 (1.593)	49.10 (1.933)
24	44133-2400	54.90 (2.160)	33.00 (1.299)	43.46 (1.711)	52.10 (2.051)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Connectors float in panel cutout up to 1.27mm (.050") in any direction
- 4 to 24 circuits for design flexibility
- Use standard Micro-Fit terminals to reduce inventory
- Innovative panel mounting design holds connectors firmly in place
- Fully isolated contacts prevent terminal damage
- Fully polarized to completely prevent mismating

Reference Information

Product Specification: PS-44300

Packaging: Bag

Mates with: 44133

Use with: 43031

Designed in: Millimeters

Electrical

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 14.7N (3.30 lb)

Contact Retention to Housing: 24.5N (5.51 lb)

Physical

Housing: Polyester, UL 94V-0

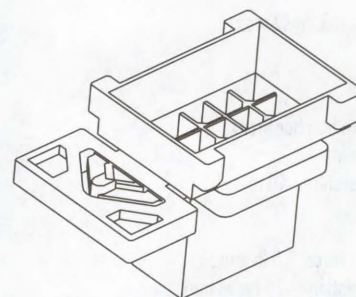
Operating Temperature: -40 to +105°C



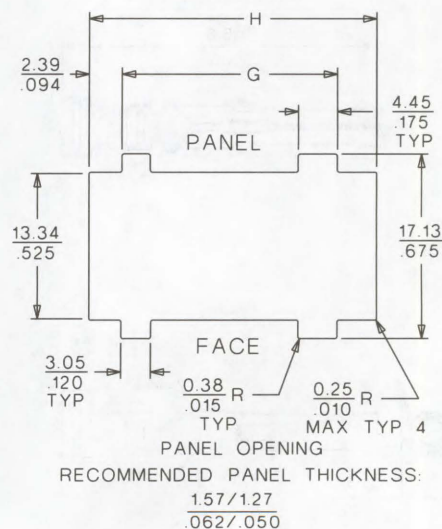
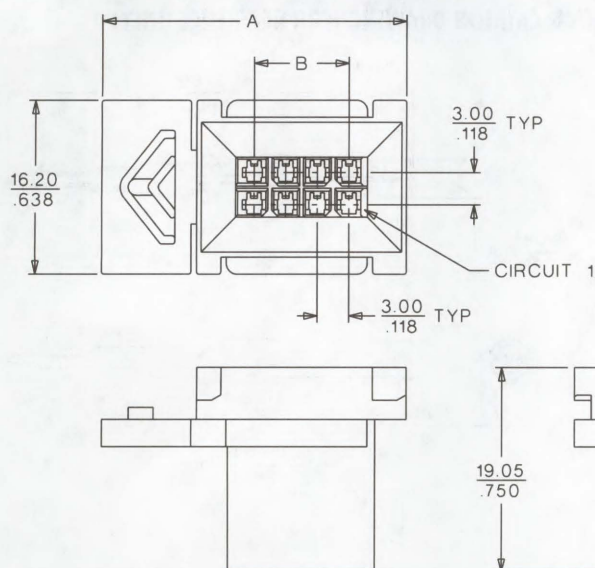
3.00mm (.118") Micro-Fit 3.0, BMI™ Panel-to-Panel Plug

44300

Dual Row



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	G	H
4	44300-0400	22.84 (.900)	3.00 (.118)	14.85 (.585)	20.85 (.821)
6	44300-0600	25.84 (1.02)	6.00 (.236)	17.85 (.703)	23.85 (.939)
8	44300-0800	28.84 (1.14)	9.00 (.354)	20.85 (.821)	26.85 (1.057)
10	44300-1000	31.84 (1.26)	12.00 (.472)	23.85 (.939)	29.85 (1.175)
12	44300-1200	34.84 (1.38)	15.00 (.591)	26.85 (1.057)	32.85 (1.293)
14	44300-1400	37.84 (1.49)	18.00 (.709)	29.85 (1.175)	35.85 (1.411)
16	44300-1600	40.84 (1.61)	21.00 (.827)	32.85 (1.293)	38.85 (1.530)
18	44300-1800	43.84 (1.73)	24.00 (.945)	35.85 (1.411)	41.85 (1.648)
20	44300-2000	46.84 (1.85)	27.00 (1.063)	38.85 (1.530)	44.85 (1.766)
22	44300-2200	49.84 (1.97)	30.00 (1.181)	41.85 (1.648)	47.85 (1.884)
24	44300-2400	52.84 (2.08)	33.00 (1.299)	44.85 (1.766)	50.85 (2.002)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Available in Tin or Gold platings
- Available in Brass or Phosphor Bronze base materials
- Accommodates 18 to 30 gauge wire

Reference Information

Packaging: Bag or reel

UL File No.: E29179

CSA File No.: LR19980

Designed In: Inches

Electrical

Contact Resistance: 3.2mΩ max.

Current: 5.0A

Physical

Contact: Brass or Phosphor Bronze

Plating: Tin or Gold

Operating Temperature: -40 to +105°C

Mechanical

Contact Insertion Force: 3.5 lb max.

Durability: Tin plating—25 cycles max.

Gold plating—50 cycles max.

Terminal Crimp Strength: Minimum pull-out force in kg (lb) for AWG wire sizes:

AWG Wire Size	Minimum Pull-out Force kg (lb)	AWG Wire Size	Minimum Pull-out Force kg (lb)
18	9.07 (20)	26	2.27 (5)
20	6.80 (15)	28	1.36 (3)
22	4.54 (10)	30	0.91 (2)
24	3.63 (8)		

Engage/Disengage Forces: Miniature terminal of 0.20mm (.008") stock 70/30 Brass. Average engage/disengage forces in plug/receptacle connector with +30% tolerance in kg (lb) by circuit:

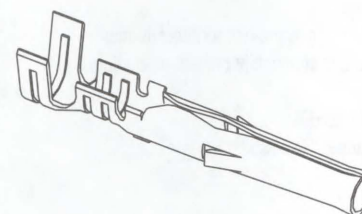
Circuits	Engage/Disengage Force	
1	1.04/0.36	(2.30/0.80)
2	2.09/0.73	(4.60/1.60)
3	3.13/1.09	(6.90/2.40)
4	4.17/1.45	(9.20/3.20)
5	5.22/1.81	(11.50/4.00)
6	6.26/2.18	(13.80/4.80)
8	8.35/2.90	(18.40/6.40)
9	9.39/3.27	(20.70/7.20)
12	12.43/4.35	(27.40/9.60)
15	15.65/5.44	(34.50/12.00)
24	25.04/8.71	(55.20/19.20)
36	37.56/13.08	(82.80/28.80)

.006 Phosphor Bronze stock recommended for versions 15 circuits and larger

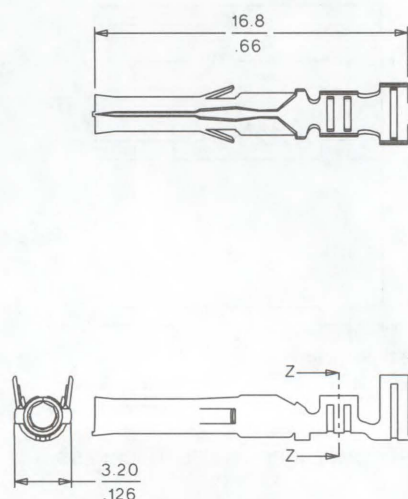


1.57mm (.062") Pin Diameter .062" Pin and Socket Female Terminals

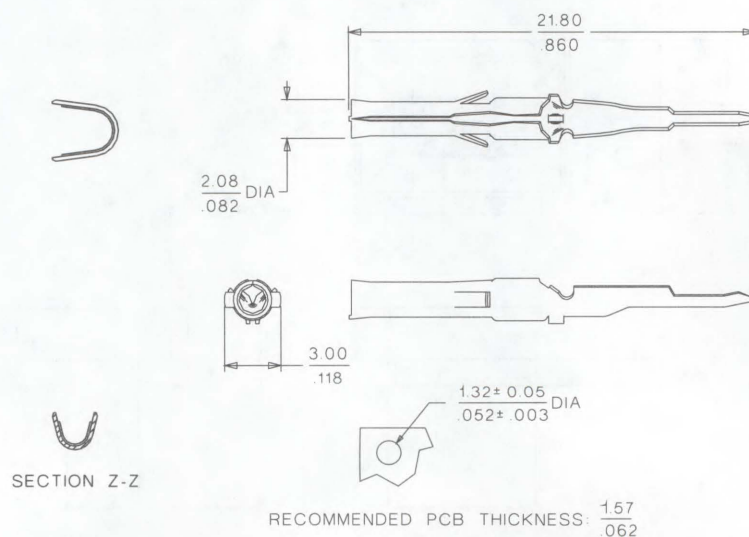
Standard .062"



STANDARD CATALOG DRAWING (FOR REFERENCE ONLY)



PC TAIL CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Type	Plating	Crimp Wire Size	Insulation Diameter	Series	Order No.	
					Chain	Loose
Standard Brass .008"	Tin	18-24	1.52/3.05 (.060/.120)	1561	• 02-06-1101	• 02-06-1103
		24-30	1.02/2.29 (.040/.090)	1855	• 02-06-1131	• 02-06-1132
	15μ" Gold	18-24	1.52/3.05 (.060/.120)	1561	• 02-06-5100	• 02-06-5103
		24-30	1.02/2.29 (.040/.090)	1855	• 02-06-5130	• 02-06-5135
	30μ" Gold	18-24	1.52/3.05 (.060/.120)	1561	02-06-5101	02-06-5102
		24-30	1.02/2.29 (.040/.090)	1855	02-06-5138	02-06-5139
		18-24	1.52/3.05 (.060/.120)	1561	02-06-5108	02-06-5109
		24-30	1.02/2.29 (.040/.090)	1855	02-06-5147	02-06-5148
Phos-Bronze	Tin .006"	18-24	1.52/3.05 (.060/.120)	4529	• 02-06-1104	• 02-06-1105
		24-30	1.02/2.29 (.040/.090)	4559	• 02-06-1109	• 02-06-1110
	Tin .008"	18-24	1.52/3.05 (.060/.120)	1787	• 02-06-1201	• 02-06-1202
		24-30	1.02/2.29 (.040/.090)	2189	• 02-06-1231	• 02-06-1232
	.006" Gold (15μ")	18-24	1.52/3.05 (.060/.120)	4529	• 02-06-5207	• 02-06-5208
		24-30	1.02/2.29 (.040/.090)	4559	• 02-06-5211	
	.008" Gold (15μ")	18-24	1.52/3.05 (.060/.120)	1787	02-06-5201	02-06-5202
				1779		• 02-06-7103
.008" PC Tail Brass for Standard .062" Housings Only	Tin			1779		02-06-7104
	20μ" Gold Tin/Lead Tail Area					

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Available in Tin or Gold platings
- Available in Brass or Phosphor Bronze base materials
- Accommodates 18 to 30 gauge wire

Reference Information

Packaging: Bag or reel
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical

Contact Resistance: 3.2mΩ max.
Current: 5.0 A

Physical

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

Mechanical

Contact Insertion Force: 3.5 lb max.
Durability: Tin plating—25 cycles max.
Gold plating—50 cycles max.

Terminal Crimp Strength: Minimum pull-out force in kg (lb) for AWG wire sizes

AWG Wire Size	Minimum Pull-out Force kg (lb)	AWG Wire Size	Minimum Pull-out Force kg (lb)
18	9.07 (20)	26	2.27 (5)
20	6.80 (15)	28	1.36 (3)
22	4.54 (10)	30	0.91 (2)
24	3.63 (8)		

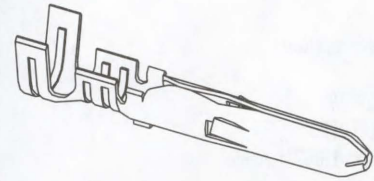
Engage/Disengage Forces: Miniature terminal of 0.20mm (.008") stock 70/30 Brass. Average engage/disengage forces in plug/receptacle connector with +30% tolerance in kg (lb) by circuit:

Circuits	Engage/Disengage Force	
1	1.04/0.36	(2.30/0.80)
2	2.09/0.73	(4.60/1.60)
3	3.13/1.09	(6.90/2.40)
4	4.17/1.45	(9.20/3.20)
5	5.22/1.81	(11.50/4.00)
6	6.26/2.18	(13.80/4.80)
8	8.35/2.90	(18.40/6.40)
9	9.39/3.27	(20.70/7.20)
12	12.43/4.35	(27.40/9.60)
15	15.65/5.44	(34.50/12.00)
24	25.04/8.71	(55.20/19.20)
36	37.56/13.08	(82.80/28.80)

.006 Phosphor Bronze stock recommended for versions 15 circuits and larger

molex® 1.57mm (.062") Pin Diameter .062" Pin and Socket Male Terminals

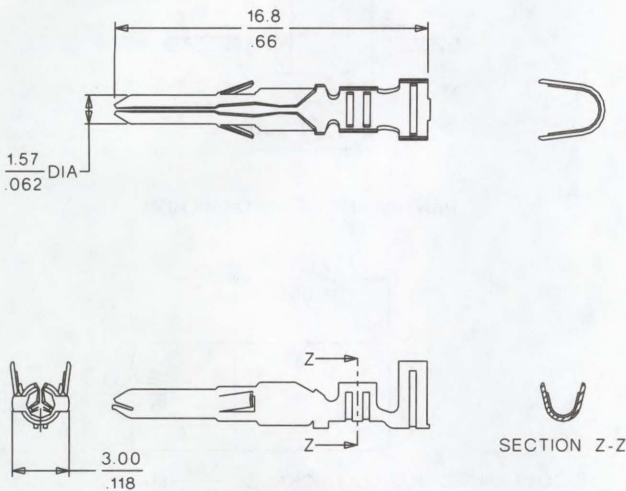
Standard .062"



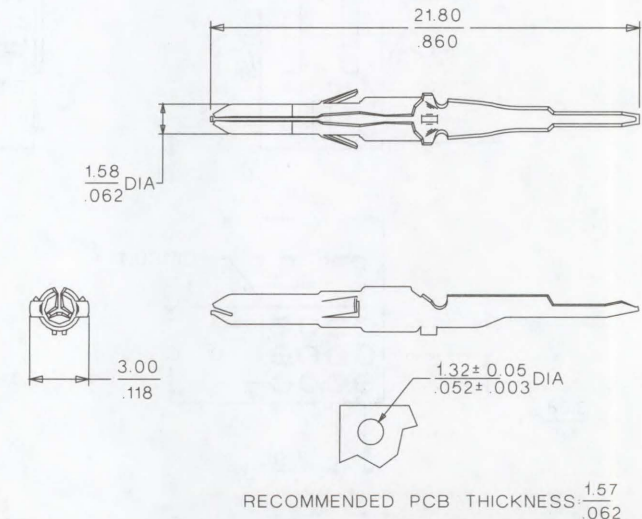
Power Connectors

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STANDARD CATALOG DRAWING (FOR REFERENCE ONLY)



PC TAIL CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Type	Plating	Crimp Wire Size	Insulation Diameter	Series	Order No.	
					Chain	Loose
Standard Brass .008"	Tin	18-24	1.52/3.05 (.060/.120)	1560	• 02-06-2101	• 02-06-2103
		24-30	1.02/2.29 (.040/.090)	1854	• 02-06-2131	• 02-06-2132
	15μ" Gold	18-24	1.52/3.05 (.060/.120)	1560	• 02-06-6100	• 02-06-6103
		24-30	1.02/2.29 (.040/.090)	1854	• 02-06-6130	• 02-06-6135
	30μ" Gold	18-24	1.52/3.05 (.060/.120)	1560	02-06-6101	02-06-6102
		24-30	1.02/2.29 (.040/.090)	1854	02-06-6138	02-06-6139
		18-24	1.52/3.05 (.060/.120)	1560	02-06-6118	02-06-6119
		24-30	1.02/2.29 (.040/.090)	1854	02-06-6143	02-06-6144
.008" Phosphor Bronze	Tin	18-24	1.52/3.05 (.060/.120)	1786	02-06-2201	02-06-2202
		24-30	1.02/2.29 (.040/.090)	2190	02-06-2231	02-06-2232
	Gold (15μ")	18-24	1.52/3.05 (.060/.120)	1786	02-06-6201	02-06-6202
.008" PC Tail Brass for Standard .062" Housings Only	Tin			1778		02-06-8103
	20μ" Gold Tin/Lead Tail Area			1778		• 02-06-6122

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits

- Friction lock
- Panel and PCB mountable
- 1-piece strain relief available, 41316 series
- Polarized housing assures proper mating
- Male and female terminals may be used in receptacle housing

Reference Information

Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 Use With: Standard .062" terminal
 Designed In: Inches

Electrical

Voltage: 250V
 Current: 5.0A max.*
 Dielectric Withstanding Voltage: 1500V AC rms

Mechanical

Contact Retention to Housing: 20 lb min.

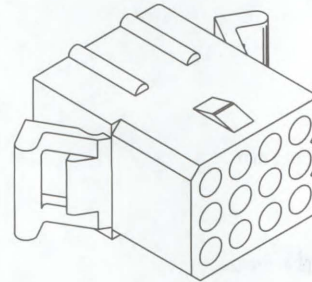
Physical

Housing: Nylon, UL 94V-2
 Operating Temperature: -40 to +105°C

* Depending on circuit size and wire gauge; please refer to product specifications

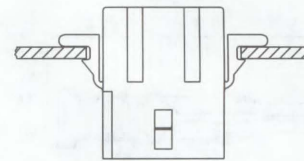
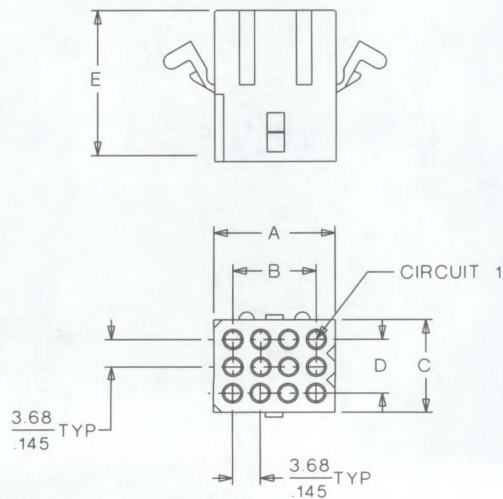
molex® 3.68mm (.145") Pitch
 .062" Pin and Socket
 Receptacle

Standard .062"

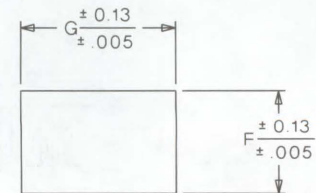


CATALOG DRAWING (FOR REFERENCE ONLY)

12 CIRCUIT SHOWN



PANEL CUTOUT INFORMATION



RECOMMENDED PANEL THICKNESS: $\frac{1.52}{.060}$ MAX

ORDERING INFORMATION AND DIMENSIONS

Circuits	Series	Order No.		Amperes per Circuit	Dimension						
		Panel Mount	Free Hanging		A	B	C	D	E	F	G
1	1625		• 03-06-1011	5	4.90 (.190)				19.80 (.780)		
2	1625	• 03-06-1022	• 03-06-1023	5	8.60 (.340)	3.68 (.145)	4.90 (.190)		20.60 (.810)	6.73 (.265)	12.83 (.505)
3	1625	• 03-06-1038	• 03-06-1032	5	12.30 (.480)	7.36 (.290)	4.90 (.190)		19.80 (.780)	6.73 (.265)	16.51 (.650)
4 (1 x 4)	1625	• 03-06-1041	• 03-06-1042	5	16.00 (.630)	11.04 (.435)	4.90 (.190)		19.80 (.780)	6.60 (.260)	19.94 (.785)
4 (2 x 2)	2004	• 03-06-1043	• 03-06-1044	5	8.60 (.340)	3.68 (.145)	8.60 (.340)	3.68 (.145)	19.60 (.770)	10.16 (.400)	12.85 (.506)
5	1625	• 03-06-1055	• 03-06-1056	5	19.70 (.780)	14.72 (.580)	4.90 (.190)		19.80 (.780)	6.73 (.265)	23.88 (.940)
6	1625	• 03-06-1061	• 03-06-1062	5	8.70 (.340)	3.68 (.145)	12.50 (.490)	7.36 (.290)	19.80 (.780)	12.83 (.505)	14.02 (.552)
9	1625	• 03-06-1091	• 03-06-1092	5	12.40 (.490)	7.36 (.290)	12.40 (.490)	7.36 (.290)	19.80 (.780)	14.02 (.552)	16.51 (.650)
12	1625	• 03-06-1121	• 03-06-1122	5	16.10 (.630)	11.04 (.435)	12.50 (.490)	7.36 (.290)	19.80 (.780)	14.30 (.563)	20.19 (.795)
15	1625	• 03-06-1155	• 03-06-1152	5	19.50 (.770)	14.72 (.580)	12.40 (.490)	7.36 (.290)	19.80 (.780)	14.45 (.569)	23.62 (.930)
24	1625	• 03-06-1241		5	23.30 (.920)	18.40 (.725)	16.10 (.630)	11.04 (.435)	19.10 (.750)	18.16 (.715)	27.41 (1.079)
36†	1772	• 03-06-1361	• 03-06-1362	5	38.20 (1.510)	29.44 (1.160)	17.50 (.690)	11.04 (.435)	19.80 (.780)	17.96 (.707)	42.60 (1.677)

• US Standard Product, available through Molex franchised distributors

† 36-circuit receptacle is on a 4.19mm (.165") pitch

FEATURES AND SPECIFICATIONS

Features and Benefits

- Friction lock
- Panel and PCB mountable
- 1-piece strain relief available, 41316 series
- Polarized housing assures proper mating
- Male and female terminals may be used in plug housing

Reference Information

Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: Standard .062" receptacle and 41316 strain relief
 Designed In: Inches

Electrical

Voltage: 250V
 Current: 5.0A max.
 Dielectric Withstanding Voltage: 1500V AC rms

Mechanical

Contact Retention to Housing: 20 lb min.

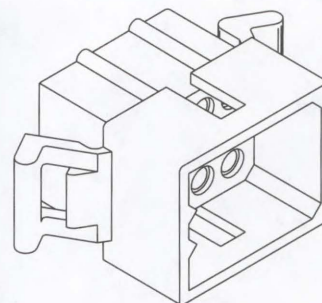
Physical

Housing: Nylon, UL 94V-2
 Operating Temperature: -40 to +105°C



3.68mm (.145") Pitch
.062" Pin and Socket
Plug

Standard .062"

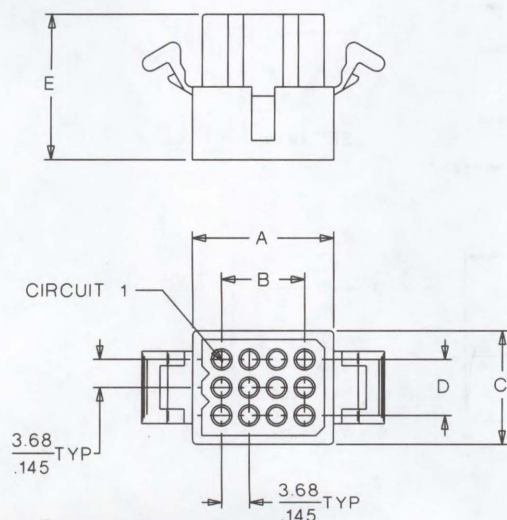


Power Connectors

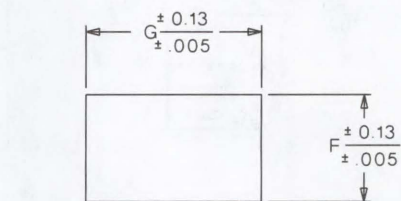
F

CATALOG DRAWING (FOR REFERENCE ONLY)

12 CIRCUIT SHOWN



PANEL CUTOUT INFORMATION



RECOMMENDED PANEL THICKNESS: $\frac{1.52}{.060}$ MAX

ORDERING INFORMATION AND DIMENSIONS

Circuits	Series	Order No.		Amperes per Circuit	Dimension						
		Panel Mount	Free Hanging		A	B	C	D	E	F	G
1	1625		• 03-06-2011	5	7.60 (.300)				19.10 (.750)		
2	1625	• 03-06-2024	• 03-06-2023	5	11.20 (.440)	3.68 (.145)	7.60 (.300)		19.80 (.780)	8.08 (.313)	15.47 (.609)
3	1625	• 03-06-2033	• 03-06-2032	5	15.00 (.590)	7.36 (.290)	7.60 (.300)		19.10 (.750)	8.08 (.313)	19.15 (.754)
4 (1 x 4)	1625	• 03-06-2041	• 03-06-2042	5	18.50 (.730)	11.04 (.435)	7.50 (.290)		19.10 (.750)	7.93 (.312)	21.97 (.865)
4 (2 x 2)	2004	• 03-06-2043	• 03-06-2044	5	11.20 (.440)	3.68 (.145)	11.20 (.440)	3.68 (.145)	19.60 (.770)	11.80 (.465)	15.62 (.615)
5	1625	• 03-06-2054	• 03-06-2055	5	22.60 (.890)	14.72 (.580)	7.90 (.310)		19.10 (.750)	8.08 (.318)	26.52 (1.044)
6	1625	• 03-06-2062	• 03-06-2061	5	11.40 (.450)	3.68 (.145)	15.20 (.600)	7.36 (.290)	19.10 (.750)	15.42 (.607)	15.62 (.615)
9	1625	• 03-06-2091	• 03-06-2092	5	15.00 (.590)	7.36 (.290)	15.00 (.590)	7.36 (.290)	19.00 (.750)	15.62 (.615)	19.10 (.752)
12	1625	• 03-06-2121	• 03-06-2122	5	18.80 (.740)	11.04 (.435)	15.00 (.590)	7.36 (.290)	19.10 (.750)	15.60 (.614)	22.94 (.903)
15	1625	• 03-06-2151	• 03-06-2152	5	22.10 (.870)	14.72 (.580)	15.00 (.590)	7.36 (.290)	19.00 (.750)	15.75 (.620)	26.21 (1.032)
24	1625	• 03-06-2241	• 03-06-2242	4	25.90 (1.020)	18.40 (.725)	18.80 (.740)	11.04 (.435)	19.10 (.750)	19.43 (.765)	30.02 (1.182)
*36	1772	• 03-06-2361	• 03-06-2362	4	20.30 (.800)	12.57 (.495)	41.20 (1.620)	33.53 (1.320)	19.10 (.750)	20.96 (.825)	45.49 (1.795)

• US Standard Product, available through Molex franchised distributors
 * 36-circuit plug is on a 4.19mm (.165") pitch

FEATURES AND SPECIFICATIONS

Features and Benefits

- Round contact for high normal force
- Anti-misinsertion feature
- Locking tab secures terminal to housing

Reference Information

Product Specification: PS-35135

Packaging: Reel

UL File No.: E29179

Use With: 35135

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 5.0A

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 29.4N (6.61 lb) min.

Wire Pull-Out Force: 20AWG—69.6N (15.7 lb) min.

Mating Force: 39.2N (8.8 lb) max.

Unmating Force: 4.9N (1.1 lb) min.

Durability: 30 cycles

Physical

Contact: Brass

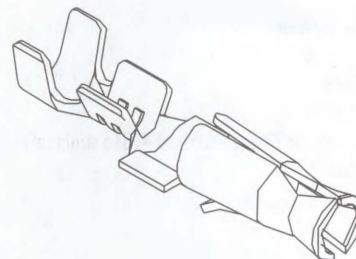
Plating: Tin

Insulation Diameter: 1.50 to 2.70mm (.059 to .106") max.

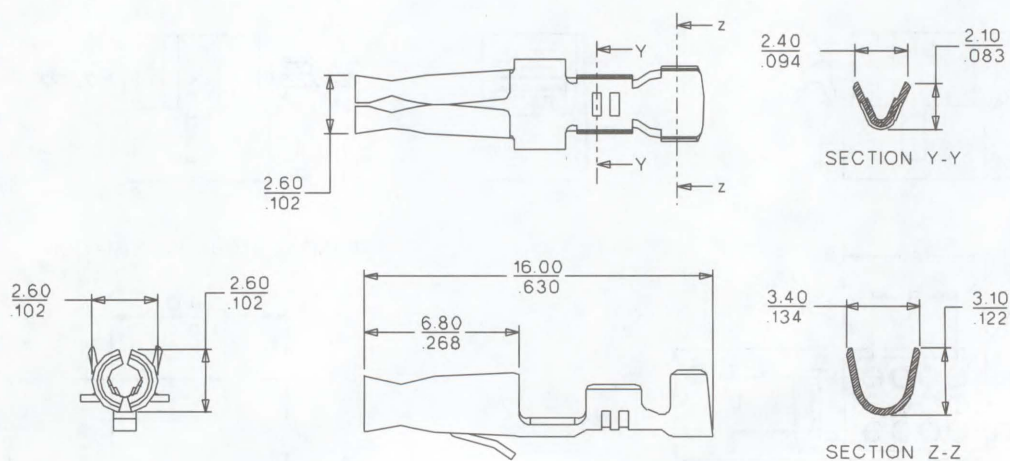
Strip Length: 3.30 to 4.20mm (.130 to .165")

Wire Gauge: 20 to 24 AWG

Operating Temperature: -25 to +85°C

molex® 5.00mm (.197") Pitch
Wire-to-Board
Crimp Terminal
35719

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.
35719-0110

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 6 circuits
- For 1.55mm (.061") diameter pins
- Polarization through varied spacing between circuits 1 and 2
- Fully isolated terminals to protect contact from damage

Reference Information

Product Specification: PS-35135
 Packaging: Bag
 UL File No.: E29179
 Mates With: 35315
 Use With: 35719
 Designed In: Millimeters

Electrical

Voltage: 250V
 Current: 5.0A
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 1000 MΩ min.

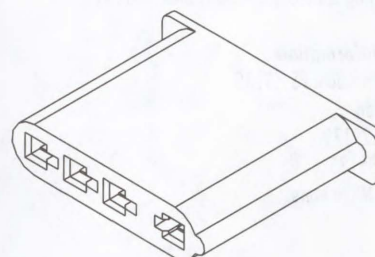
Mechanical

Contact Retention to Housing: 29.4N (6.6 lb) min.
 Mating Force: 39.2N (8.8 lb) max.
 Unmating Force: 4.9N (1.1 lb) min.
 Durability: 30 cycles

Physical

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

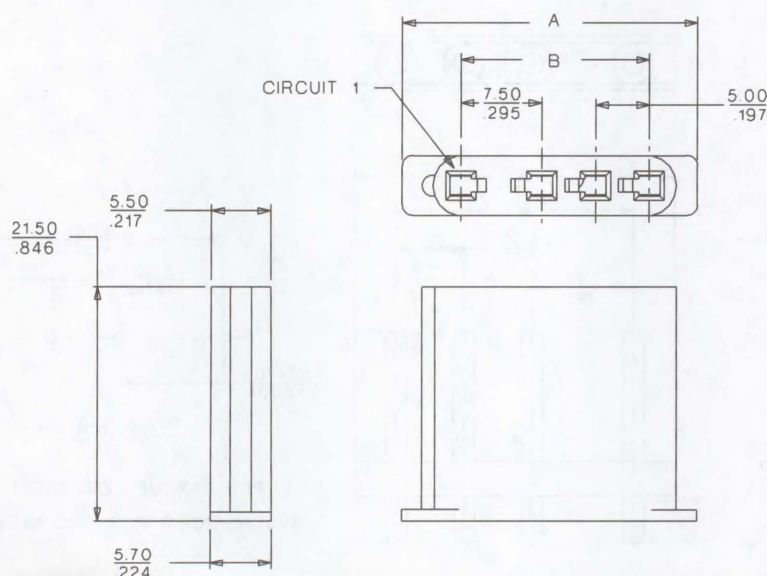
molex® 5.00mm (.197") Pitch Wire-to-Board Housing 35135



Power Connectors

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CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	35135-0210	16.50 (.650)	7.50 (.295)
3	35135-0310	21.50 (.846)	12.50 (.492)
4	35135-0410	26.50 (1.043)	17.50 (.689)
5	35135-0510	31.50 (1.240)	22.50 (.886)
6	35135-0610	36.50 (1.437)	27.50 (1.083)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 6 circuits
- Uses 1.55mm (.061") diameter pins
- Polarization through varied spacing between circuits 1 and 2
- Voids circuits available (contact Molex)
- Other plating options available (contact Molex)

Reference Information

Product Specification: PS-35135
 Packaging: Bag
 UL File No.: E29179
 Mates With: 35135
 Designed In: Millimeters

Electrical

Voltage: 250V
 Current: 5.0A
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 1000 MΩ min.

Mechanical

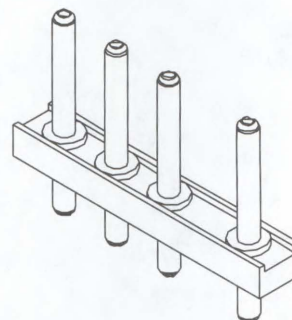
Mating Force: 39.2N (8.8 lb) max.
 Unmating Force: 4.9N (1.1 lb) min.
 Durability: 30 cycles

Physical

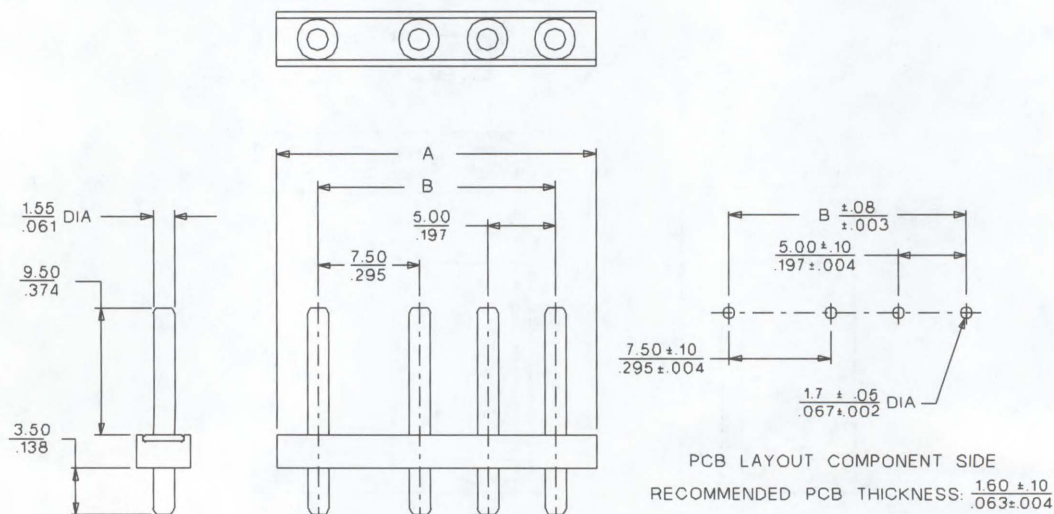
Housing: Natural 6/6 nylon, UL 94V-0
 Contact: Brass
 Plating: Tin
 Operating Temperature: -25 to +85°C

molex® 5.00mm (.197") Pitch Wire-to-Board Header

35315



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	35315-0210	13.50 (.531)	7.50 (.295)
3	35315-0310	18.50 (.728)	12.50 (.492)
4	35315-0410	23.50 (.925)	17.50 (.689)
5	35315-0510	28.50 (1.122)	22.50 (.886)
6	35315-0610	33.50 (1.319)	27.50 (1.083)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Size 6 circuits
- Break-away polarizing keys
- Rectangular pins 0.79 by 1.57mm (.031 by .062")
- High temperature version also available

Reference Information

Product Specification: PS-90331
 Packaging: Tray
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: 90331
 Designed In: Inches

Electrical

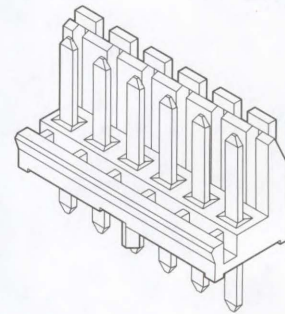
Voltage: 250V
 Current: 4.0A
 Insulation Resistance: 500 MΩ min.
 Dielectric Withstanding Voltage: 1500V AC

Physical

Housing: Black glass-filled polyester, UL 94V-0
 High Temperature—Black PCT, UL 94V-0
 Contact: Copper Alloy
 Plating: Tin
 Operating Temperature: -40 to +105°C

molex® 3.96mm (.156") Pitch Industry Standard Power Supply Header

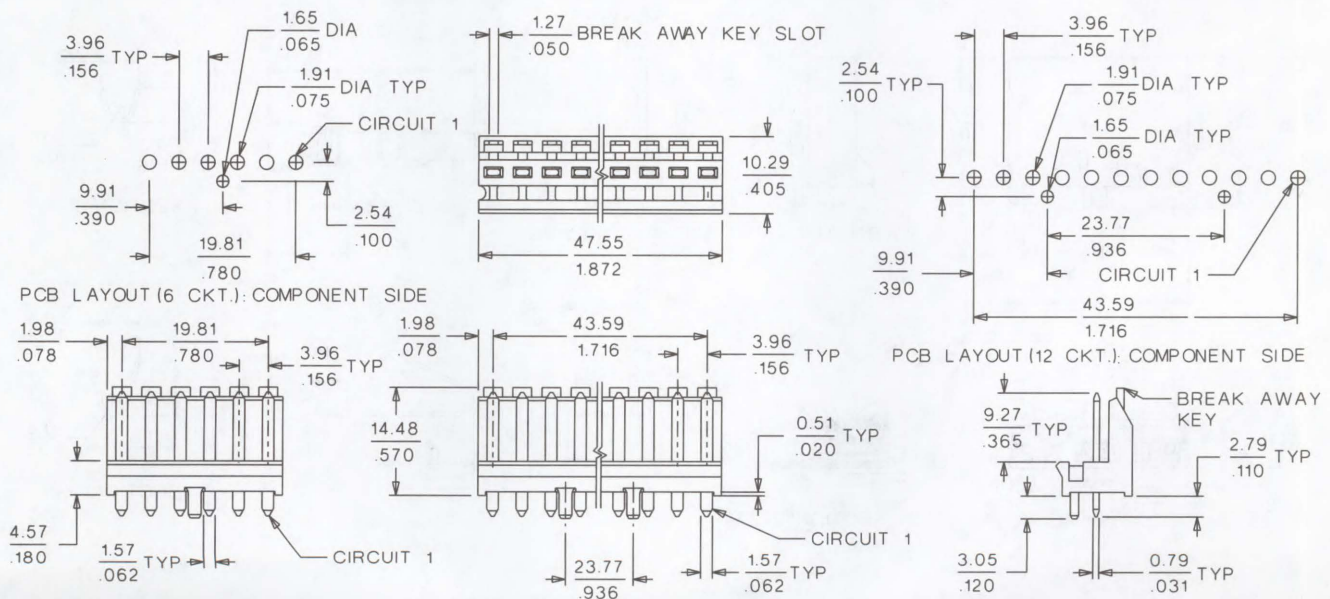
8619



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Standard			
Circuits	Order No.	Keys Removed	Mates with Housing
6	15-48-0106	None	
	15-48-0407	Circuit 1	90331-0002
	15-48-0406	Circuit 2	90331-0007
	15-48-0409	Circuit 3	90331-0008
	15-48-0408	Circuit 4	90331-0003
	15-48-0411	Circuit 5	90331-0009
	15-48-0412	Circuit 6	90331-0010

Surface Mount Compatible		
Circuits	Order No.	Keys Removed
6	15-48-0420	None
	15-48-0421	Circuit 1
	15-48-0422	Circuit 2
	15-48-0423	Circuit 3
	15-48-0424	Circuit 4
	15-48-0425	Circuit 5
	15-48-0426	Circuit 6

FEATURES AND SPECIFICATIONS

Features and Benefits

- 6 circuit standard
- Molded latches lock on header
- Polarizing ribs
- Keying options
- Friction lock

Reference Information

Product Specification: PS-90331
 Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: 8619
 Designed In: Millimeters

Electrical

Voltage: 250V
 Current: 4.0A
 Contact Resistance: 20mΩ max.
 Insulation Resistance: 500 MΩ min.

Mechanical

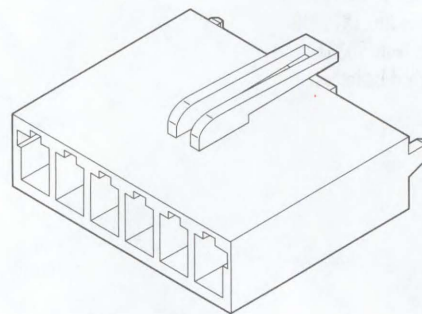
Contact Insertion Force: 336g max.
 Contact Retention to Housing: 14g min.
 Wire Pull-Out Force: 36N min.
 Durability: 25 cycles

Physical

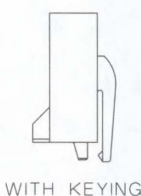
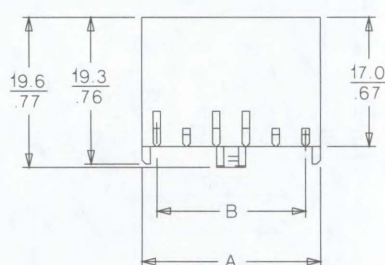
Housing: Natural polyester, UL 94V-0
 Contact: Copper Alloy
 Plating: Tin
 Operating Temperature: -40 to +85°C
 Wire Range: 18 to 24 AWG
 Insulation Diameter: 2.79mm (.110") max.

molex® 3.96mm (.156") Pitch Industry Standard Power Supply Crimp Terminal and Housing

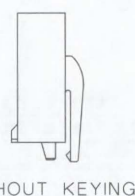
8993/90331



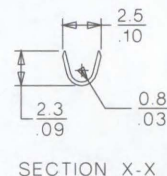
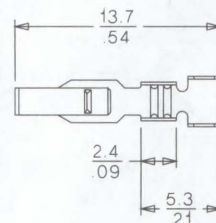
CATALOG DRAWING (FOR REFERENCE ONLY)



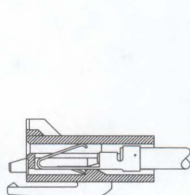
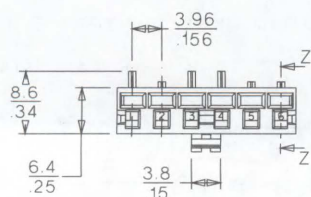
WITH KEYING



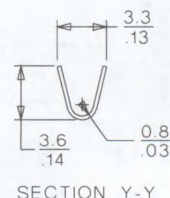
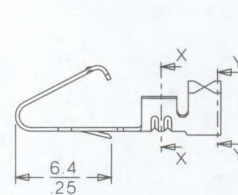
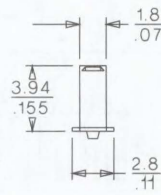
WITHOUT KEYING



SECTION X-X



SECTION Z-Z



SECTION Y-Y

ORDERING INFORMATION AND DIMENSIONS

Housing											
Circuit No.	Order No.		Dimension		Keying Required at Circuit Positions						Middle Locking Peg
	Natural	Black	A	B	1	2	3	4	5	6	
6	90331-X001	90331-X101	23.67 ± 0.13	19.81 ± 0.13	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	90331-X002	90331-X102	23.67 ± 0.13	19.81 ± 0.13	Yes	No	No	No	No	No	Yes
6	90331-X003	90331-X103	23.67 ± 0.13	19.81 ± 0.13	No	No	No	Yes	No	No	Yes
6	90331-X007	90331-X107	23.67 ± 0.13	19.81 ± 0.13	No	Yes	No	No	No	No	Yes
6	90331-X008	90331-X108	23.67 ± 0.13	19.81 ± 0.13	No	No	Yes	No	No	No	Yes
6	90331-X009	90331-X109	23.67 ± 0.13	19.81 ± 0.13	No	No	No	No	Yes	No	Yes
6	90331-X010	90331-X110	23.67 ± 0.13	19.81 ± 0.13	No	No	No	No	No	Yes	Yes

Terminal	
Chain	08-50-0277
Loose	08-50-0276

Material: Replace X with
 0 = Polyester, UL 94V-0
 1 = 6/6 nylon, UL 94V-0
 4 = 6/6 nylon, UL 94V-2

FEATURES AND SPECIFICATIONS

Features and Benefits

- Rast 2.5 crimping technology
- Used for domestic appliances

Reference Information

Product Specification: PS-94539-005

Packaging: Reel

Mates With: 94538 and 94539

Designed In: Millimeters

Electrical

Voltage: 65V

Current: 3.0mA

Contact Resistance: 30mΩ max.

Dielectric Withstanding Voltage: 500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention Force: 3N (0.67 lb) min.

Contact Retention to Housing: 60N (13.49 lb) min.

Mating Force: 6N (1.35 lb) max.

Unmating Force: 30N (6.74 lb) min.

Normal Force: 1N (0.22 lb) min.

Durability: 20 cycles

Physical

Contact: Phosphor Bronze Copper Tin Alloy

Plating: Tin

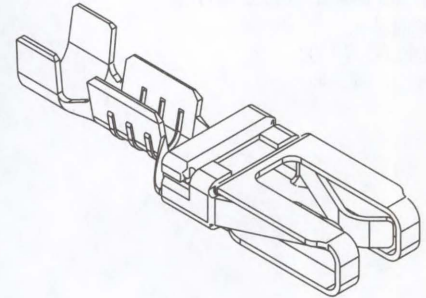
PCB Thickness: 1.50mm (.059")

Operating Temperature: -40 to +85°C



2.50mm (.098") Pitch Wire-to-Board Fork Terminal

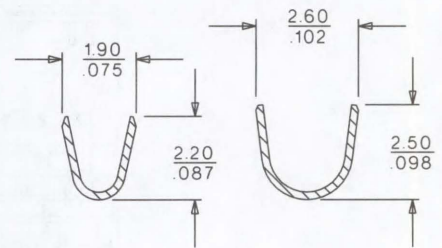
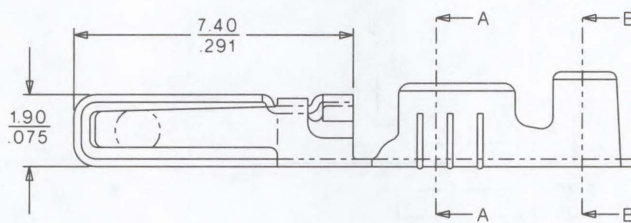
94539



Power Connectors

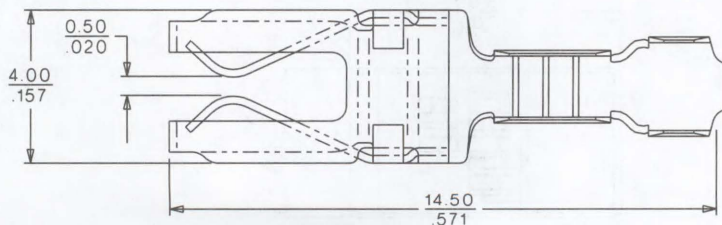
F

CATALOG DRAWING (FOR REFERENCE ONLY)



SECTION A-A

SECTION B-B



ORDERING INFORMATION

Order No.	Wire Range	Insulation Diameter
94539-1000	0.25-0.50mm ²	2.20mm max.

FEATURES AND SPECIFICATIONS

Features and Benefits

- Rast 2.5 crimping technology
- Used for domestic appliances
- Plastic latch
- Polarized

Reference Information

Product Specification: PS-94539-005

Packaging: Box

Use With: 94539-1000

Designed In: Millimeters

Electrical

Voltage: 65V

Current: 3.0mA

Contact Resistance: 30mΩ max.

Dielectric Withstanding Voltage: 500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention Force: 3N (0.67 lb) min.

Contact Retention to Housing: 60N (13.49 lb) min.

Mating Force: 6N (1.35 lb) max.

Unmating Force: 30N (6.74 lb) min.

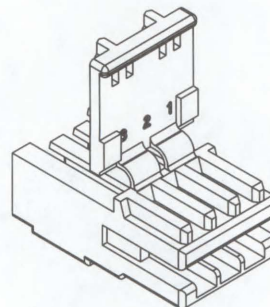
Normal Force: 1N (0.22 lb) min.

Durability: 20 cycles

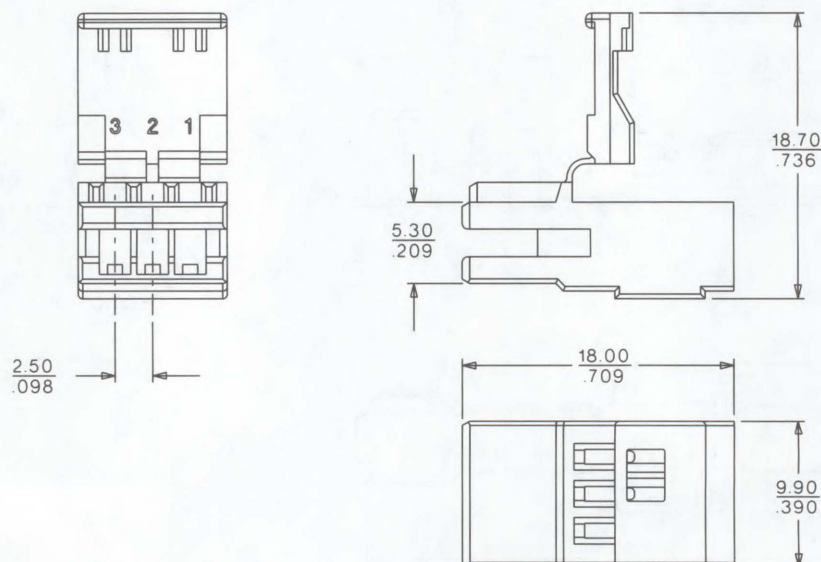
Physical

Housing: PA 66, UL 94V-2

Operating Temperature: -40 to +85°C

molex® 2.50mm (.098") Pitch
Wire-to-Board
Housing
94539
3 Circuit
With Secondary Lock


CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	Color
94539-9003	White
94539-9103	Black
94539-9203	Red
94539-9303	Green

Note: Please contact Molex for 8 circuit version



Specialty Power Connectors Introduction

3.96 (.156) and 6.50mm (.256") Pitch Connectors

This newest series is offered in the industry standard 3.96mm pitch size for both wire-to-wire and wire-to-board applications. The system's female terminal also is used with a similar 6.50mm (.256") pitch wire-to-board series.

Features

- 9A max., 600V
- Long tab-style terminal
- Inner positive lock
- Terminal locking tangs
- Housing side walls
- Housing side ribs
- One-piece locking ears
- Terminal Retainer
- Header snap-fit pegs
- Stand-offs
- UL 94V-0 material

Benefits

- Ideal for white goods applications
- Low insertion force and secure contact
- Easy attachment and secure mating retention
- Guide for retainer
- Protect latch and facilitate mating
- Polarization
- Good spring characteristics and secure panel retention
- Additional terminal retention and easy attachment
- Secure PCB retention
- Prevent flux wicking
- Withstands harsh environments

The connectors shown in this Specialty Connector section offer the high current capabilities used in power applications, along with special features to meet unique industry needs. Included here are new wire-to-wire and wire-to-board connectors with Terminal Retainer features. These connectors utilize a flat male tab and female receptacle contact system that offers low insertion force and rugged features for low-circuit size applications in the white goods, automotive and other harsh environments.

Power Connectors

F

1.80mm (.070") Pitch Wire-to-Wire Connectors

Molex's line of 1.80mm (.070") wire-to-wire connectors are designed around the system's industry standard .070" width male "tab" style terminal. This terminal system has gained wide usage in the white goods and automotive markets, particularly in the Far East

Features

- 15A max., 300V
- Wide 1.80mm (.070") male tab contact
- Low insertion force
- Dual-row system
- TPA Secondary Lock
- Housing locking terminal
- Terminal dimples and housing polarization features
- Positive lock
- Spring-style mounting ears
- UL 94V-0 material

Benefits

- Meets white goods, automotive and other power requirements
- Enables high current carrying capability
- Easy mating/unmating even for larger circuit sizes
- Provides good heat dissipation and lower engagement forces than 3-rows
- Ensures high reliability terminal seating and contact
- Prevents terminal deformation
- Prevents incorrect terminal insertion and mis-mating
- Secure mating retention
- Prevent breakage
- Withstands harsh environments

FEATURES AND SPECIFICATIONS

Features and Benefits

- Low insertion force
- Housing-locking feature avoids deformation of terminal
- Fully enclosed box design protects contact area from damage and provides 3 points of contact
- Accepts wide wire range (14 to 22 AWG)
- Strip length: 4.0 to 4.5mm

Reference Information

Product Specification: PS-35150

Packaging: Reel

Tooling Information: Semi-automatic crimping press and applicator

Mates With: 35745 and 35747 male terminals

Use With: 35150, 35151, 35180 and 35181 housings

Designed In: Millimeters

Electrical

Voltage: 300V

Current:

AWG	14	16	18	20	22
Amperes	15.0	10.0	7.0	5.0	4.0

Electrical (continued)

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 100MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.

Contact Retention to Housing: 4.0kgf min.

Wire Pull-Out Force: 14AWG—15.0kgf min.

Mating Force: 1.6kgf max.

Unmating Force: 0.5kgf min.

Durability: 30 cycles

Physical

Contact: Copper Alloy

Plating: Tin

Insulation Diameter: See Table

Strip Length: 4.00 to 4.50mm (.157 to .177")

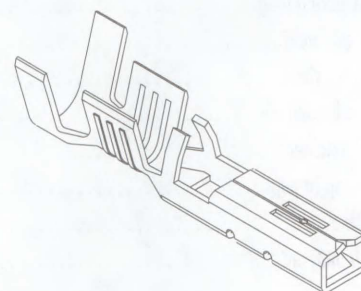
Wire Range: See Table



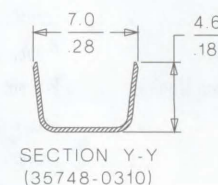
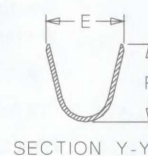
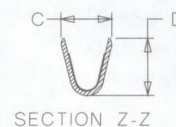
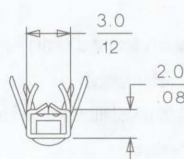
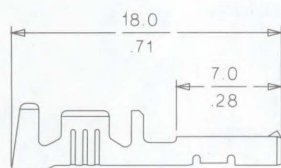
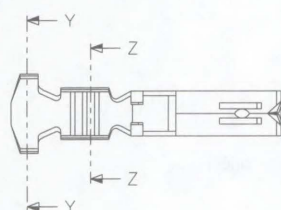
1.80mm (.070") Width Wire-to-Wire Terminal

35748

Female, Crimp



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Dimension				Wire Range AWG	Insulation Range (max.)
	C	D	E	F		
35748-0110	2.85 (.112)	2.80 (.110)	4.20 (.165)	4.00 (.157)	20-22	2.70 (.106)
35748-0210	3.40 (.134)	3.80 (.150)	5.20 (.205)	4.80 (.189)	14-18	3.40 (.134)
35748-0310	4.00 (.157)	3.60 (.142)			18+18, 20+20	6.00 (.236)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Low insertion force
- Housing-locking feature avoids deformation of terminal
- Fully enclosed box design protects contact area from damage and provides 3 points of contact
- Accepts wide wire range (14 to 22 AWG)
- Strip length: 4.0 to 4.8mm

Reference Information

Product Specification: PS-35150

Packaging: Reel

Tooling Information: Semi-automatic crimping press and applicator

Mates With: 35745 and 35747 male terminals

Use With: 35150, 35151, 35180 and 35181 housings

Designed In: Millimeters

Electrical

Voltage: 300V

Current:

AWG	14	16	18	20	22
Amperes	15.0	10.0	7.0	5.0	4.0

Electrical (continued)

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 100MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.

Contact Retention to Housing: 4.0kgf min.

Wire Pull-Out Force: 14AWG—15.0kgf min.

Mating Force: 1.6kgf max.

Unmating Force: 0.5kgf min.

Durability: 30 cycles

Physical

Contact: Copper Alloy

Plating: Tin

Insulation Diameter: See Table

Strip Length: 4.00 to 4.50mm (.157 to .177")

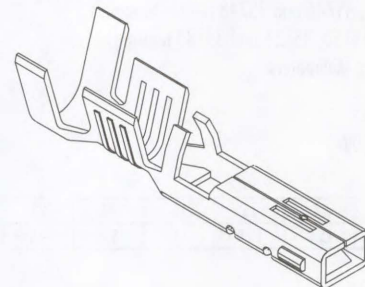
Wire Range: See Table



1.80mm (.070") Width Wire-to-Wire Terminal

35746

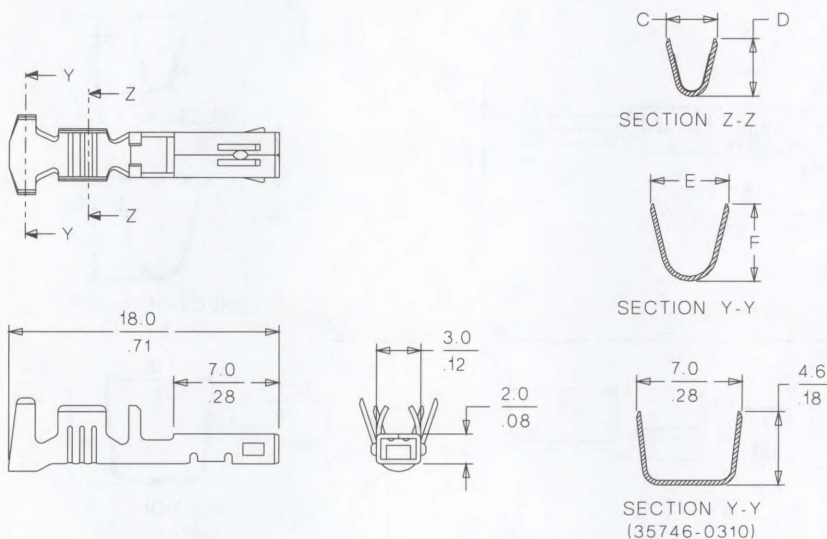
Female, Crimp With Polarizing Dimple



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Dimension				Wire Range AWG	Insulation Range (max.)
	C	D	E	F		
35746-0110	2.85 (.112)	2.80 (.110)	4.20 (.165)	4.00 (.157)	20-22	2.70 (.106)
35746-0210	3.40 (.134)	3.80 (.150)	5.20 (.205)	4.80 (.189)	14-18	3.40 (.134)
35746-0310	4.00 (.157)	3.60 (.142)			18+18, 20+20	6.00 (.236)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Wide-area tab enables up to 15A
- Low insertion force
- Housing-locking feature avoids deformation of terminal
- Accepts wide wire range (14 to 22 AWG)
- Strip length: 4.0 to 4.5mm

Reference Information

Product Specification: PS-35150

Packaging: Reel

Tooling Information: Semi-automatic crimping press and applicator

Mates With: 35746 and 35748 female terminals

Use With: 35150, 35151 and 35180 housings

Designed In: Millimeters

Electrical

Voltage: 300V

Current:

AWG	14	16	18	20	22
Amperes	15.0	10.0	7.0	5.0	4.0

Electrical (continued)

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 100MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.

Contact Retention to Housing: 4.0kgf min.

Wire Pull-Out Force: 14AWG—15.0kgf min.

Mating Force: 1.6kgf max.

Unmating Force: 0.5kgf min.

Durability: 30 cycles

Physical

Contact: Copper Alloy

Plating: Tin

Insulation Diameter: See Table

Strip Length: 4.00 to 4.50mm (.157 to .177")

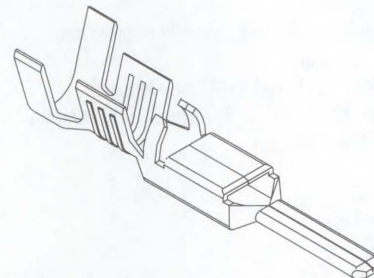
Wire Range: See Table



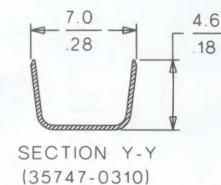
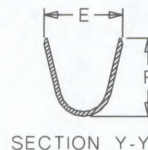
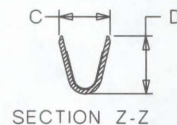
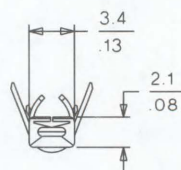
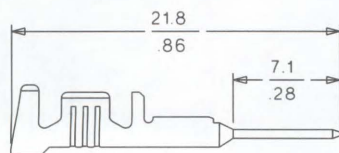
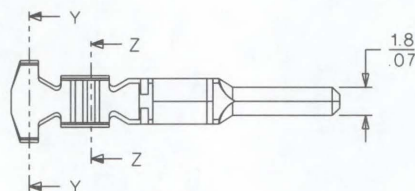
1.80mm (.070") Width Wire-to-Wire Terminal

35747

Male, Crimp



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Dimension				Wire Range AWG	Insulation Range (max.)
	C	D	E	F		
35747-0110	2.85 (.112)	2.80 (.110)	4.20 (.165)	4.00 (.157)	20-22	2.70 (.106)
35747-0210	3.40 (.134)	3.80 (.150)	5.20 (.205)	4.80 (.189)	14-18	3.40 (.134)
35747-0310	4.00 (.157)	3.60 (.142)			18+18, 20+20	6.00 (.236)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Low insertion force
- Housing-locking feature avoids deformation of terminal
- Accepts wide wire range (14 to 22 AWG)
- Strip length: 4.0 to 4.5mm

Reference Information

Product Specification: PS-35150

Packaging: Reel

Tooling Information: Semi-automatic crimping press and applicator

Mates With: 35746 and 35748 female terminals

Use With: 35150, 35151, 35180 and 35181 housings

Designed In: Millimeters

Electrical

Voltage: 300V

Current:

AWG	14	16	18	20	22
Amperes	15.0	10.0	7.0	5.0	4.0

Electrical (continued)

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 100MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.

Contact Retention to Housing: 4.0kgf min.

Wire Pull-Out Force: 14AWG—15.0kgf min.

Mating Force: 1.6kgf max.

Unmating Force: 0.5kgf min.

Durability: 30 cycles

Physical

Contact: Copper Alloy

Plating: Tin

Insulation Diameter: See Table

Strip Length: 4.00 to 4.50mm (.157 to .177")

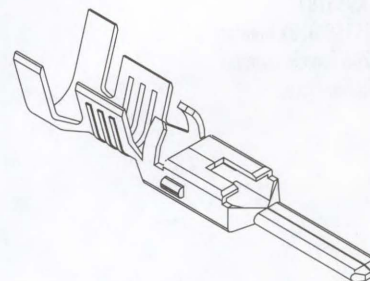
Wire Range: See Table



1.80mm (.070") Width Wire-to-Wire Terminal

35745

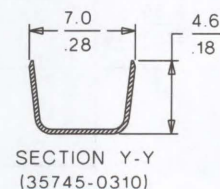
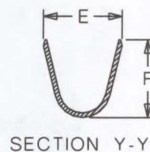
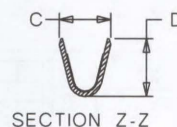
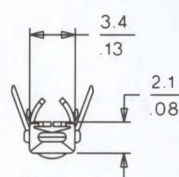
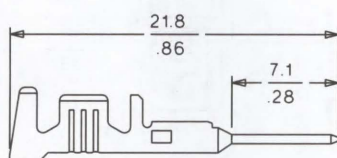
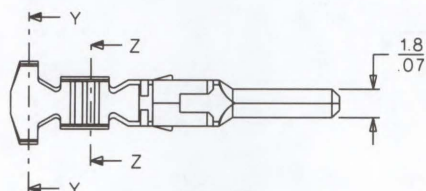
Male, Crimp With Polarizing Dimple



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Dimension				Wire Range AWG	Insulation Range (max.)
	C	D	E	F		
35745-0110	2.85 (.112)	2.80 (.110)	4.20 (.165)	4.00 (.157)	20-22	2.70 (.106)
35745-0210	3.40 (.134)	3.80 (.150)	5.20 (.205)	4.80 (.189)	14-18	3.40 (.134)
35745-0310	4.00 (.157)	3.60 (.142)			18+18, 20+20	6.00 (.236)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Positive lock ensures secure mating
- Polarization prevents mismatching
- Accepts 35150-029X TPA secondary lock
- Durable housing withstands harsh environments

Reference Information

Product Specification: PS-35150
 Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 TUV File No.: R9551811
 Mates With: 35150-010X housing
 Use With: 35746 female terminal
 Designed In: Millimeters

Electrical

Voltage: 300V
 Current: 15A max.
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 100 MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.
 Contact Retention to Housing: 4.0kgf min.
 Mating Force: 1.6kgf max.
 Unmating Force: 0.5kgf min.
 Durability: 30 cycles

Physical

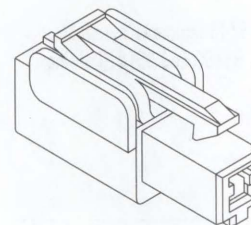
Housing: Polyester, UL 94V-0
 Operating Temperature: -40 to +120°C



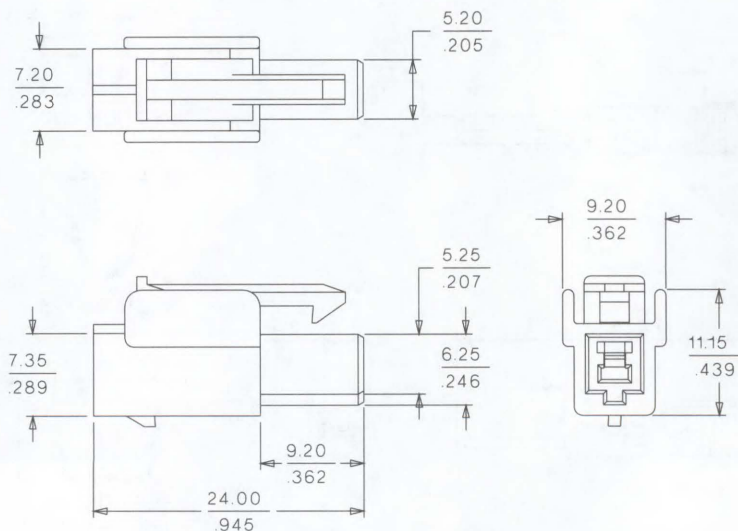
1.80mm (.070") Width Wire-to-Wire Receptacle

35151

1 Circuit



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	Color
35151-0110	Natural
35151-0114	Blue

FEATURES AND SPECIFICATIONS

Features and Benefits

- Positive lock ensures secure mating
- Polarization prevents mismatching
- Accepts 35182-019X TPA secondary lock
- Durable housing withstands harsh environments

Reference Information

Product Specification: PS-35150

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV File No.: R9551811

Mates With: 35151-011X housing

Use With: 35745 male terminal

Designed In: Millimeters

Electrical

Voltage: 300V

Current: 15A max.

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 100 MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.

Contact Retention to Housing: 4.0kgf min.

Mating Force: 1.6kgf max.

Unmating Force: 0.5kgf min.

Durability: 30 cycles

Physical

Housing: Polyester, UL 94V-0

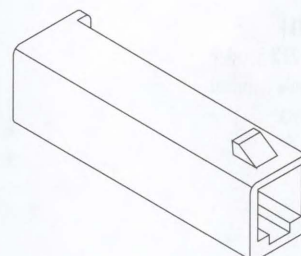
Operating Temperature: -40 to +120°C



**1.80mm (.070") Width
Wire-to-Wire
Plug**

35150

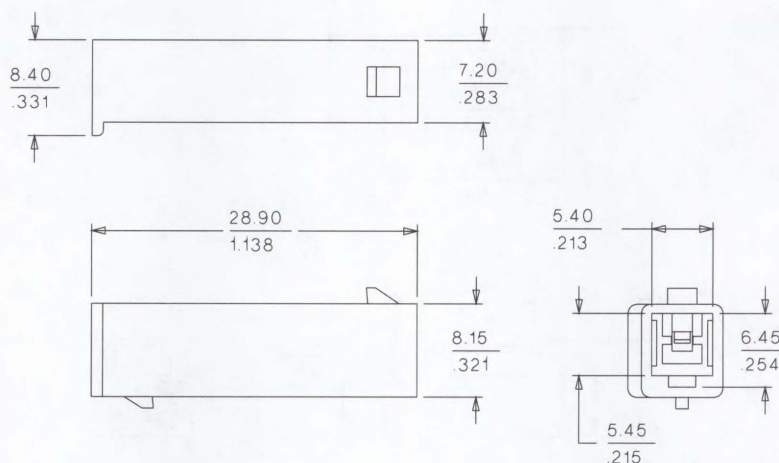
1 Circuit



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	Color
35150-0100	Natural
35150-0104	Blue

FEATURES AND SPECIFICATIONS

Features and Benefits

- Positive lock ensures secure mating
- Molded-in walls protect latching feature
- Polarization prevents mismatching
- Accepts 35150-029X TPA secondary lock
- Durable housing withstands harsh environments

Reference Information

Product Specification: PS-35150
 Packaging: Bag
 UL File No.: E29179
 TUV File No.: R9551811
 Mates With: 35150-021X housing
 Use With: 35746 female terminal
 Designed In: Millimeters

Electrical

Voltage: 300V
 Current: 15A
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 100 MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.
 Contact Retention to Housing: 4.0kgf min.
 Mating Force: 2.4kgf max.
 Unmating Force: 0.8kgf min.
 Durability: 30 cycles

Physical

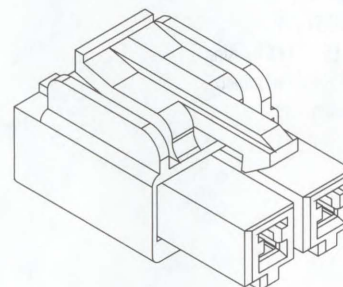
Housing: Polyester, UL 94V-0
 Operating Temperature: -40 to +120°C



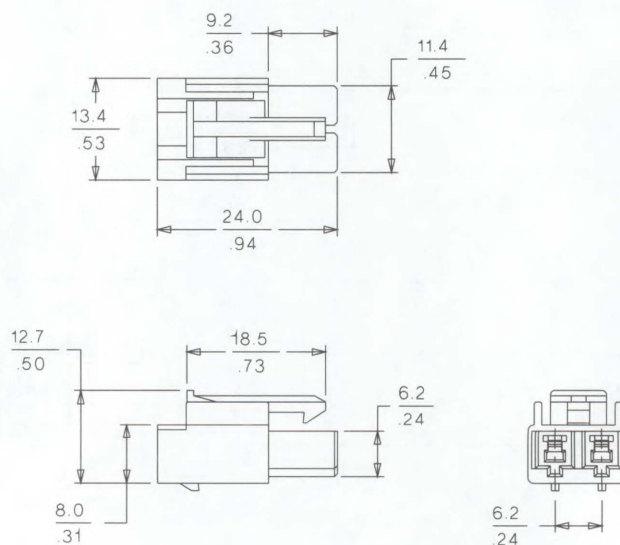
1.80mm (.070") Width
Wire-to-Wire
Receptacle

35151

2 Circuits



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	Color
35151-0210	Natural
35151-0214	Blue

FEATURES AND SPECIFICATIONS

Features and Benefits

- Positive lock ensures secure mating
- Optional mounting ears snap firmly into place
- Polarization prevents mismating
- Accepts 35150-029X TPA secondary lock
- Durable housing withstands harsh environments

Reference Information

Product Specification: PS-35150

Packaging: Bag

UL File No.: E29179

TUV File No.: R9551811

Mates With: 35151-021X housing

Use With: 35745 male terminal

Designed In: Millimeters

Electrical

Voltage: 300V

Current: 15A

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 100 MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.

Contact Retention to Housing: 4.0kgf min.

Mating Force: 2.4kgf max.

Unmating Force: 0.8kgf min.

Durability: 30 cycles

Physical

Housing: Polyester, UL 94V-0

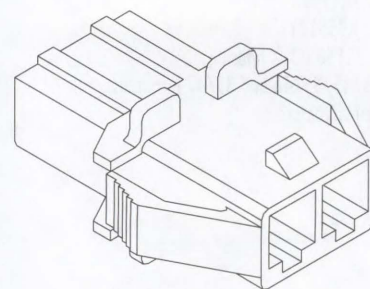
Operating Temperature: -40 to +120°C



1.80mm (.070") Width Wire-to-Wire Plug

35150

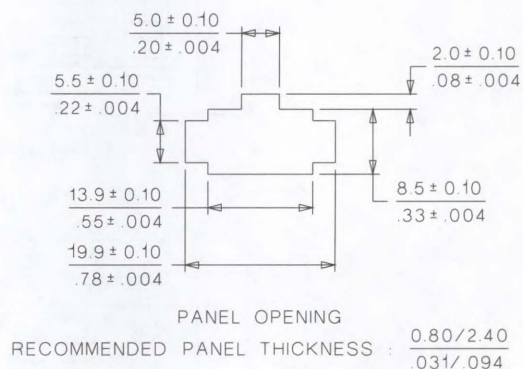
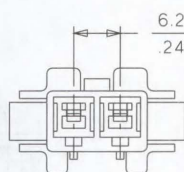
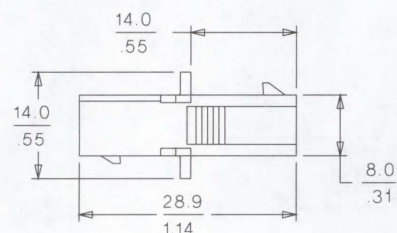
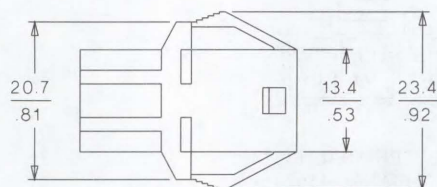
2 Circuits



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	Color
35150-0210	Natural
35150-0214	Blue

Note: Contact Molex for version without mounting ear

FEATURES AND SPECIFICATIONS

Features and Benefits

- Hybrid connector accommodates 3 types of terminals
- Positive lock ensures secure mating
- Polarization prevents mismatching
- Accepts 35150-039X TPA secondary lock

Reference Information

Product Specification: PS-35150

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV File No.: R9551811

Mates With: 35150-031X housing

Use With: 35745, 35746 and 35747 terminals

Designed In: Millimeters

Electrical

Voltage: 300V

Current: 15A max.

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 100 MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.

Contact Retention to Housing: 4.0kgf min.

Mating Force: 4.2kgf max.

Unmating Force: 1.2kgf min.

Durability: 30 cycles

Physical

Housing: Polyester, UL 94V-0

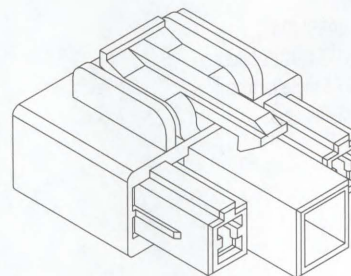
Operating Temperature: -40 to +120°C



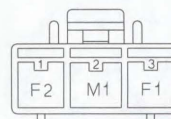
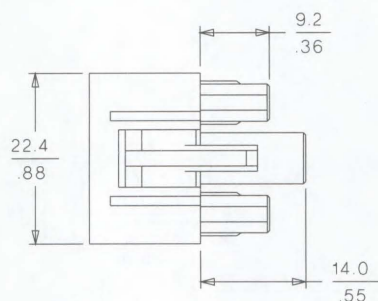
1.80mm (.070") Width Wire-to-Wire Hybrid Receptacle

35151

3 Circuits

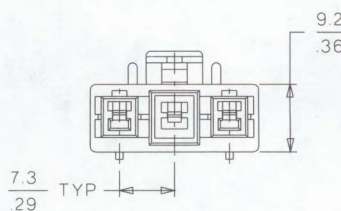
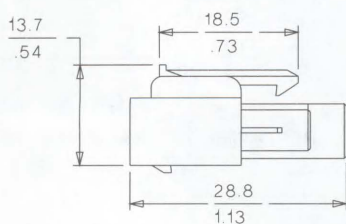


CATALOG DRAWING (FOR REFERENCE ONLY)



F1 : FEMALE TERMINAL (35748)
M1 : MALE TERMINAL (35745)
F2 : FEMALE TERMINAL (35746)

TERMINAL PATTERN



ORDERING INFORMATION

Order No.	Color
35151-0310	Natural
35151-0314	Blue

FEATURES AND SPECIFICATIONS

Features and Benefits

- Hybrid connector accommodates 3 types of terminals
- Positive lock ensures secure mating
- Optional mounting ears snap firmly into place
- Polarization prevents mismatching
- Accepts 35150-039X TPA secondary lock

Reference Information

Product Specification: PS-35150
 Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 TUV File No.: R9551811
 Mates With: 35151-031X housing
 Use With: 35745, 35746 and 35747 terminals
 Designed In: Millimeters

Electrical

Voltage: 300V
 Current: 15A
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 100 MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.
 Contact Retention to Housing: 4.0kgf min.
 Mating Force: 4.2kgf max.
 Unmating Force: 1.2kgf min.
 Durability: 30 cycles

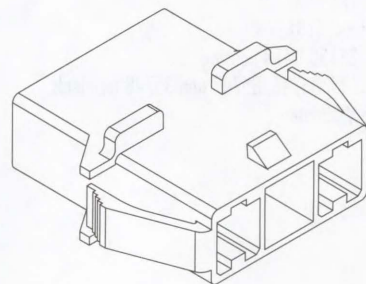
Physical

Housing: Polyester, UL 94V-0
 Operating Temperature: -40 to +120°C

molex® 1.80mm (.070") Width Wire-to-Wire Hybrid Plug

35150

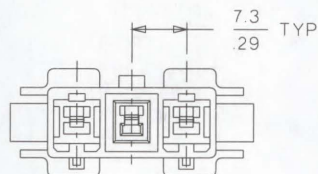
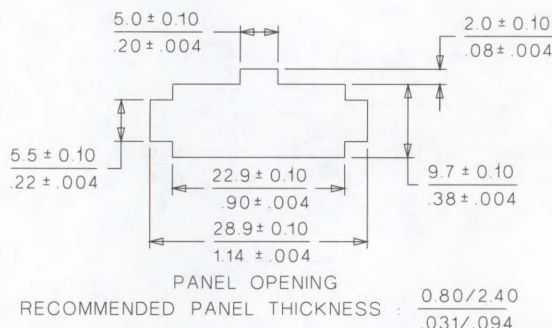
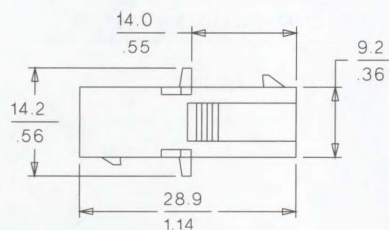
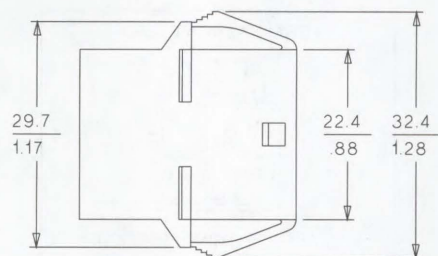
3 Circuits



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



M1 : MALE TERMINAL (35745)
 F1 : FEMALE TERMINAL (35746)
 M2 : MALE TERMINAL (35747)

TERMINAL PATTERN

ORDERING INFORMATION

Order No.	Color
35150-0310	Natural
35150-0314	Blue

Note: Contact Molex for version without mounting ear

FEATURES AND SPECIFICATIONS

Features and Benefits

- Hybrid connector accommodates 4 types of terminals
- Positive lock ensures secure mating
- Polarization prevents mismating
- Accepts 35150-029X TPA secondary lock

Reference Information

Product Specification: PS-35150

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV File No.: R9551811

Mates With: 35150-041X housing

Use With: 35745, 35746, 35747 and 35748 terminals

Designed In: Millimeters

Electrical

Voltage: 300V

Current: 15A max.

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 100 MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.

Contact Retention to Housing: 4.0kgf min.

Mating Force: 5.0kgf max.

Unmating Force: 1.5kgf min.

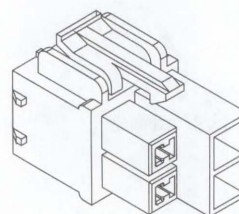
Durability: 30 cycles

Physical

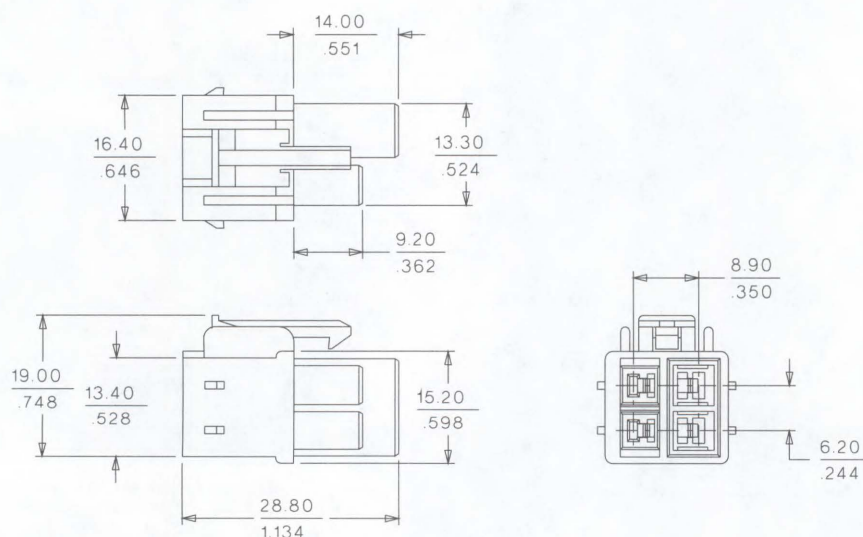
Housing: Polyester, UL 94V-0

Operating Temperature: -40 to +120°C

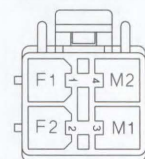
molex® 1.80mm (.070") Width Wire-to-Wire Hybrid Receptacle

35151**4 Circuits**

CATALOG DRAWING (FOR REFERENCE ONLY)



TERMINAL PATTERN



M1: MALE TERMINAL(35745)
M2: MALE TERMINAL(35747)
F1: FEMALE TERMINAL(35746)
F2: FEMALE TERMINAL(35748)

ORDERING INFORMATION

Order No.	Color
35151-0410	Natural
35151-0414	Blue

FEATURES AND SPECIFICATIONS

Features and Benefits

- Hybrid connector accommodates 4 types of terminals
- Positive lock ensures secure mating
- Optional mounting ears snap firmly into place
- Polarization prevents mismatching
- Accepts 35150-029X TPA secondary lock

Reference Information

Product Specification: PS-35150

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV File No.: R9551811

Mates With: 35151-041X housing

Use With: 35745, 35746, 35747 and 35748 terminals

Designed In: Millimeters

Electrical

Voltage: 300V

Current: 15A max.

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 100 MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.

Contact Retention to Housing: 4.0kgf min.

Mating Force: 5.0kgf max.

Unmating Force: 1.5kgf min.

Durability: 30 cycles

Physical

Housing: Polyester, UL 94V-0

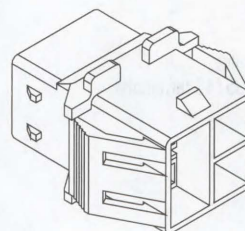
Operating Temperature: -40 to +120°C



1.80mm (.070") Width Wire-to-Wire Hybrid Plug

35150

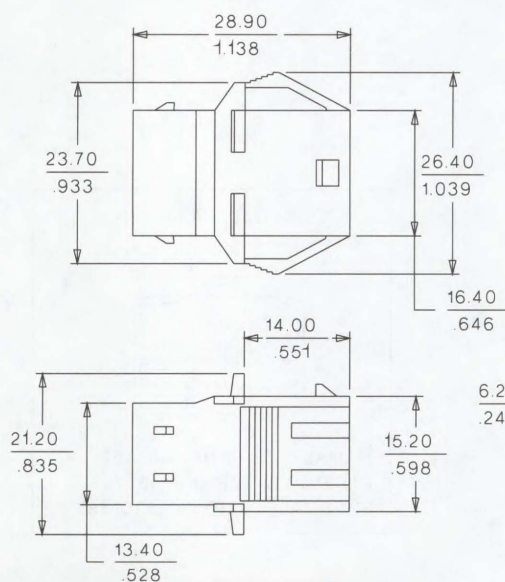
4 Circuits



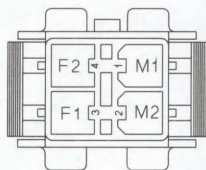
Power Connectors

F

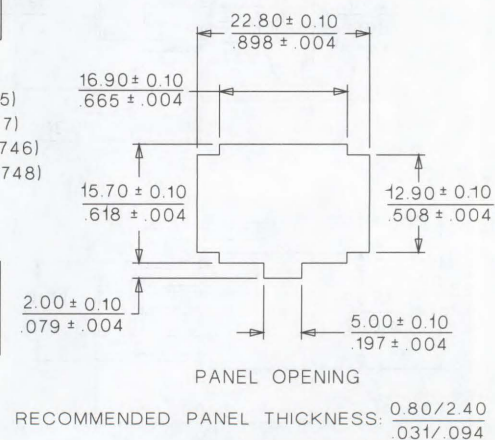
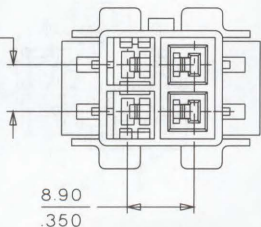
CATALOG DRAWING (FOR REFERENCE ONLY)



TERMINAL PATTERN



M1: MALE TERMINAL (35745)
M2: MALE TERMINAL (35747)
F1: FEMALE TERMINAL (35746)
F2: FEMALE TERMINAL (35748)



ORDERING INFORMATION

Order No.	Color
35150-0410	Natural
35150-0414	Blue

Note: Contact Molex for version without mounting ear

FEATURES AND SPECIFICATIONS

Features and Benefits

- Hybrid connector accommodates 3 types of terminals
- Positive lock ensures secure mating
- Optional mounting ears snap firmly into place
- Polarization prevents mismatching
- Accepts 35150-039X TPA secondary lock

Reference Information

Product Specification: PS-35150
 Packaging: Bag
 UL File No.: E29179
 TUV File No.: R9551811
 Mates With: 35150-061X housing
 Use With: 35745, 35746 and 35748 terminals
 Designed In: Millimeters

Electrical

Voltage: 300V
 Current: 15A max.
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 100 MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.
 Contact Retention to Housing: 4.0kgf min.
 Mating Force: 6.2kgf max.
 Unmating Force: 2.4kgf min.
 Durability: 30 cycles

Physical

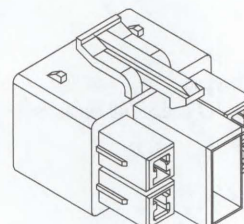
Housing: Polyester, UL 94V-0
 Operating Temperature: -40 to +120°C



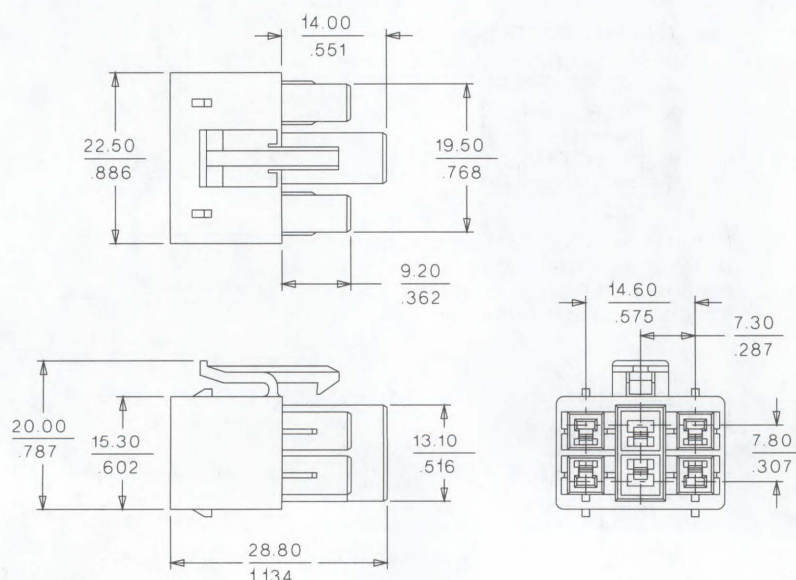
1.80mm (.070") Width Wire-to-Wire Hybrid Receptacle

35151

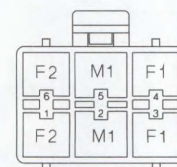
6 Circuits



CATALOG DRAWING (FOR REFERENCE ONLY)



TERMINAL PATTERN



M1: MALE TERMINAL(35745)
 F1: FEMALE TERMINAL(35746)
 F2: FEMALE TERMINAL(35748)

ORDERING INFORMATION

Order No.	Color
35151-0610	Natural
35151-0614	Blue

FEATURES AND SPECIFICATIONS

Features and Benefits

- Hybrid connector accommodates 3 types of terminals
- Positive lock ensures secure mating
- Polarization prevents mismatching
- Accepts 35150-039X TPA secondary lock

Reference Information

Product Specification: PS-35150

Packaging: Bag

UL File No.: E29179

TUV File No.: R9551811

Mates With: 35151-061X housing

Use With: 35745, 35746 and 35747 terminals

Designed In: Millimeters

Electrical

Voltage: 300V

Current: 15A max.

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 100 MΩ min.

Mechanical

Contact Insertion Force: 2.5kgf max.

Contact Retention to Housing: 4.0kgf min.

Mating Force: 6.2kgf max.

Unmating Force: 2.4kgf min.

Durability: 30 cycles

Physical

Housing: Polyester, UL 94V-0

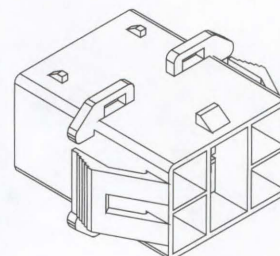
Operating Temperature: -40 to +120°C



1.80mm (.070") Width Wire-to-Wire Hybrid Plug

35150

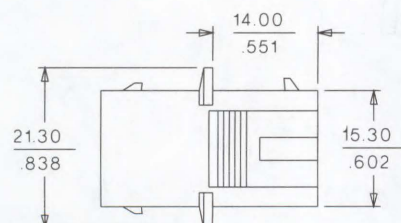
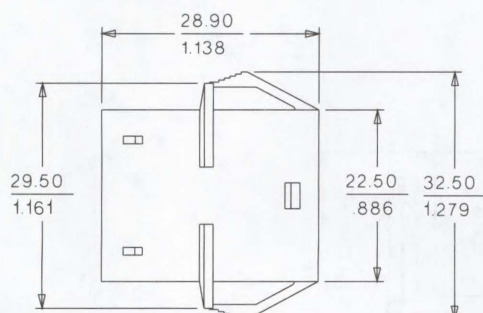
6 Circuits



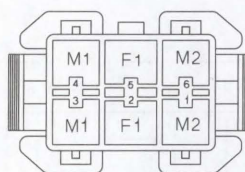
Power Connectors

F

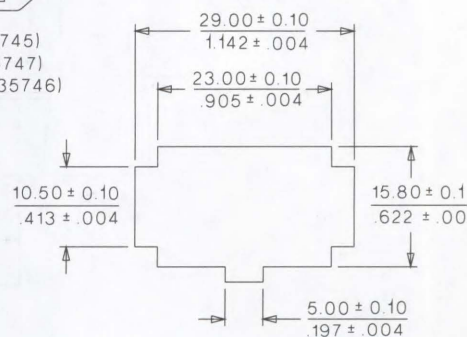
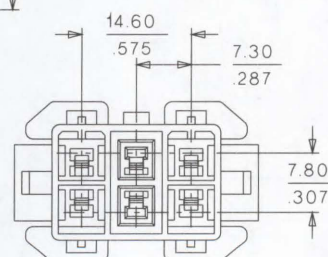
CATALOG DRAWING (FOR REFERENCE ONLY)



TERMINAL PATTERN



M1: MALE TERMINAL (35745)
M2: MALE TERMINAL (35747)
F1: FEMALE TERMINAL (35746)



ORDERING INFORMATION

Order No.	Color
35150-0610	Natural
35150-0614	Blue

Note: Contact Molex for version without mounting ear

FEATURES AND SPECIFICATIONS

Features and Benefits

- TPA (Terminal Positioning Assurance) secondary lock ensures that terminals are fully inserted during harness assembly
- Prevents wire pull-out and adds additional stability during mating
- An audible "click" lets the operator know when the TPA lock is inserted

Reference Information

Product Specification: PS-35150
 Packaging: Bag
 Use With: 35150 and 35151 housings
 Designed In: Millimeters

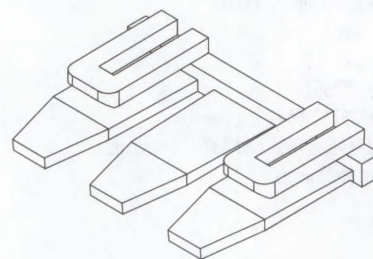
Physical

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

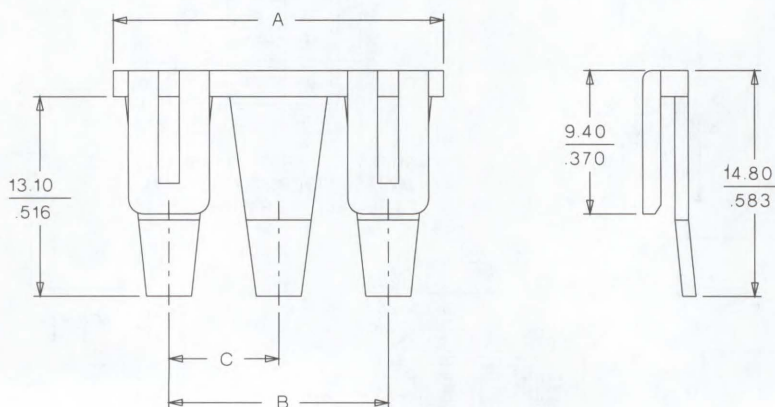


1.80mm (.070") Width Wire-to-Wire TPA Secondary Lock

35150/35182



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Color	Dimension		
			A	B	C
1	35182-0190	Natural	6.80 (.268)		
	35182-0192	Red			
	35182-0193	Yellow			
	35182-0194	Blue			
2	35150-0290	Natural	11.80 (.465)	6.20 (.244)	6.20 (.244)
	35150-0292	Red			
	35150-0293	Yellow			
	35150-0294	Blue			
3	35150-0390	Natural	22.00 (.866)	14.60 (.575)	7.30 (.287)
	35150-0392	Red			
	35150-0393	Yellow			
	35150-0394	Blue			

FEATURES AND SPECIFICATIONS

Features and Benefits

- Locking tang provides guide for retainer
- Housing lance holds terminal firmly in place

Reference Information

Packaging: Reel or bag
Use With: 51138 and 51142
Designed In: Millimeters

Electrical

Voltage: 600V
Current: 9.0A

Physical

Contact: Copper Alloy
Plating: Tin

Wire Range:

50597—16 to 22 AWG

50598—20 to 26 AWG

Insulation Range:

50597—2.00 to 3.40mm dia.

Note: When using retainer—2.50mm dia. max.

50598—1.25 to 2.35mm dia.

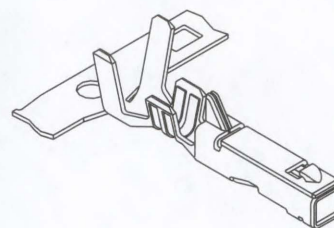
Strip Length: 2.70 to 3.30mm



**3.96 (.156) and
6.50mm (.256") Pitch
Wire-to-Wire and
Wire-to-Board
Crimp Terminal**

50597/50598

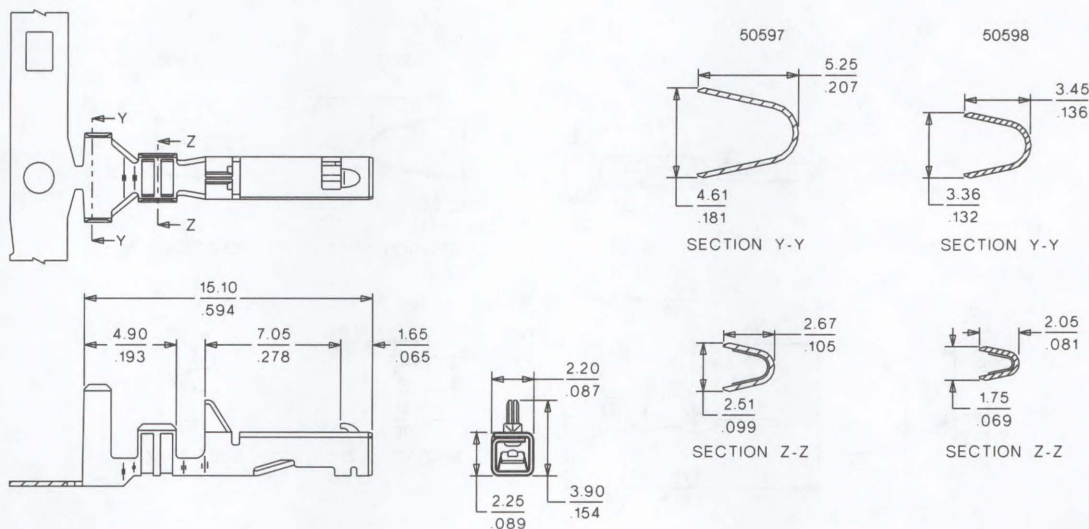
Female



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	Terminal
50597-8000	Reel
50598-8000	
50597-8100	Bag
50598-8100	

FEATURES AND SPECIFICATIONS

Features and Benefits

- Long tab-style terminal provides low insertion force and secure contact
- Locking tang provides guide for retainer

Reference Information

Packaging: Reel or bag
 Use With: 51139
 Designed In: Millimeters

Electrical

Voltage: 600V
 Current: 9.0A

Physical

Contact: Copper Alloy

Plating: Tin

Wire Range:

50599—16 to 22 AWG

50600—20 to 26 AWG

Insulation Range:

50599—2.00 to 3.40mm dia.

Note: When using retainer—2.50mm dia. max.

50600—1.25 to 2.35mm dia.

Strip Length: 2.70 to 3.30mm



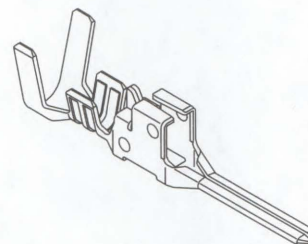
3.96mm (.156") Pitch

Wire-to-Wire

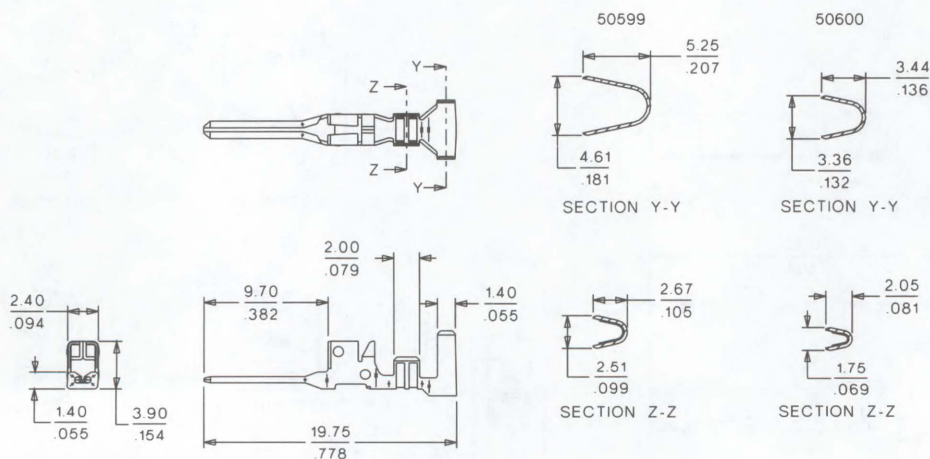
Crimp Terminal

50599/50600

Male



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	Terminal
50599-8000	Reel
50600-8000	
50599-8100	Bag
50600-8100	

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2, 6 and 8 circuits
- Inner positive lock provides easy attachment and secure mating retention
- Side walls protect latch and facilitate mating
- Side ribs provide polarization

Reference Information

Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: 51139, 53720 and 53727
 Use With: 50597 and 50598
 Applicable Retainer: 51140
 Designed In: Millimeters

Electrical

Voltage: 600V
 Current: 9.0A
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC/1 min.
 Insulation Resistance: 1000 MΩ min.

Physical

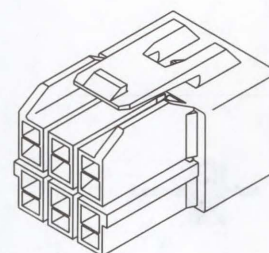
Housing: PBTP, UL 94V-0
 Operating Temperature: -40 to +105°C



3.96mm (.156") Pitch Wire-to-Wire and Wire-to-Board Receptacle

51138

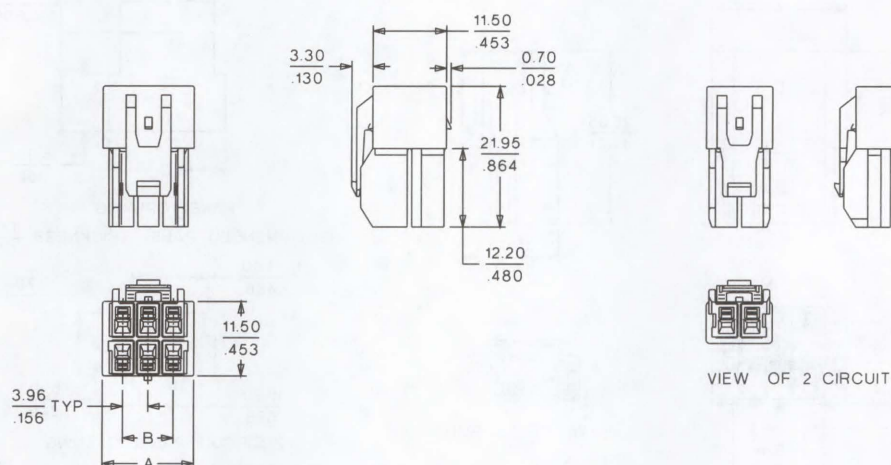
Dual Row



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	51138-0200	10.30 (.406)	3.96 (.156)
6	51138-0600	14.26 (.561)	7.92 (.312)
8	51138-0800	18.22 (.717)	11.88 (.468)

FEATURES AND SPECIFICATIONS

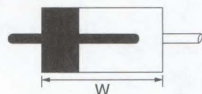
Features and Benefits

- Sizes 2 and 6 circuits
- Panel mount type
- Inner positive lock provides easy attachment and secure mating retention
- One-piece locking ears provide good spring characteristics and secure panel retention

Reference Information

Packaging: Bag
 Mates With: 51138
 Use With: 50599 and 50600
 Applicable Retainer: 51140
 Designed In: Millimeters

Mating Dimensions
 51139/50599 or 50600
 51138/50597 or 50598/51140
 W=41.8mm



Electrical

Voltage: 600V
 Current: 9.0A
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC/1 min.
 Insulation Resistance: 1000 MΩ min.

Physical

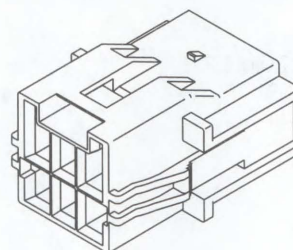
Housing: PBTP, UL 94V-0
 Operating Temperature: -40 to +105°C



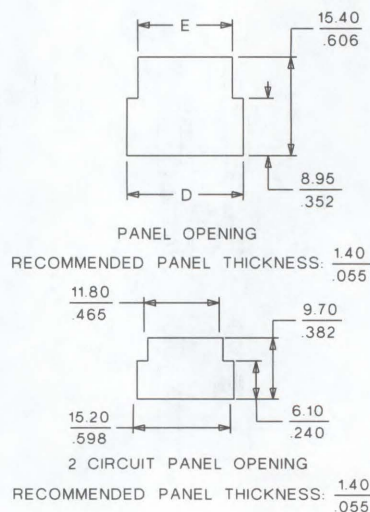
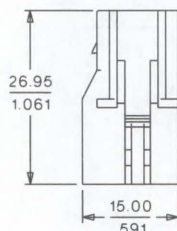
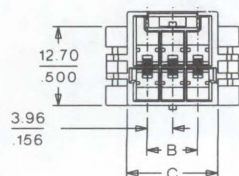
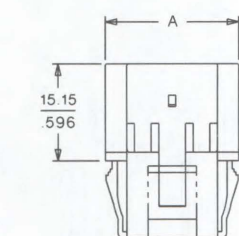
3.96mm (.156") Pitch Wire-to-Wire Plug

51139

Dual Row



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension						
		A	B	C	D	E	F	G
2	51139-0200	18.00 (.709)	3.96 (.156)	18.00 (.709)	15.20 (.598)	11.80 (.465)	9.70 (.382)	6.10 (.240)
6	51139-0600	20.96 (.825)	7.92 (.312)	20.96 (.825)	18.16 (.715)	14.76 (.581)	15.40 (.606)	8.95 (.352)

FEATURES AND SPECIFICATIONS

Features and Benefits

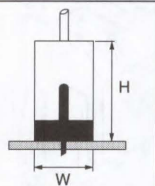
- Sizes 6 and 8 circuits
- Inner positive lock provides easy attachment and secure mating retention
- Stand-offs prevent flux wicking
- Locating peg for placement guidance and polarization

Reference Information

Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 51138
Designed In: Millimeters

Mating Dimensions

53727/51138/50597 or 50598
H=25.95mm W=15.0mm
(With retainer: H=28.35mm)



Electrical

Voltage: 600V
Current: 9.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical

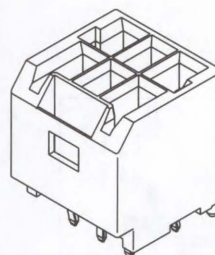
Housing: 6/6 nylon, UL 94V-0
Contact: Copper Alloy
Plating: Tin/Lead over Copper
Operating Temperature: -40 to +105°C



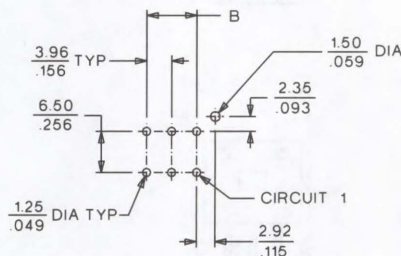
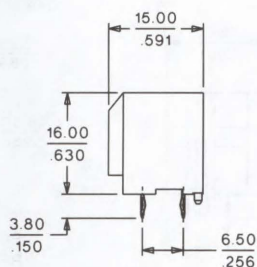
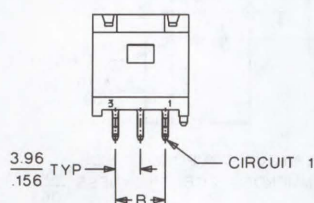
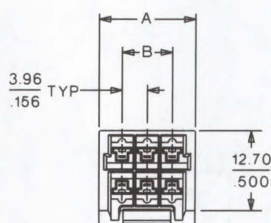
3.96mm (.156") Pitch
Wire-to-Board
Header

53727

Vertical with Peg
Dual Row



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
6	53727-0610	15.26 (.601)	7.92 (.312)
8	53727-0810	19.22 (.757)	11.88 (.468)

FEATURES AND SPECIFICATIONS

Features and Benefits

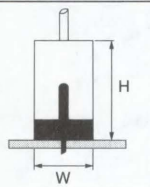
- Sizes 6 and 8 circuits
- Inner positive lock provides easy attachment and secure mating retention
- Stand-offs prevent flux wicking
- Snap-fit pegs for secure PCB retention
- Side walls protect PCB peg

Reference Information

Packaging: Tray
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: 51138
 Designed In: Millimeters

Mating Dimensions

53720/51138/50597 or 50598
 H=25.95mm W=15.0mm
 (With retainer: H=28.35mm)



Electrical

Voltage: 600V
 Current: 9.0A
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC/1 min.
 Insulation Resistance: 1000 MΩ min.

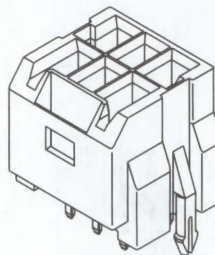
Physical

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

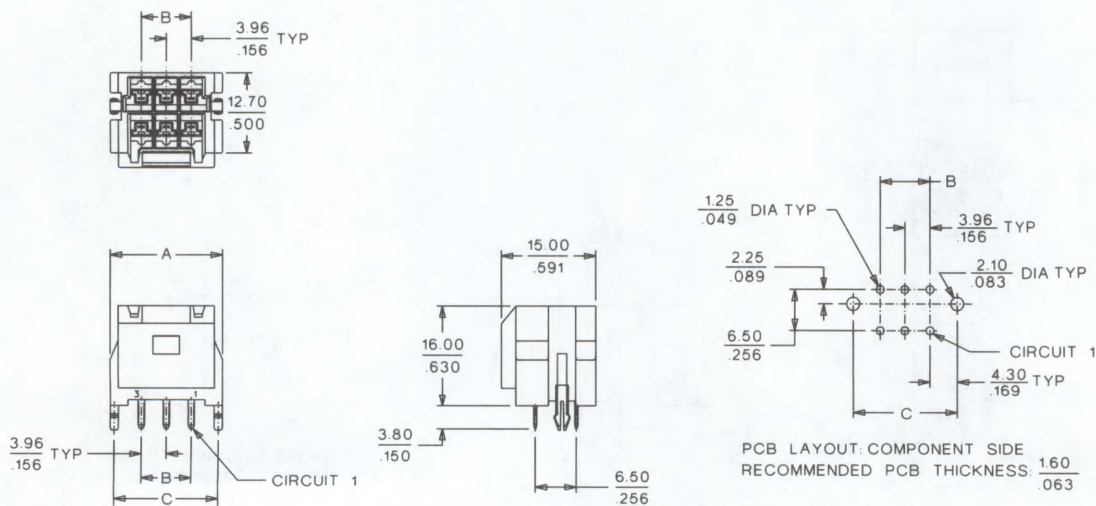
molex® 3.96mm (.156") Pitch Wire-to-Board Header

53720

Vertical, Dual Row With Snap-Fit Pegs



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
6	53720-0610	17.82 (.702)	7.92 (.312)	16.52 (.650)
8	53720-0810	21.78 (.857)	11.88 (.468)	20.48 (.806)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2, 3 and 4 circuits
- Provides additional terminal retention and easy attachment

Reference Information

Packaging: Bag

Mates With: 51138 and 51139

Designed In: Millimeters

Physical

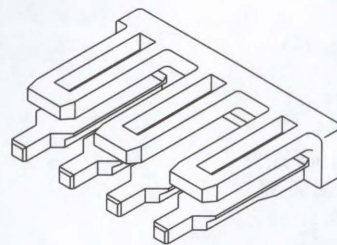
Housing: Gray PBTP, UL 94V-0

Operating Temperature: -40 to +105°C

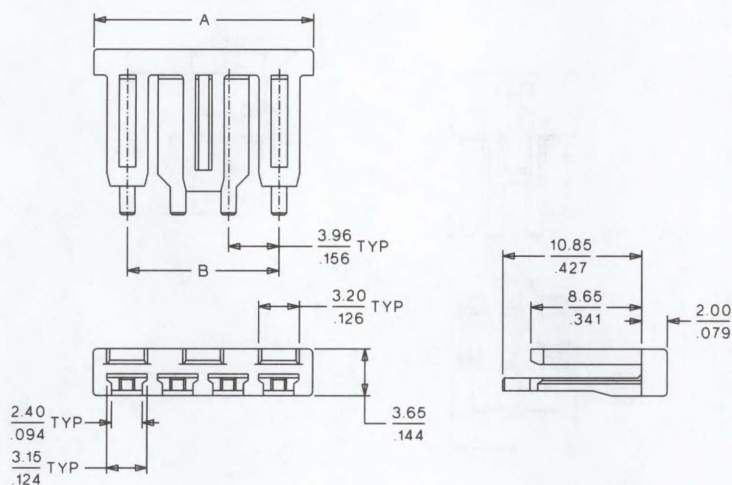


3.96mm (.156") Pitch Terminal Retainer

51140



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	51140-0205	9.26 (.365)	3.96 (.156)
3	51140-0305	13.22 (.520)	7.92 (.312)
4	51140-0405	17.18 (.676)	11.88 (.468)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2, 4 and 6 circuits
- Inner positive lock provides easy attachment and secure mating retention
- Polarizing guide walls

Reference Information

Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: 53721 and 53728
 Use With: 50597 and 50598
 Applicable Retainer: 51143
 Designed In: Millimeters

Electrical

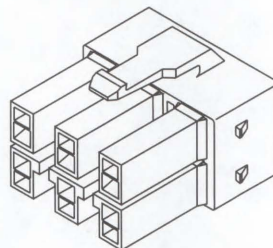
Voltage: 600V
 Current: 9.0A (10.0A for 2 circuit only)
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V AC/1 min.
 Insulation Resistance: 1000 MΩ min.

Physical

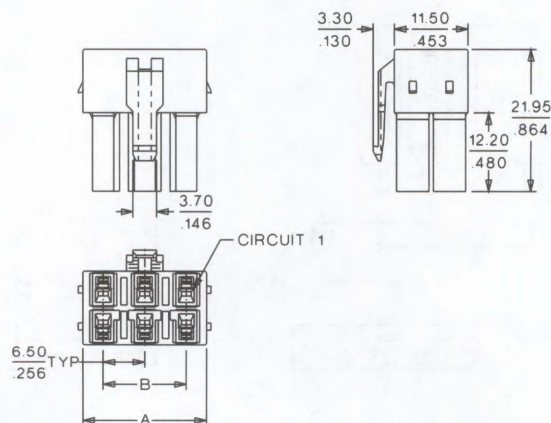
Housing: PBTP, UL 94V-0
 Operating Temperature: -40 to +105°C

molex® 6.50mm (.256") Pitch Wire-to-Board Receptacle

51142



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	51142-0200	6.34 (.250)	
4	51142-0400	12.84 (.506)	6.50 (.256)
6	51142-0600	19.34 (.761)	13.00 (.512)

FEATURES AND SPECIFICATIONS

Features and Benefits

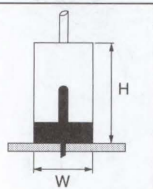
- Sizes 2, 4 and 6 circuits
- Inner positive lock provides easy attachment and secure mating retention
- Stand-offs prevent flux wicking
- Locating peg for placement guidance and polarization

Reference Information

Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
Mates With: 51142
Designed In: Millimeters

Mating Dimensions

53728/51142/50597 or 50598
H=25.95mm W=15.0mm
(With retainer: H=28.35mm)



Electrical

Voltage: 600V
Current: 9.0A (10.0A for 2 circuit only)
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

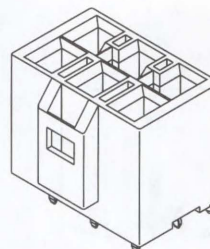
Physical

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

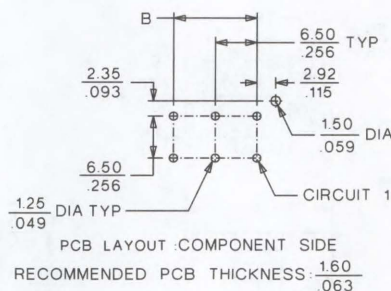
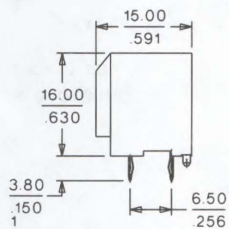
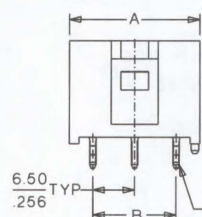
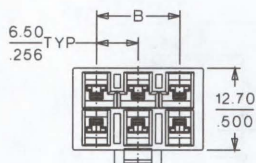
molex® 6.50mm (.256") Pitch Wire-to-Board Header

53728

Vertical with Peg



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	53728-0210	7.34 (.289)	
4	53728-0410	13.84 (.545)	6.50 (.256)
6	53728-0610	20.34 (.801)	13.00 (.512)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2, 4 and 6 circuits
- Inner positive lock provides easy attachment and secure mating retention
- Stand-offs prevent flux wicking
- Snap-fit pegs for secure PCB retention
- Side walls protect PCB peg

Reference Information

Packaging: Tray

Mates With: 51142

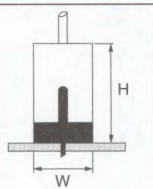
Designed In: Millimeters

Mating Dimensions

53721/51142/50597 or 50598

H=25.95mm W=15.0mm

(With retainer: H=28.35mm)



Electrical

Voltage: 600V

Current: 9.0A (10.0A for 2 circuit only)

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

Physical

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

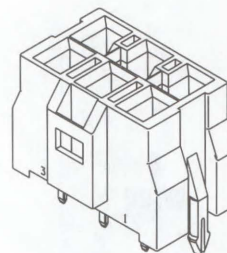
Contact: Phosphor Bronze

Plating: Tin

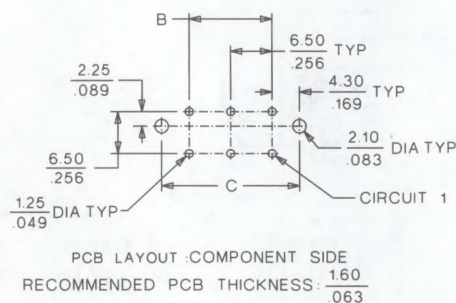
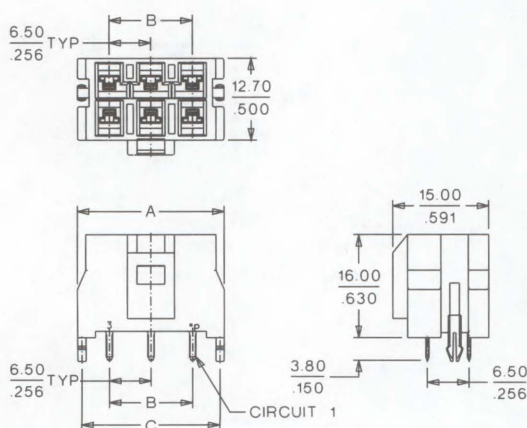
Operating Temperature: -40 to +105°C

6.50mm (.256") Pitch
Wire-to-Board
Header

53721

Vertical
With Snap-Fit Pegs

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
2	53721-0210	9.90 (.390)		8.60 (.339)
4	53721-0410	16.40 (.646)	6.50 (.256)	15.10 (.594)
6	53721-0610	22.90 (.902)	13.00 (.512)	21.60 (.850)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 1, 2 and 3 circuits
- Provides additional terminal retention and easy attachment

Reference Information

Packaging: Bag

Mates With: 51142

Designed In: Millimeters

Physical

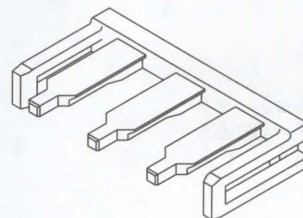
Housing: Gray PBTP, UL 94V-0

Operating Temperature: -40 to +105°C

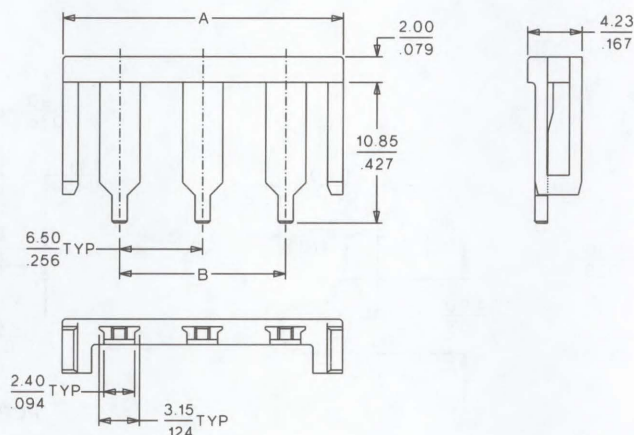


6.50mm (.256") Pitch Terminal Retainer

51143



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
1	51143-0105	8.94 (.352)	
2	51143-0205	15.44 (.608)	6.50 (.256)
3	51143-0305	21.94 (.864)	13.00 (.512)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Electrical connection between main battery and mobile phone
- SMT lead configuration
- PCB top mounting
- Insert molded
- Pick-and-place area

Reference Information

Product Specification: PS-94337-005

Packaging: Tape and reel

Designed In: Millimeters

Electrical

Voltage: 200V

Current: 1.0A

Contact Resistance: 25mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

Mechanical

Normal Force: 2.2N (0.49 lb) min.

Durability: 10,000 cycles

Physical

Housing: Black LCP, UL 94V-0

Contact: Beryllium Copper Alloy

Plating: Contact Area—Selective Gold over Palladium Nickel

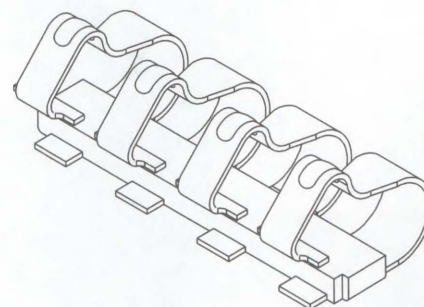
Solder Tail Area—Selective Tin/Lead

Underplating—Nickel overall

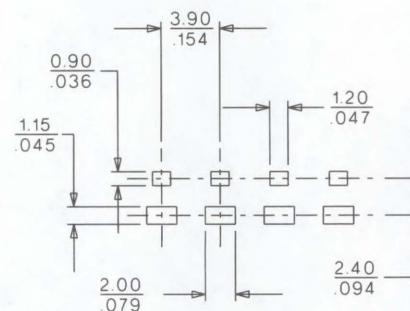
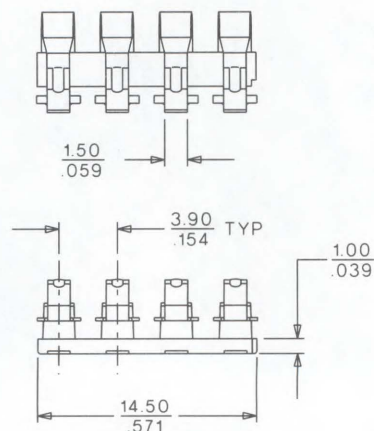
Operating Temperature: -40 to +85°C

3.90mm (.153") Pitch
Battery Connector

94337

4 Circuit
Single Row

CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE

ORDERING INFORMATION

Order No.
94337-5004

FEATURES AND SPECIFICATIONS

Features and Benefits

- Electrical connection between main battery and mobile phone
- SMT lead configuration
- PCB top mounting
- Insert molded
- Pick-and-place area

Reference Information

Product Specification: PS-94334-005

Packaging: Tape and reel

Designed In: Millimeters

Electrical

Voltage: 200V

Current: 1.0A

Contact Resistance: 25mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

Mechanical

Normal Force: 1.7N (0.38 lb) min.

Durability: 10,000 cycles

Physical

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

Contact: Beryllium Copper Alloy

Plating: Contact Area—Selective Gold over Palladium Nickel

Solder Tail Area—Selective Tin/Lead

Underplating—Nickel overall

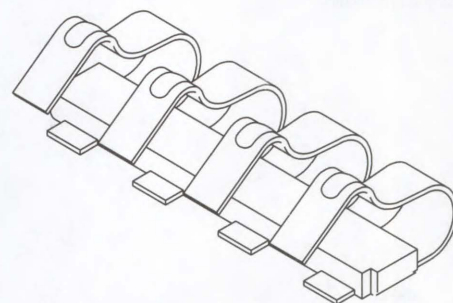
Operating Temperature: -40 to +85°C



**3.90mm (.153") Pitch
Battery Connector**

94334

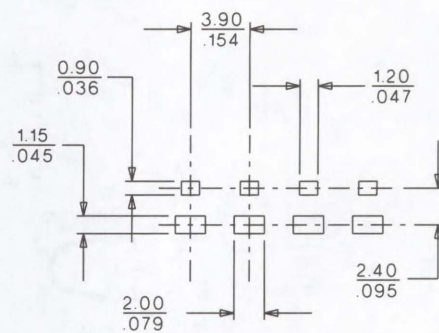
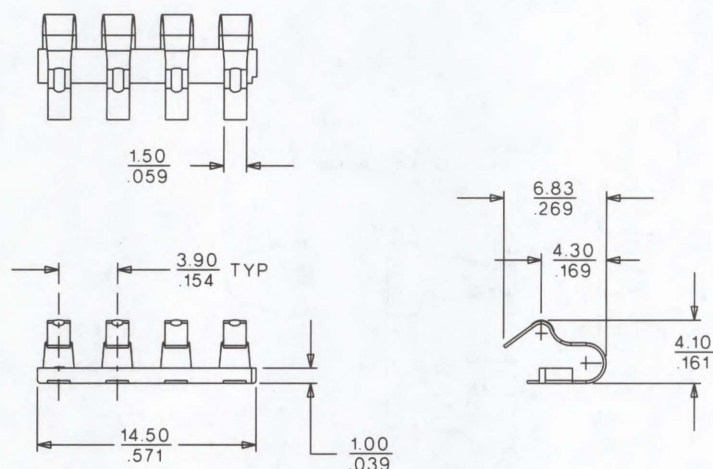
**4 Circuit
Single Row**



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	Contact Area	Color
94334-5004	With dimple	Black
94334-5104	With dimple	White
94334-5114	Without dimple	White

FEATURES AND SPECIFICATIONS

Features and Benefits

- Snap-lock secure wire to PC board before wave soldering
- No additional contact resistance
- Wire soldering directly to board
- Rapid and economical means of hand-wiring boards
- Eliminates evelets on PC boards

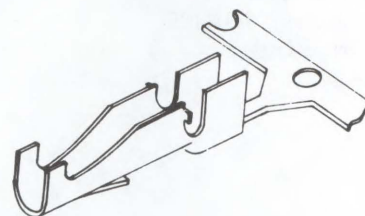
Physical

Contact: Brass
Plating: See table

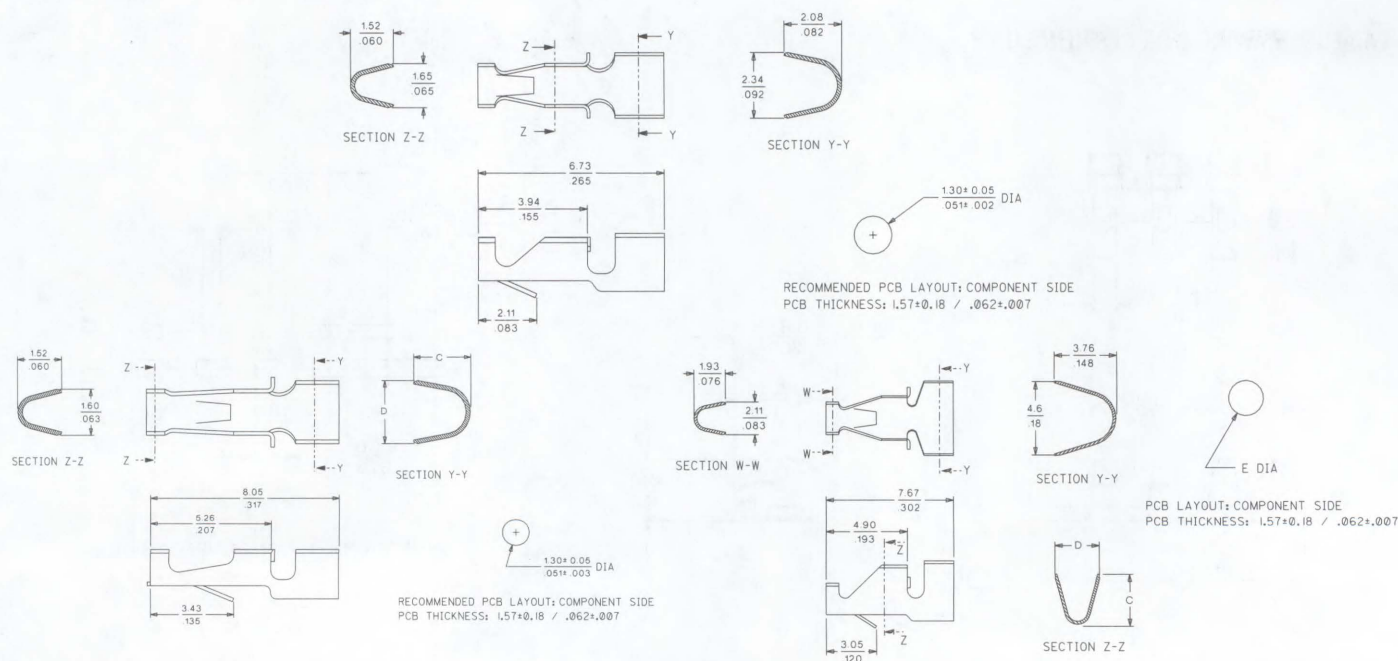


Wire-to-Board Crimp Terminals Strain Relief PC Board Terminals

4706/4811/41817/42001



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG	Maximum Insulation Diameter	Engineering No.	Order No.	Plating	Terminal Progression	Application Tooling TM-42			Dimension			
						Die Only	Press and Die	Spare Tooling Kit	A	B	Board Thickness C	PC Board Hole Size D
16-18	3.05 (.120)	4706	02-09-2105	Tin/Lead	11.20 (.440)	11-40-2042	11-04-0293	11-40-3042	7.70 (.300)	3.10 (.120)	1.57 (.062)	2.49 (.098)
18-24	3.05 (.120)	4706-3	02-07-2101	Tin/Lead	11.20 (.440)	11-40-2043	11-04-0295	11-40-3043	7.70 (.300)	3.10 (.120)	1.57 (.062)	1.91 (.075)
22-24	2.54 (.100)	4811	16-02-0037	Tin/Lead	9.70 (.380)	11-40-2029	11-04-0277	11-40-3029	8.10 (.320)	3.40 (.140)	1.57 (.062)	1.30 (.051)
22-26	1.52 (.060)	4811-1	16-02-0034	Tin/Lead	9.70 (.380)	11-40-2039	11-04-0279	11-40-3029	8.10 (.320)	3.40 (.140)	1.57 (.062)	1.30 (.051)
		41817	16-02-0118	Tin/Lead	5.10 (.200)	11-40-2120	11-04-0595	11-40-3118	8.10 (.320)	3.40 (.140)	1.57 (.062)	1.30 (.051)
		42001	16-08-0605	Tin/Lead	5.10 (.200)	11-40-2171	11-04-0679	11-40-3173	6.90 (.270)	2.10 (.080)	1.57 (.062)	1.30 (.051)

FEATURES AND SPECIFICATIONS

Features and Benefits

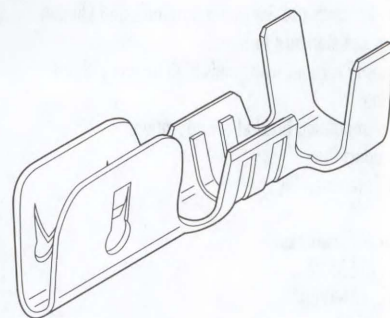
- Provides reliable ground to chassis without fasteners
- Simple to install
- Requires no secondary fasteners
- Accepts single and dual crimps
- Secondary grounding applications only
- Rust-resistant Stainless Steel

Physical

Contact: .020" Stainless Steel

molex® Panel Grounding Clip

42172



Reference Information

UL File No.: E126412

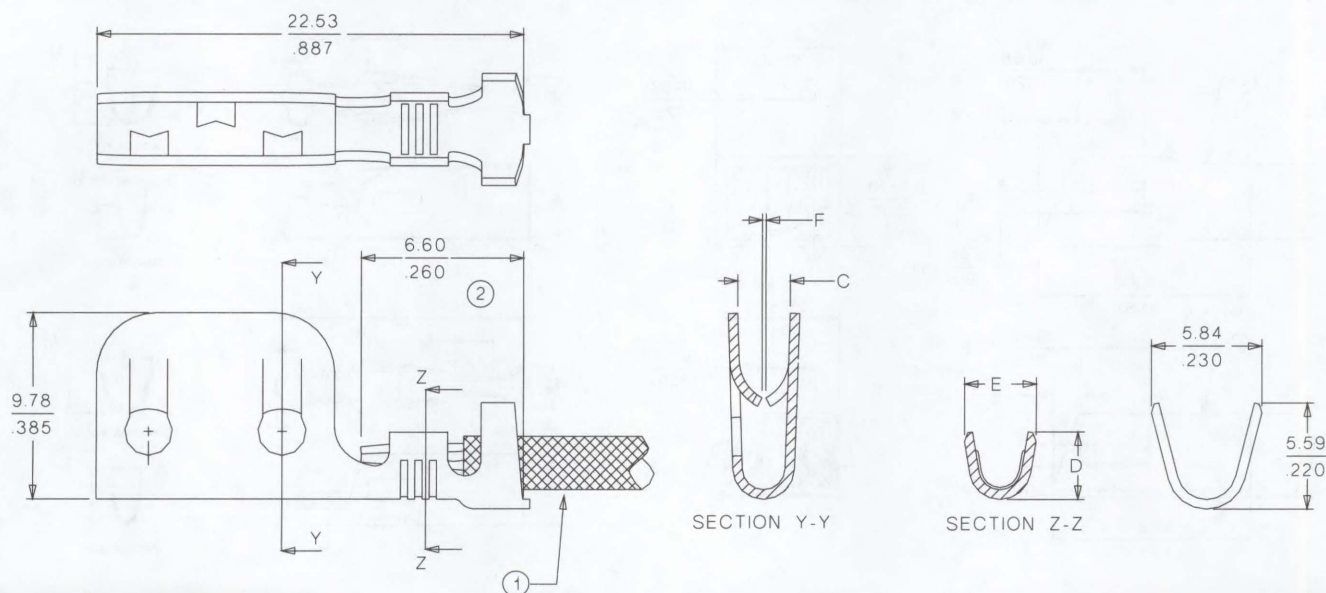
CSA File No.: LR19980A

Designed In: Inches

Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Minimum Panel Thickness	Maximum Panel Thickness	Wire Range AWG	Dual Crimp Capabilities	Engineering No.	Order No.	Dimension			
						C	D	E	F
0.38 (.015)	0.89 (.035)	14	(2) 16 AWG	42172-CG1	40-06-2025	2.80 (.110)	4.10 (.160)	4.10 (.160)	0.10 (.004)
0.38 (.015)	0.89 (.035)	14	(2) 16 AWG	42172-DD1	40-06-2018	2.80 (.110)	4.10 (.160)	4.10 (.160)	
0.38 (.015)	0.89 (.035)	16-18	(2) 18 AWG, or (1) 18 and (1) 16 AWG	42172-G1	40-06-2024	2.80 (.110)	3.60 (.140)	3.80 (.150)	0.10 (.004)
0.38 (.015)	0.89 (.035)	16-18	(2) 18 AWG, or (1) 18 and (1) 16 AWG	42172-D1	40-06-2019	2.80 (.110)	3.60 (.140)	3.80 (.150)	
0.38 (.015)	0.89 (.035)	14	(2) 16 AWG	42172-AA1	40-06-2014	2.80 (.110)	4.10 (.160)	4.10 (.160)	0.20 (.008)
0.38 (.015)	0.89 (.035)	16-18	(2) 18 AWG, or (1) 18 and (1) 16 AWG	42172-A1	40-06-2003	2.80 (.110)	3.60 (.140)	3.80 (.150)	0.20 (.008)
0.51 (.020)	0.76 (.030)	16-18	(2) 18 AWG, or (1) 18 and (1) 16 AWG	42172-F1	40-06-2017	2.80 (.110)	3.60 (.140)	3.80 (.150)	0.38 (.015)
0.89 (.035)	1.27 (.050)	14	(2) 16 AWG	42172-BB1	40-06-2015	3.30 (.130)	4.10 (.160)	4.10 (.160)	0.64 (.025)
0.89 (.035)	1.27 (.050)	16-18	(2) 18 AWG, or (1) 18 and (1) 16 AWG	42172-B1	40-06-2005	3.30 (.130)	3.60 (.140)	3.80 (.150)	0.64 (.025)
1.52 (.060)	1.91 (.075)	14	(2) 16 AWG	42172-CC1	40-06-2016	3.30 (.130)	4.10 (.160)	4.10 (.160)	1.27 (.050)
1.52 (.060)	1.91 (.075)	16-18	(2) 18 AWG, or (1) 18 and (1) 16 AWG	42172-C1	40-06-2013	3.30 (.130)	3.60 (.140)	3.80 (.150)	1.27 (.050)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Receptacles provide easy disconnect from heating element on range surface
- Ceramic housings use Beryllium terminals and Phenolic housings use standard terminals
- High density ceramic withstands high impact without shattering
- Choice of mounting bracket configurations
- Long product life
- Trouble-free assembly

Reference Information

UL File No.: E153512

CSA File No.: LR19980A

Mates With: 2589

Designed In: Inches

Physical

Housing: Ceramic or Phenolic

Contact: Alcoloy or Beryllium Copper

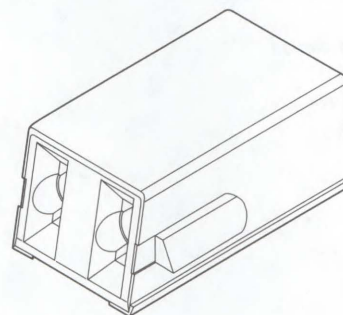
Operating Temperature: Ceramic—200 to +300°C

Phenolic—0 to +150°C

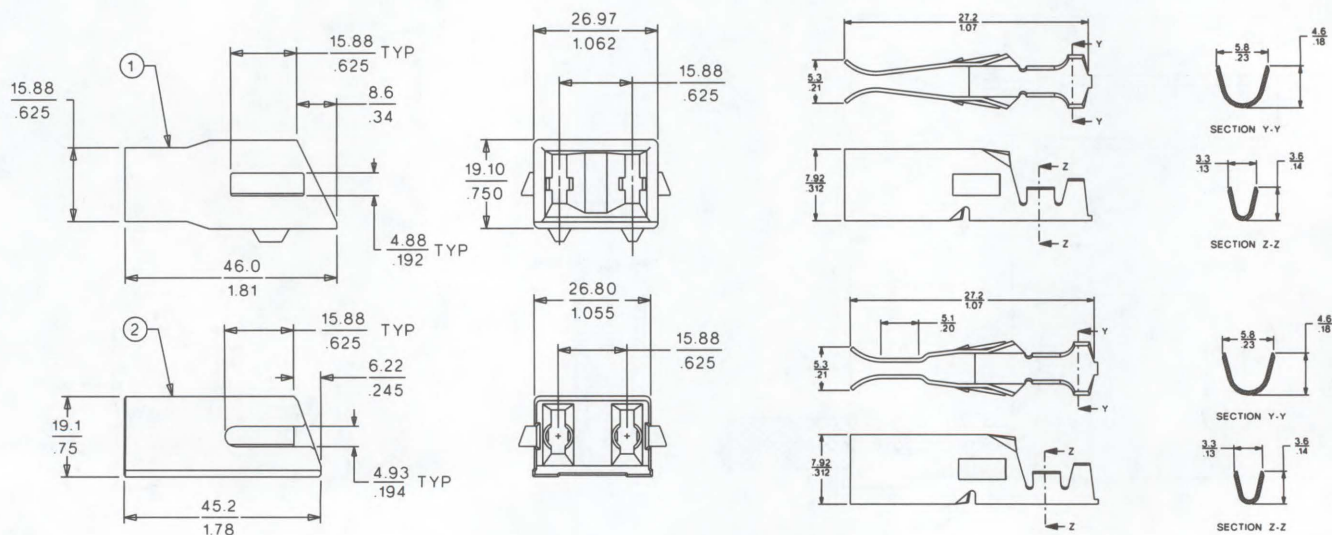


15.88mm (.625") Pitch Ceramic and Phenolic Range Receptacles and Terminals

2481/6482



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Terminals							
Wire Size AWG	Terminal Material	Contact Type	Gap Width	Engineering No.	Order No.	Mini-Mac	TM-40/42
14-18	Beryllium Copper Alloy	Curved	5.30 (.210)	6482-2 (Chain)	05-12-1104	11-18-2036	11-04-0632
		Curved	5.30 (.210)	6482-1 (Chain)	05-12-1100	11-18-2036	11-04-0632
	Standard Copper Alloy	Flat	5.30 (.210)	6482-1 (Chain)	05-12-1102	11-18-2036	11-04-0632

Automated application equipment can be used to crimp either terminal. Automatic and semi-automatic application tooling available, contact Molex.

Range Receptacles				
Drawing Notation	Description	Temperature Range	Engineering No.	Order No.
1	Phenolic Receptacle	0-150°C	2481	50-16-0281
2	Ceramic Receptacle	200-300°C	2481-13	50-16-0283

Heater Element Terminal Thickness Range	
2.032-2.413 (.080-.095)*	
2.286-2.667 (.090-.105)*	

* Heater elements not interchangeable in same terminal

FEATURES AND SPECIFICATIONS

Features and Benefits

- Resilient Stainless Steel clips
- Accepts either Phenolic or Ceramic housing
- Available in a wide range of tab angles
- Simple to install

Reference Information

Packaging: Bag

Mates With: 2481

Physical

Clip Material: .020" Stainless Steel

molex® Mounting Clip

2589

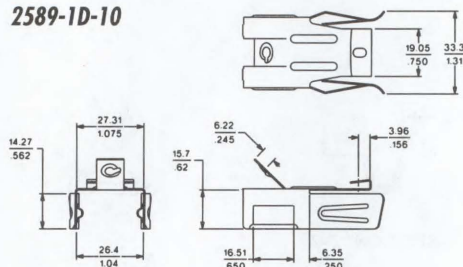
**For Use with
Range Receptacles**

Power Connectors

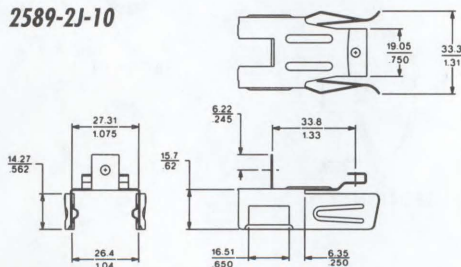
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CATALOG DRAWING (FOR REFERENCE ONLY)

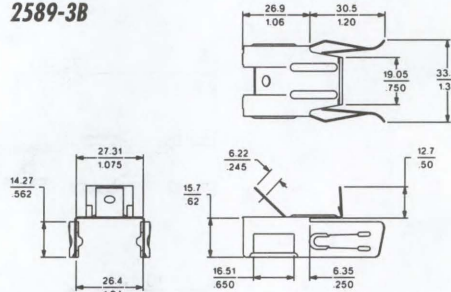
2589-1D-10



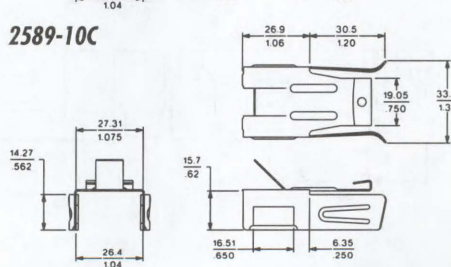
2589-2J-10



2589-3B



2589-10C



ORDERING INFORMATION

Circuit Size	Order No.
2589-1D-10	089-00-2006
2589-2J-10	089-00-2027
2589-3B	089-00-2041
2589-10C	089-00-2100

Note: Contact Molex for technical assistance based on clip type and tab angle. Other tab angles and mounting screw variations are available.

FEATURES AND SPECIFICATIONS

Features and Benefits

- Crimped with magnet wire
- One-step crimping operation (no stripping operation)
- Sharp edge serration for good electrical contact

Reference Information

Product Specification: PS-35565-001

Packaging: Reel

Use With: 35565

Designed In: Millimeters

Electrical

Voltage: 230V

Current: 20.0A

Contact Resistance: 5mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

Mechanical

Unmating Force: 11.2N (2.8 lb) min.

Durability: 30 cycles

Physical

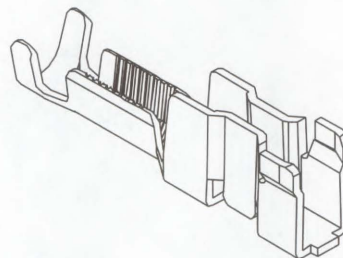
Contact: Phosphor Bronze

Plating: Tin

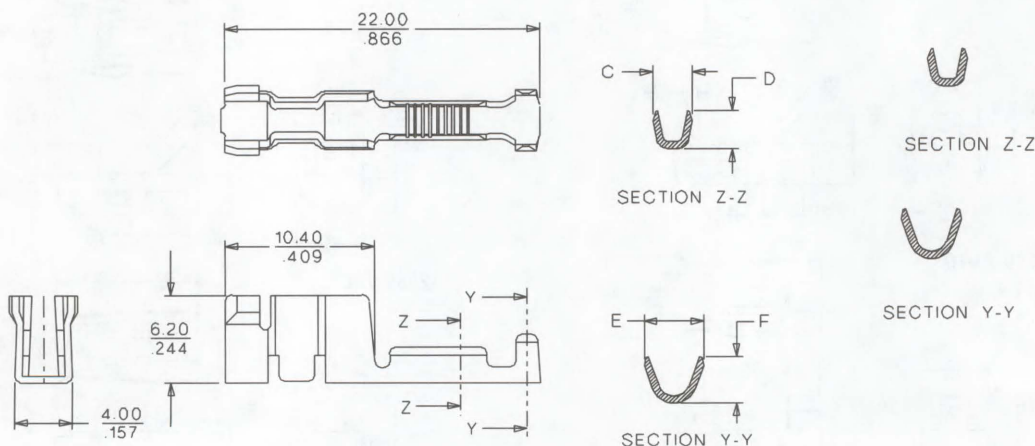
Wire Range: 400 to 4200 CMA



2.29mm (.090") Diameter Pin Cluster Block Connector Terminal

35454**For Magnet Wire**

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Wire Range	Dimension			
		C	D	E	F
35454-2702	400 to 1600 CMA	2.70 (.106)	2.60 (.102)	4.20 (.165)	3.60 (.142)
35454-2902	1500 to 4200 CMA	3.40 (.134)	4.00 (.157)	5.10 (.201)	4.20 (.165)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Connects to sealed hermetic header pins on compressor motor
- Impervious to oils and refrigerant
- Side grip for easy unmating

Reference Information

Product Specification: PS-35565-001

Packaging: Bag

Use With: 35454-2X02

Designed In: Millimeters

Electrical

Voltage: 230V

Current: 20.0A

Contact Resistance: 5mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 22.3N (5.0 lb) max.

Mating Force: 133.4N (30.0 lb) max.

Unmating Force: 38.2N (8.6 lb) min.

Durability: 30 cycles

Physical

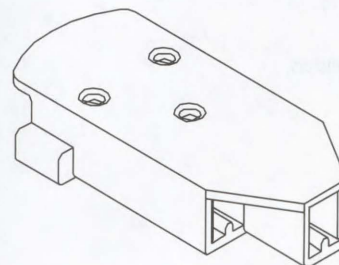
Housing: Natural polyester, UL 94-HB



2.29mm (.090") Diameter Pin Cluster Block Connector Housing

35565

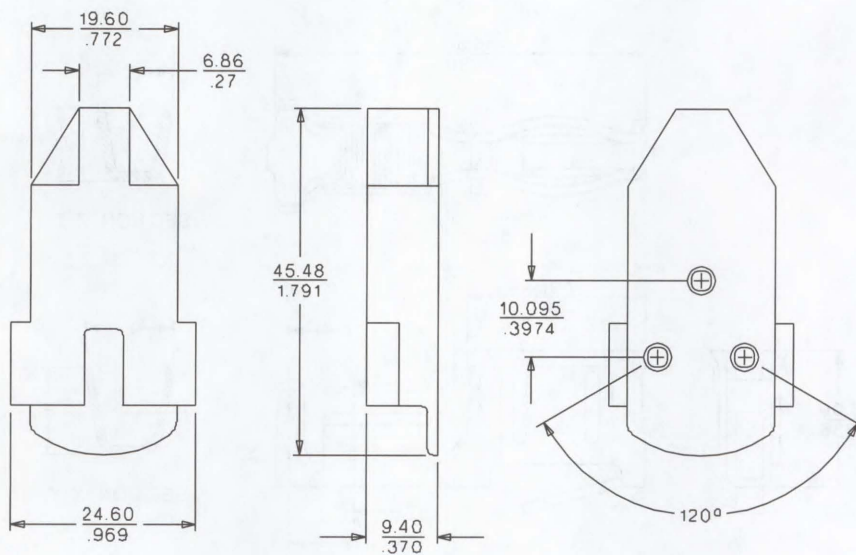
For Magnet Wire



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
3	35565-0300

FEATURES AND SPECIFICATIONS

Features and Benefits

- Crimped with magnet wire
- One-step crimping operation (no stripping operation)
- Sharp edge serration for good electrical contact
- Oval shaped contact for additional mating retention

Reference Information

Product Specification: PS-35567-001

Packaging: Reel

UL File No.: E29179

Use With: 35567

Designed In: Millimeters

Electrical

Voltage: 230V

Current: 20.0A

Contact Resistance: 5mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 68.6N (15.4 lb) min.

Mating Force: 49.0N (11.0 lb) max.

Unmating Force: 12.3N (2.8 lb) min.

Durability: 30 cycles

Physical

Contact: Phosphor Bronze

Plating: Tin

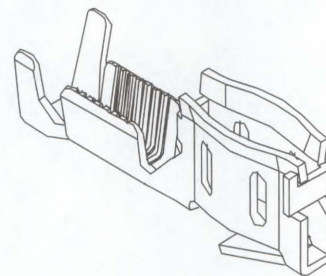
Wire Range: 650 to 3800 CMA



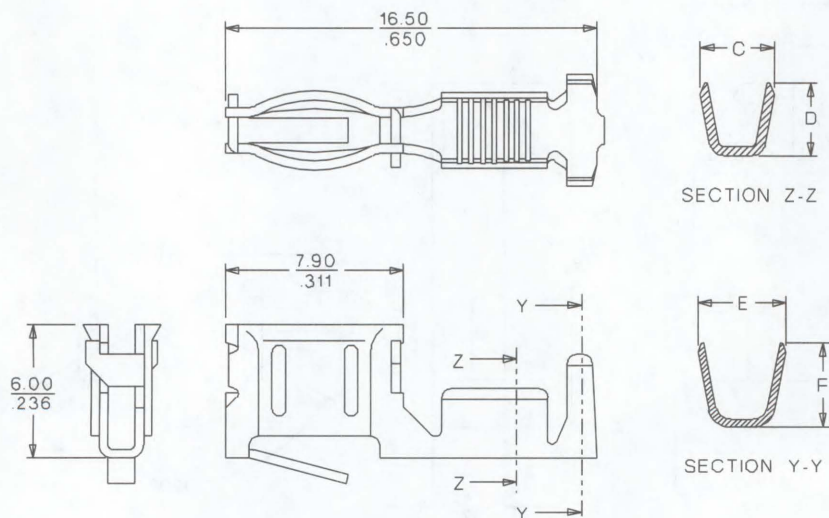
2.29mm (.090") Diameter Pin Cluster Block Connector Terminal

35491

For Magnet Wire High Retention Contact



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Wire Range	Dimension			
		C	D	E	F
35491-8702	650 to 1800 CMA	2.70 (.106)	2.50 (.098)	3.90 (.154)	3.20 (.126)
35491-8802	1800 to 3800 CMA	3.30 (.130)	3.40 (.134)	4.50 (.177)	3.30 (.130)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Connects to sealed hermetic header pins on compressor motor
- Impervious to oils and refrigerant
- Side grip for easy unmating

Reference Information

Product Specification: PS-35567-001
 Packaging: Bag
 UL File No.: E29179
 Use With: 35491
 Designed In: Millimeters

Electrical

Voltage: 230V
 Current: 20.0A
 Contact Resistance: 5mΩ max.
 Dielectric Withstanding Voltage: 1000V
 Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 68.6N (15.4 lb) min.
 Mating Force: 133.4N (30.0 lb) max.
 Unmating Force: 38.2N (8.6 lb) min.
 Durability: 30 cycles

Physical

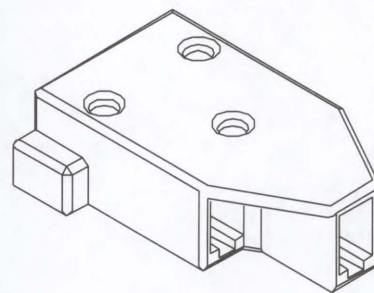
Housing: Natural polyester, UL 94-HB



2.29mm (.090") Diameter Pin Cluster Block Connector Housing

35567

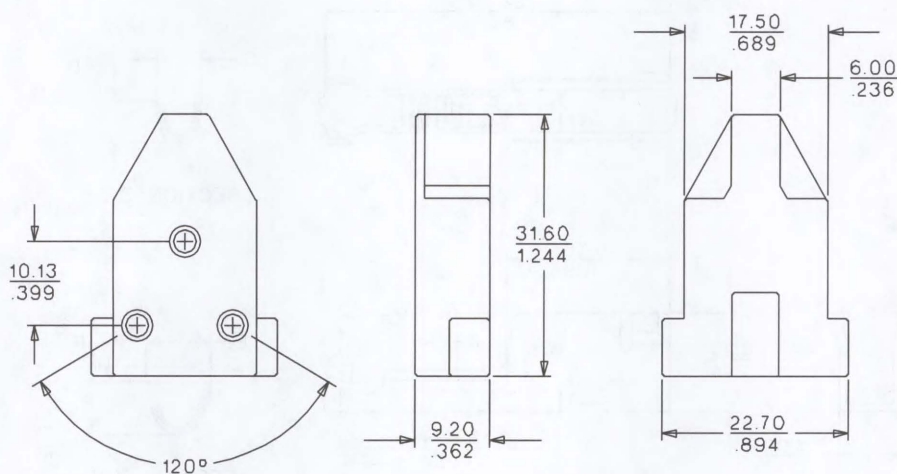
For Magnet Wire Compact Size



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
3	35567-0300

FEATURES AND SPECIFICATIONS

Features and Benefits

- Crimped with magnet wire
- One-step crimping operation (no stripping operation)
- Sharp edge serration for good electrical contact

Reference Information

Product Specification: PS-35548

Packaging: Reel

UL File No.: E29179

Use With: 35548

Designed In: Millimeters

Electrical

Voltage: 230V

Current: 20.0A

Contact Resistance: 5mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

Mechanical

Unmating Force: 11.2N (2.8 lb) min.

Durability: 30 cycles

Physical

Contact: Phosphor Bronze

Plating: Tin

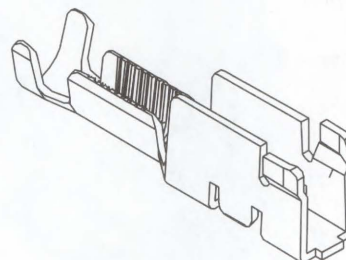
Wire Gauge: 400 to 8000 CMA



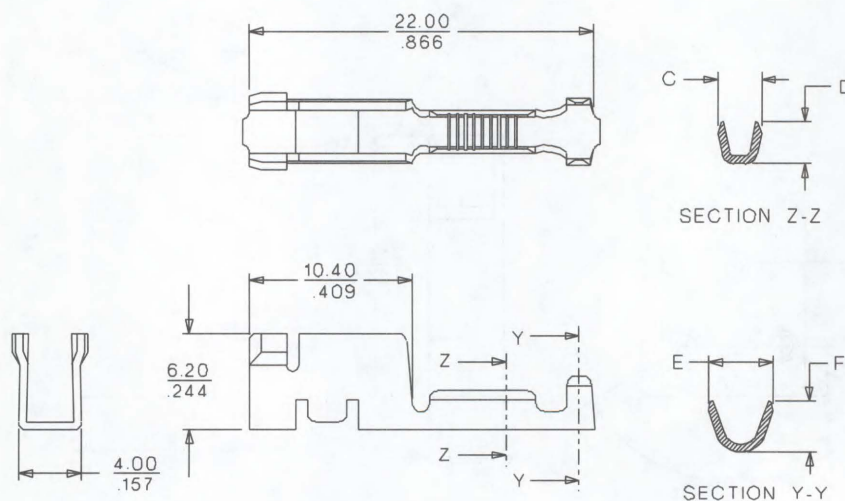
3.18mm (.125") Diameter Pin Cluster Block Connector Terminal

35454

For Magnet Wire



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Wire Gauge	Dimension			
		C	D	E	F
35454-8702	400 to 1600 CMA	2.70 (.106)	2.60 (.102)	4.20 (.165)	3.60 (.142)
35454-8902	1500 to 4200 CMA	3.40 (.134)	4.00 (.157)	5.10 (.201)	4.20 (.165)
35454-8002	4000 to 8000 CMA	4.20 (.165)	4.80 (.189)	5.20 (.205)	5.70 (.224)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Connects to sealed hermetic header pins on compressor motor
- Impervious to oils and refrigerant

Reference Information

Product Specification: PS-35548

Packaging: Bag

UL File No.: E29179

Use With: 35454-8X02

Designed In: Millimeters

Electrical

Voltage: 230V

Current: 20.0A

Contact Resistance: 5mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 22.3N (5.0 lb) max.

Mating Force: 133.4N (30.0 lb) max.

Unmating Force: 38.2N (8.6 lb) min.

Durability: 30 cycles

Physical

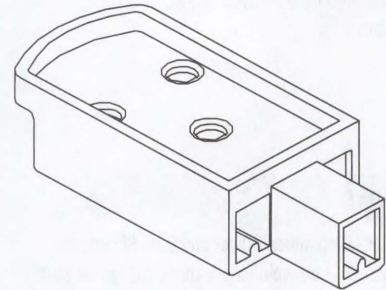
Housing: Natural polyester, UL 94-HB



3.18mm (.125") Diameter Pin Cluster Block Connector Housing

35548

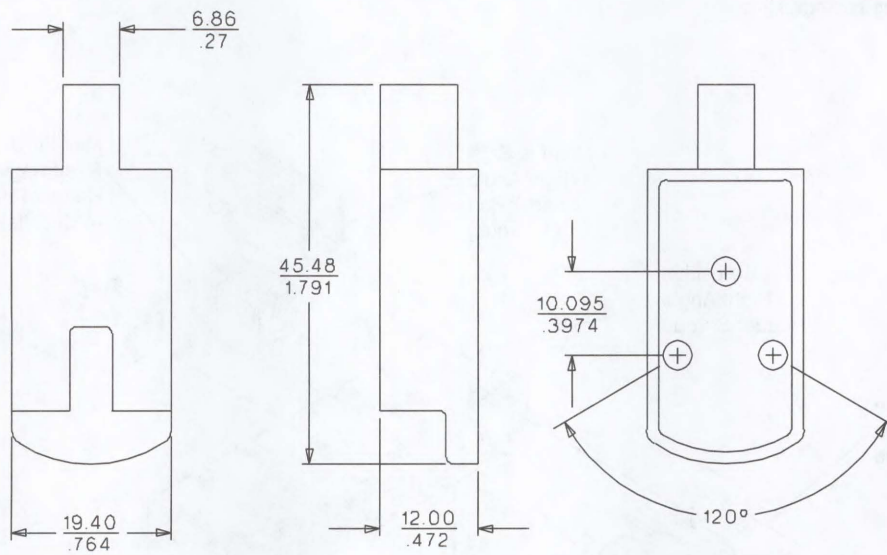
For Magnet Wire



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
3	35548-0300

FEATURES AND SPECIFICATIONS

Features and Benefits

- Fully isolated towers in the product pods
- Polarized shroud so system can only be mated one way
- Pods are polarized to the shroud, so they can only be inserted one way into the shroud
- Any of the wire pods can be placed in the receptacle, plug, or right angle header shrouds to add an additional level of polarization, as well as the flexibility in designs
- Latches are used to lock the pods in place; therefore, there is no need for adhesives, screws, or other mechanisms

1-Circuit Mini-Fit, Sr.™ Pod

High current pod carries 50.0A* when using an 8 AWG wire.

4-Circuit Mini-Fit, Jr.™ Pod

Mid-range current pod carries up to 8.0A* with the standard terminal or up to 11.0A* with the HSC or high current terminal.

6-Circuit Micro-Fit 3.0 Pod

Low current or signal pod carries 5.0A* of current or signal.

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.

Blind Mate Interface (BMI) pod

Provides guidance and alignment when connecting the system together, correcting up to .125" of misalignment in the X or Y direction.

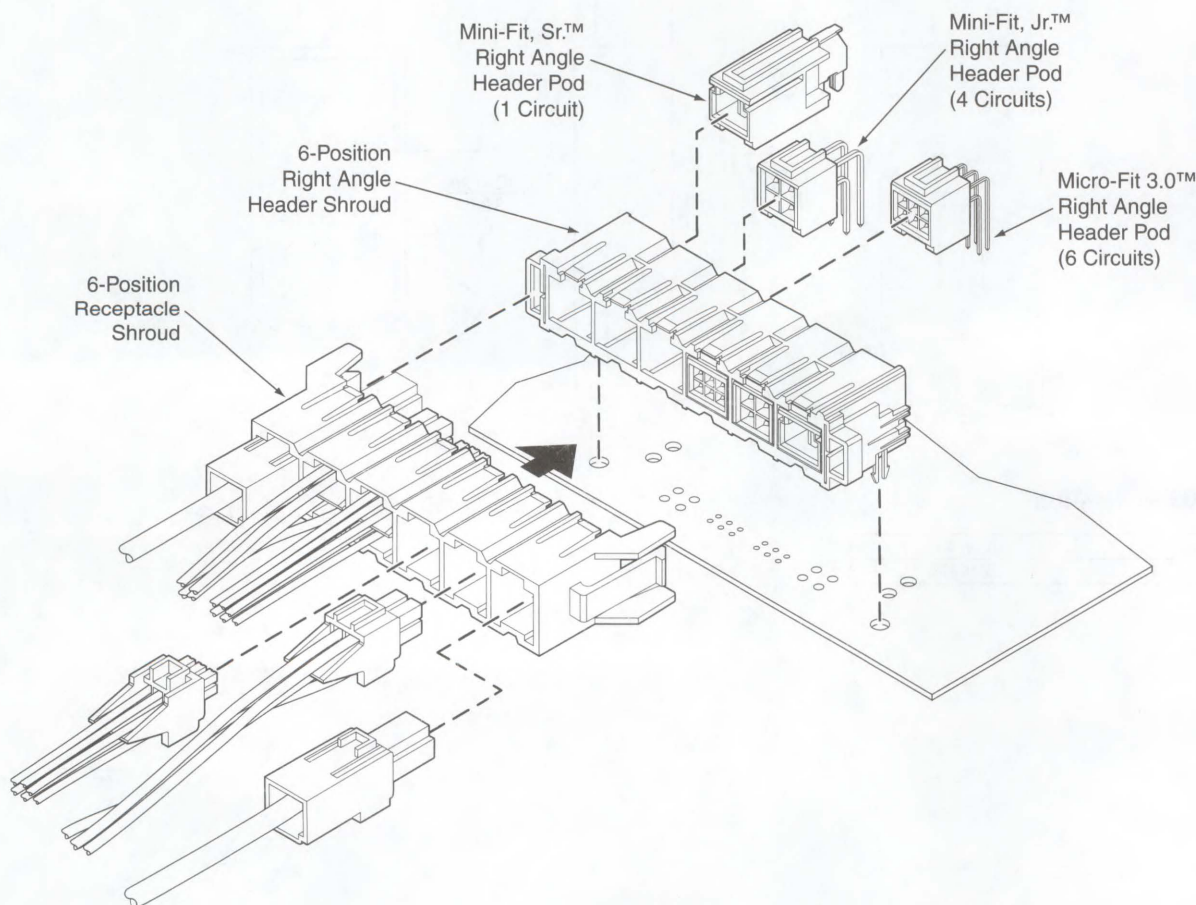
COMPODRE

COMPODRE, or COMbination POWer and Data REceptacle Connector System, is a revolutionary connector system that combines proven Molex power and signal connector systems into one fully modular connector. It can be configured in any arrangement to meet your specific application needs. The basic concept behind COMPODRE is simple. It consists of an outside frame or "Shroud" and internal product "Pods", which accept the standard product crimp terminals. The shroud is available in 2 through 6 positions or bays, meaning it can accept from 2 to 6 product pods.

How does COMPODRE work? Since it uses existing Molex crimp terminals, they're crimped using the exact same application tooling that is currently available for the respective product families. After crimping, the terminals are inserted into the respective product pod. The pods are then inserted into their respective position in the shroud. If a mistake is made during assembly, the pod can be removed with a finger nail or small screwdriver and inserted into the correct position in the shroud.

The system is available in wire-to-wire and wire-to-board configurations. The wire-to-board version is available in right angle and vertical configurations.

Product Note: Please refer to the respective product specifications to obtain the most complete information of the individual products.



FEATURES AND SPECIFICATIONS

Features and Benefits

- Fully customizable and expandable to meet your application needs
- One connector system to meet both your power and signal needs
- Offers connector consolidation and PCB real estate savings by having power and signal in one connector
- Easy to assemble or disassemble
- Uses existing interfaces, so no requalification is usually necessary
- Pods and shrouds are gender interchangeable

Reference Information

Product Specification: PS-43510-001 and PS-42815-001

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: 43510 receptacle pod mates with

43513 plug pod, 43952 vertical header pod or

43953 right angle header pod

Use With: 43838 receptacle or 43839 plug shrouds

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 50.0A max.*

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 7.0kg max.

Contact Retention to Housing: 10.0kg min.

Physical

Housing: Black polyester, UL 94V-0

Operating Temperature: -40 to +105°C

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.



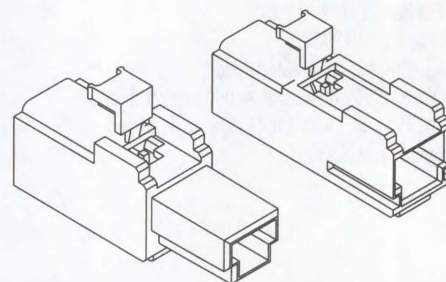
12.30mm (.484") Pitch

COMPODRE™

Wire-to-Wire, Wire-to-Board
Pod, Plug and Receptacle

43510/43513

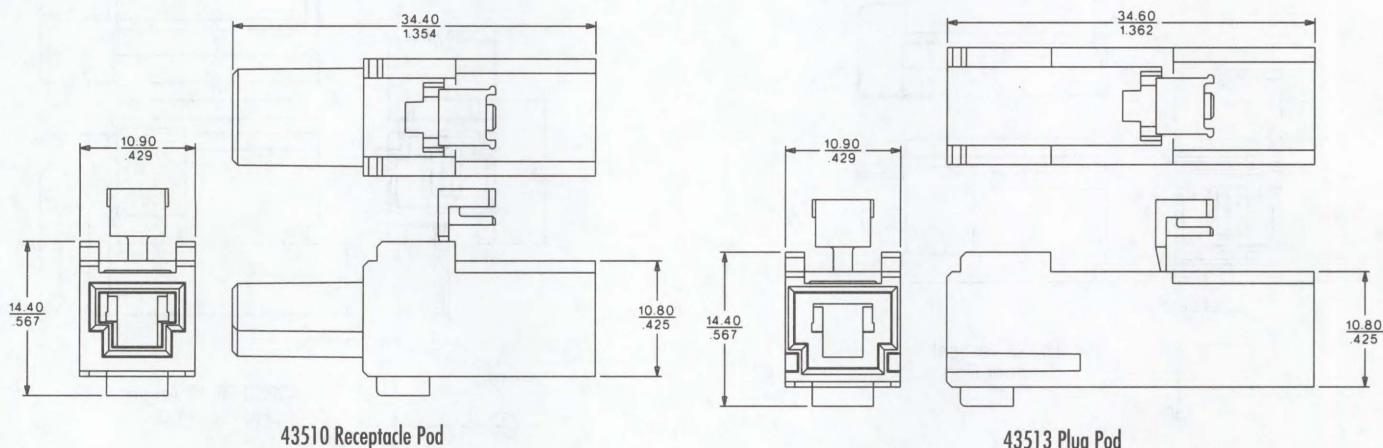
Mini-Fit, Sr.™ Plug and
Receptacle Pod



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Description	Order No.
1-Circuit Mini-Fit, Sr. Receptacle Pod	43510-0001
1-Circuit Mini-Fit, Sr. Plug Pod	43513-0001

FEATURES AND SPECIFICATIONS

Features and Benefits

- 1 circuit per pod
- Polarized to prevent improper assembly into header shrouds
- Easy to assemble
- Polarized to prevent improper assembly and mating
- Multiple tail lengths to accommodate various PCB thicknesses
- First make/last break capability

Reference Information

Product Specification: PS-43510-001 and PS 42815-001

Packaging Type: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: 43510 receptacle pod

Use With: 43952 mates with 44040 vertical shroud

43953 mates with 44041 right angle shroud

Designed In: Millimeters

Electrical

Voltage: 600V

Current: 48.0A max.*

Contact Resistance: 1mΩ max.

Dielectric Withstanding Voltage: 2200V

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 2.0kg min.

Normal Force: 200g min.

Durability: 30 cycles

Physical

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

Contact: High conductivity Copper alloy

Plating: Tin/Lead

Operating Temperature: -40 to +105°C

PCB Thickness: 1.57, 2.36 or 3.18mm (.062, .093 or .125")

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.



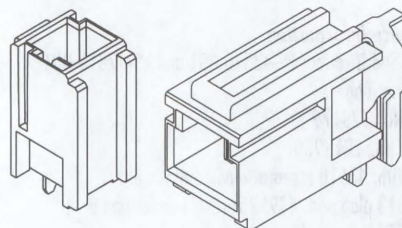
12.30mm (.484") Pitch

COMPODRE™

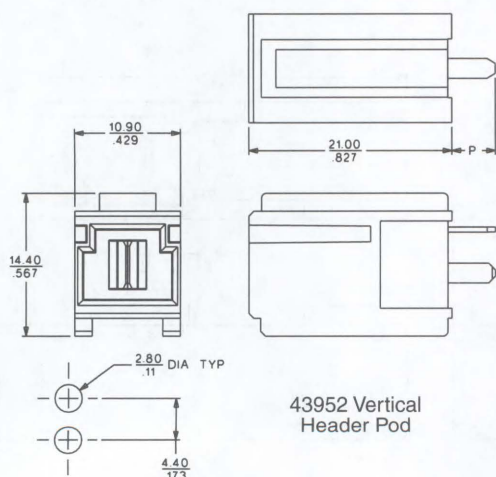
Wire-to-Board Header Pod

43952/43953

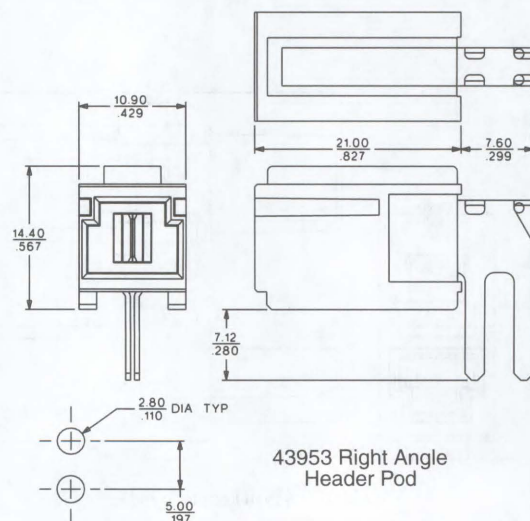
Mini-Fit, Sr.™ Header
Vertical and Right Angle



CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: SEE TABLE



PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: SEE TABLE

ORDERING INFORMATION AND DIMENSIONS

Description	PCB Thickness	Order No.	Dimension P
Mini-Fit, Sr. Right Angle Header Pod	1.57-3.18 (.062"-.125")	43953-0101	
Mini-Fit, Sr. Vertical Header Pod	1.57-2.36 (.062"-.093")	43952-0101	3.50 (.138)
Mini-Fit, Sr. Vertical Header Pod, First Mate/Last Break	1.57-2.36 (.062"-.093")	43952-0201	3.50 (.138)
Mini-Fit, Sr. Vertical Header Pod	3.18 (.125")	43952-0301	5.10 (.201)
Mini-Fit, Sr. Vertical Header Pod, First Mate/Last Break	3.18 (.125")	43952-0401	5.10 (.201)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Fully customizable and expandable to meet your application needs
- One connector system to meet both your power and signal needs
- Offers connector consolidation and PCB real estate savings by having power and signal in one connector
- Easy to assemble or disassemble
- Uses existing interfaces, so no requalification is usually necessary
- Pods and shrouds are gender interchangeable

Reference Information

Product Specification: PS-43510-001 and PS-5556-001

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: 43511 receptacle pod mates with

43514 Plug Pod, 43954 vertical header pod,

43955 right angle header pod

Use With: 43838 receptacle or 43839 plug shrouds

Designed In: Millimeters

Electrical

Voltage: 600V

Current: Standard terminal—8.0A*

HCS terminal—11.0A*

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 1.5kg max.

Contact Retention to Housing: 3.0kg min.

Physical

Housing: Black polyester, UL 94V-0

Operating Temperature: -40 to +105°C

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.



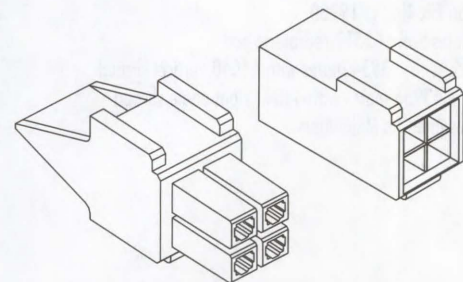
12.30mm (.484") Pitch

COMPODRE™

Wire-to-Wire, Wire-to-Board
Pod, Plug and Receptacle

43511/43514

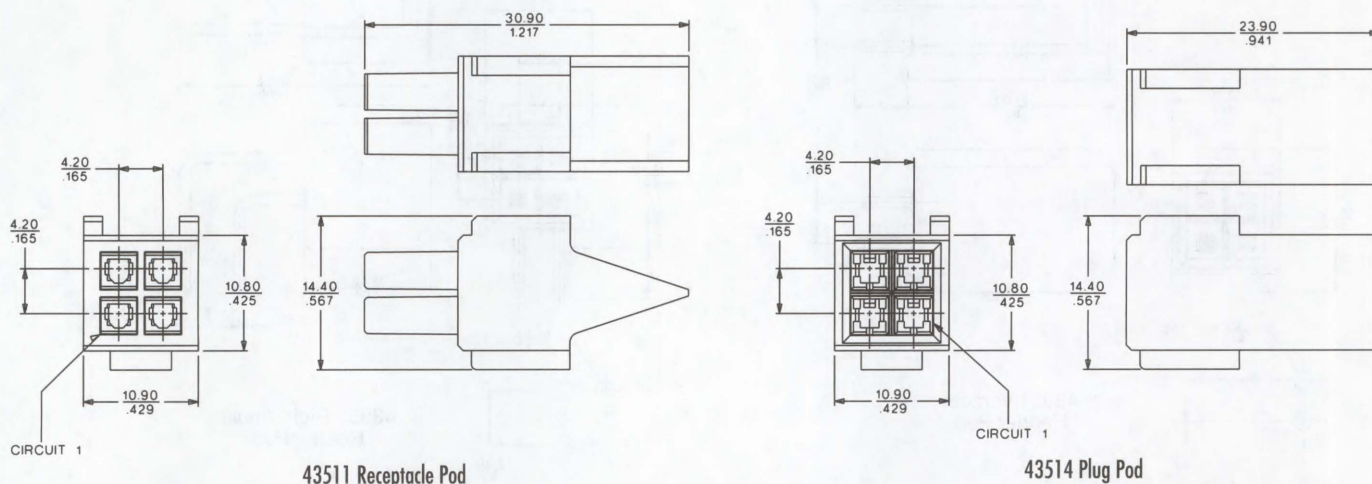
Mini-Fit, Jr.™ Plug and
Receptacle Pod



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Description	Order No.
4-Circuit Mini-Fit, Jr. Receptacle Pod	43511-0001
4-Circuit Mini-Fit, Jr. Plug Pod	43514-0001

FEATURES AND SPECIFICATIONS

Features and Benefits

- Vertical or right angle PCB tails
- Multiple PCB tail lengths to accommodate various PCB thicknesses
- Polarized to prevent improper assembly and mating
- 4 circuits per pod
- Pod "snaps" into shroud with no tools required

Reference Information

Product Specification: PS-43510-001 and PS-5556-01

Packaging Type: 43954—Bag

43955—Tube

UL File No.: E29179

CSA File No.: LR19980

Mates With: 43511 receptacle pod

Use With: 43954 mates with 44040 vertical shroud

43955 mates with 44041 right angle shroud

Designed In: Millimeters

Electrical

Electrical Voltage: 600V

Current: 11.0A max.*

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 1.0kg min.

Normal Force: 700g min.

Durability: 30 cycles

Physical

Physical Housing: Glass-filled nylon, UL 94V-0

Contact: Brass

Plating: Tin or Gold

Operating Temperature: -40 to +105°C

PCB Thickness: 1.57, 2.36 or 3.18mm (.062, .093 or .125")

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.



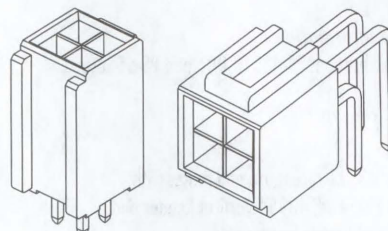
12.30mm (.484") Pitch

COMPODRE™

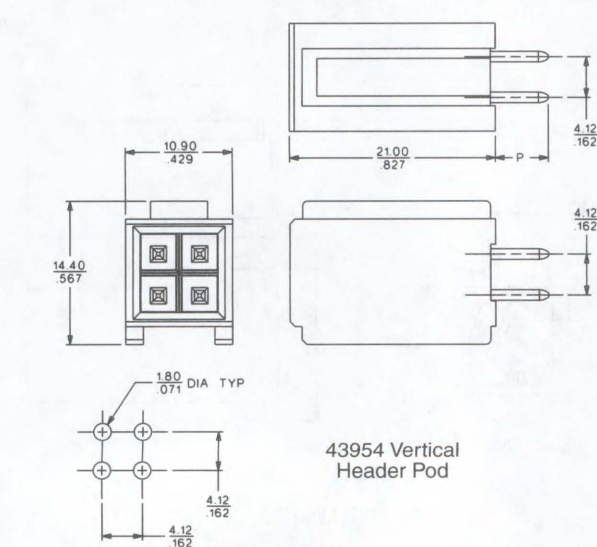
Wire-To-Board Header Pod

43954/43955

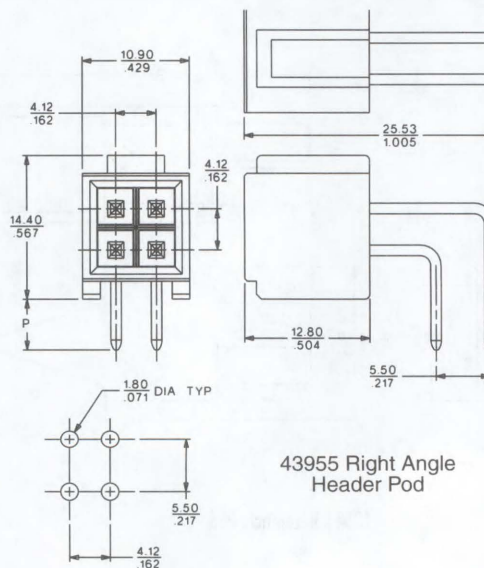
Mini-Fit, Jr.™ Header
Vertical and Right Angle



CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: SEE TABLE



PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: SEE TABLE

ORDERING INFORMATION AND DIMENSIONS

Description	Order No.	Plating	PCB Thickness	Description P
Mini-Fit, Jr. Right Angle Header Pod	43955-0101	Tin	1.57 (.062)	5.10 (.201)
Mini-Fit, Jr. Right Angle Header Pod	43955-0201	30μ" Select Gold	1.57 (.062)	5.10 (.201)
Mini-Fit, Jr. Right Angle Header Pod	43955-0301	Tin	2.36 (.093)	5.90 (.232)
Mini-Fit, Jr. Right Angle Header Pod	43955-0401	30μ" Select Gold	2.36 (.093)	5.90 (.232)
Mini-Fit, Jr. Right Angle Header Pod	43955-0501	Tin	3.18 (.125)	6.70 (.264)
Mini-Fit, Jr. Right Angle Header Pod	43955-0601	30μ" Select Gold	3.18 (.125)	6.70 (.264)
Mini-Fit, Jr. Vertical Header Pod	43954-0101	Tin	1.57 (.062)	3.50 (.138)
Mini-Fit, Jr. Vertical Header Pod	43954-0201	30μ" Select Gold	1.57 (.062)	3.50 (.138)
Mini-Fit, Jr. Vertical Header Pod	43954-0301	Tin	2.36 (.093)	4.30 (.169)
Mini-Fit, Jr. Vertical Header Pod	43954-0401	30μ" Select Gold	2.36 (.093)	4.30 (.169)
Mini-Fit, Jr. Vertical Header Pod	43954-0501	Tin	3.18 (.125)	5.10 (.201)
Mini-Fit, Jr. Vertical Header Pod	43954-0601	30μ" Select Gold	3.18 (.125)	5.10 (.201)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Fully customizable and expandable to meet your application needs
- One connector system to meet both your power and signal needs
- Offers connector consolidation and PCB real estate savings by having power and signal in one connector
- Easy to assemble or disassemble
- Uses existing interfaces, so no requalification is usually necessary
- Pods and shrouds are gender interchangeable

Reference Information

Product Specification: PS-43510-001 and PS-43045

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: 43512 mates with 43515 plug pod,

44032 vertical header pod or 44033 right angle pod

Use With: 43838 receptacle or 43839 plug shrouds

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 5.0A max.*

Contact Resistance: 10mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Insertion Force: 1.5kgf max. (3.30 lb)

Contact Retention to Housing: 2.5kgf min. (5.50 lb)

Physical

Housing: Black polyester, UL 94V-0

Operating Temperature: -40 to +105°C

* Depending on circuit size, wire gauge and PCB. Please refer to product specification.



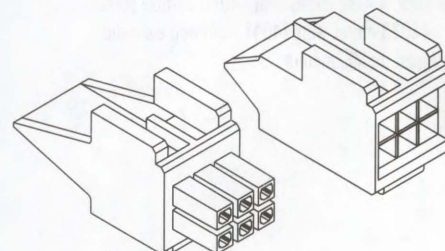
12.30mm (.484") Pitch

COMPODRE™

Wire-to-Wire, Wire-to-Board
Pod, Plug and Receptacle

43512/43515

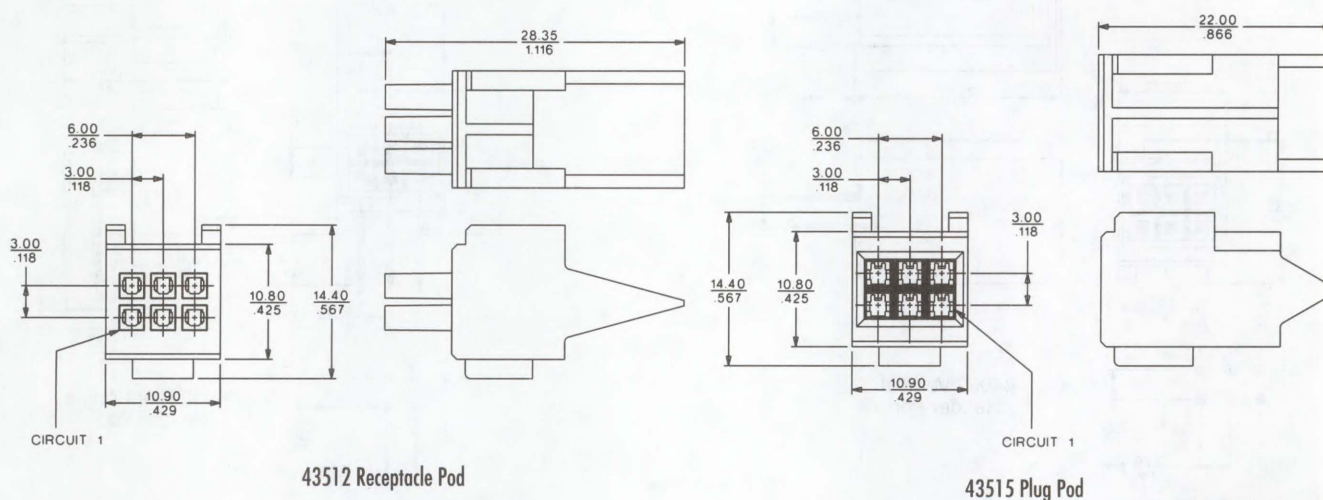
Micro-Fit 3.0™ Plug and
Receptacle Pod



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Description	Order No.
6-Circuit Micro-Fit 3.0 Receptacle Pod	43512-0001
6-Circuit Micro-Fit 3.0 Plug Pod	43515-0001

FEATURES AND SPECIFICATIONS

Features and Benefits

- 6 circuits per pod
- Pod "snaps" into shroud with no tools required
- Fully customizable connector system
- Polarized to prevent improper assembly and mating
- Vertical or right angle PCB tails with multiple tail lengths

Reference Information

Product Specification: PS-43510-001 and PS-43045
 Packaging Type: Tube
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: 43512 receptacle pod
 Use With: 44032 mates with 44040 vertical shroud
 44033 mates with 44041 right angle shroud
 Designed In: Millimeters

Electrical

Electrical Voltage: 250V
 Current: 5.0A max.*
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 1.4kg min.
 Normal Force: 375gf (.32 lb) max.

Physical

Housing: Glass-filled nylon, UL 94V-0
 Contact: Phosphor Bronze
 Plating: Tin or Gold
 Operating Temperature: -40 to +105°C
 PCB Thickness: 1.57, 2.36 or 3.18mm (.062, .093 or 1.25")

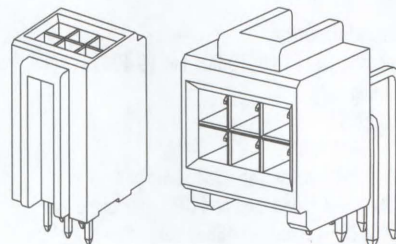
* Depending on circuit size, wire gauge and PCB. Please refer to product specification.



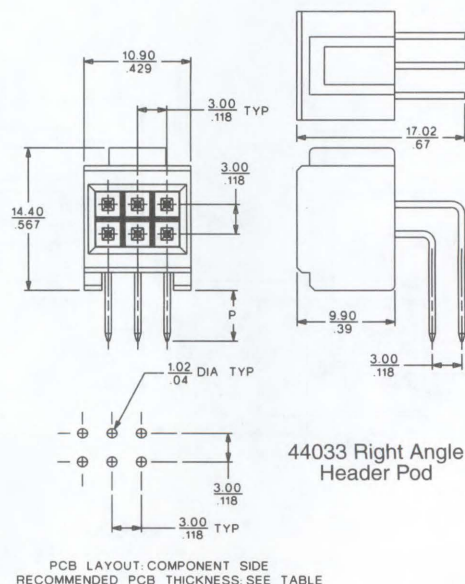
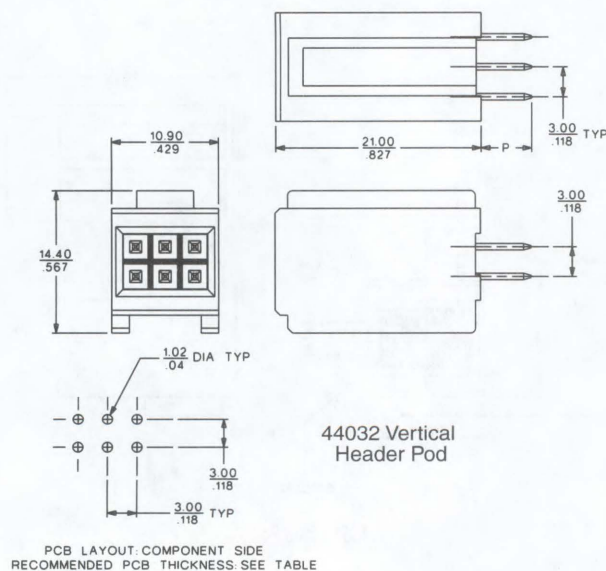
12.30mm (.484") Pitch COMPODRE™ Wire-to-Board Header Pod

44032/44033

Micro-Fit 3.0™ Header Vertical and Right Angle



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Description	Order No.	Plating	PCB Thickness	Description P
Micro-Fit 3.0 Right Angle Header Pod	44033-0101	Tin	1.57 (.062)	5.10 (.201)
Micro-Fit 3.0 Right Angle Header Pod	44033-0201	30μ" Select Gold	1.57 (.062)	5.10 (.201)
Micro-Fit 3.0 Right Angle Header Pod	44033-0301	Tin	2.36 (.093)	5.90 (.232)
Micro-Fit 3.0 Right Angle Header Pod	44033-0401	30μ" Select Gold	2.36 (.093)	5.90 (.232)
Micro-Fit 3.0 Right Angle Header Pod	44033-0501	Tin	3.18 (.125)	6.70 (.264)
Micro-Fit 3.0 Right Angle Header Pod	44033-0601	30μ" Select Gold	3.18 (.125)	6.70 (.264)
Micro-Fit 3.0 Vertical Header Pod	44032-0101	Tin	1.57 (.062)	3.50 (.138)
Micro-Fit 3.0 Vertical Header Pod	44032-0201	30μ" Select Gold	1.57 (.062)	3.50 (.138)
Micro-Fit 3.0 Vertical Header Pod	44032-0301	Tin	2.36 (.093)	4.30 (.169)
Micro-Fit 3.0 Vertical Header Pod	44032-0401	30μ" Select Gold	2.36 (.093)	4.30 (.169)
Micro-Fit 3.0 Vertical Header Pod	44032-0501	Tin	3.18 (.125)	5.10 (.201)
Micro-Fit 3.0 Vertical Header Pod	44032-0601	30μ" Select Gold	3.18 (.125)	5.10 (.201)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Used for blind mating applications
- Pod "snaps" into shroud with no tools required
- Guides system together in both X and Y directions
- Allows for up to 3.18mm (.125") of misalignment to guide system together
- Can be placed in receptacle, plug or header shrouds

Reference Information

Product Specification: PS-43510-001

Packaging Type: Bag

UL File No.: E29179

CSA File No.: LR19980

Use With: 43838, 43839, 44040, 44041 Shrouds

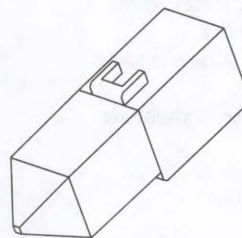
Designed In: Millimeters

Physical

Operating Temperature: -40 to +105°C

molex® **COMPODRE™**
43516

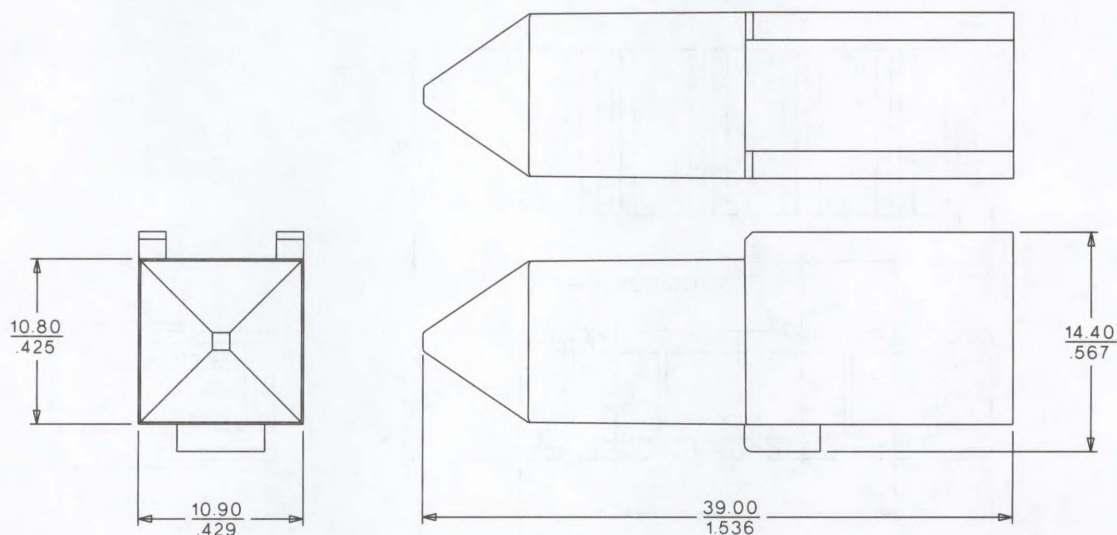
Blind Mate Interface Pod



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Description	Order No.
Blind Mate Interface Pod	43516-0001

FEATURES AND SPECIFICATIONS

Features and Benefits

- Fully customizable and expandable to meet your application needs
- One connector system to meet both your power and signal needs
- Offers connector consolidation and PCB real estate savings by having power and signal in one connector
- Easy to assemble or disassemble
- Uses existing interfaces, so no requalification is usually necessary
- Pods and shrouds are gender interchangeable

Reference Information

Product Specification: PS-43510-001

Packaging: Bag

Mates with: 43893 Plug Shroud, 44040 Verticle Header

Shroud 44041 Right Angle Shroud

UL File No.: E29179

CSA File No.: LR19980

Mates With: 43839, 44040 or 44041

Designed In: Millimeters

Mechanical

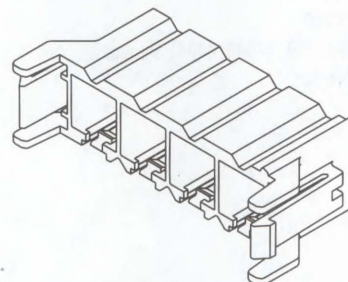
Pod Insertion Force: .5kg max.

Pod Retention Force: 10kg min.

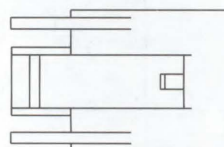
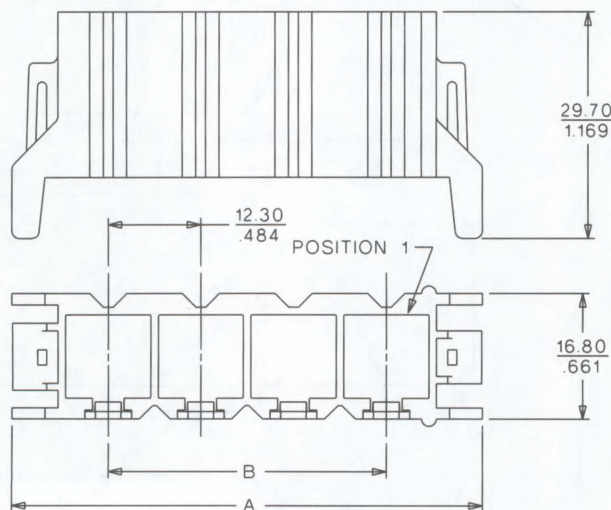
Physical

Housing: Black polyester, UL 94V-0

Operating Temperature: -40 to +105°C

**12.30mm (.484") Pitch****COMPODRE™****Wire-to-Wire, Wire-to-Board
Receptacle****43838****Receptacle Shroud**

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Description	Order No.	Dimension	
		A	B
2-Position Receptacle Shroud	43838-0201	37.80 (1.488)	12.30 (.484)
3-Position Receptacle Shroud	43838-0301	50.10 (1.972)	24.60 (.969)
4-Position Receptacle Shroud	43838-0401	62.40 (2.457)	36.90 (1.453)
5-Position Receptacle Shroud	43838-0501	74.70 (2.941)	49.20 (1.937)
6-Position Receptacle Shroud	43838-0601	87.00 (3.425)	61.50 (2.421)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Fully customizable and expandable to meet your application needs
- One connector system to meet both your power and signal needs
- Offers connector consolidation and PCB real estate savings by having power and signal in one connector
- Easy to assemble or disassemble
- Uses existing interfaces, so no requalification is usually necessary
- Pods and shrouds are gender interchangeable

Reference Information

Product Specification: PS-43510-001
 Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: 43838 receptacle shroud
 Designed In: Millimeters

Mechanical

Pod Insertion Force: .5kg max.
 Pod Retention Force: 10kg min.

Physical

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



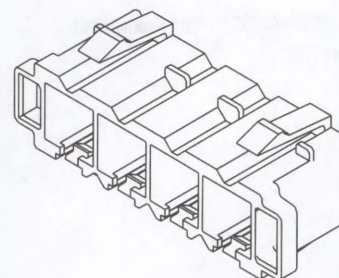
12.30mm (.484") Pitch

COMPODRE™

Wire-to-Wire, Wire-to-Board
 Plug

43839

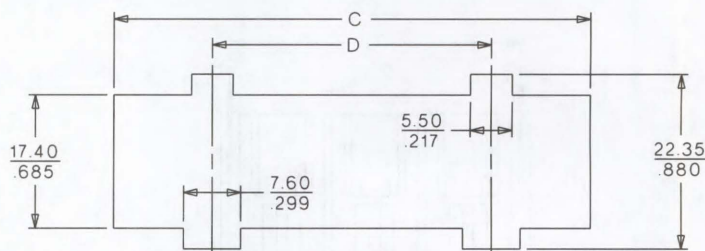
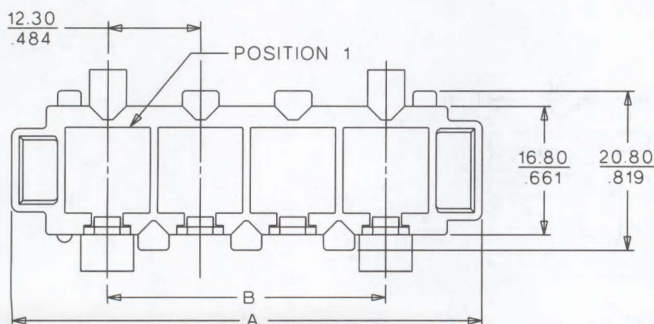
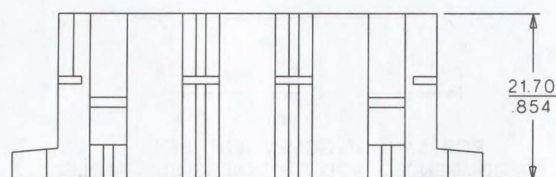
Plug Shroud



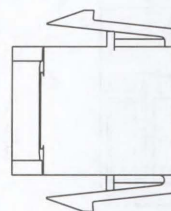
Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



PANEL OPENING: FROM OUTSIDE THE BOX
 RECOMMENDED PANEL THICKNESS: 1.57 TO 2.29
 .062 .090



ORDERING INFORMATION AND DIMENSIONS

Description	Order No.	Dimension			
		A	B	C	D
2-Position Plug Shroud	43839-0201	37.80 (1.488)	12.30 (.484)	38.40 (1.512)	12.30 (.484)
3-Position Plug Shroud	43839-0301	50.10 (1.972)	24.60 (.969)	50.70 (1.997)	24.60 (.969)
4-Position Plug Shroud	43839-0401	62.40 (2.457)	36.90 (1.453)	63.00 (2.480)	36.90 (1.453)
5-Position Plug Shroud	43839-0501	74.70 (2.941)	49.20 (1.937)	75.30 (2.965)	49.20 (1.937)
6-Position Plug Shroud	43839-0601	87.00 (3.425)	61.50 (2.421)	87.60 (3.449)	61.50 (2.421)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Accommodate from 2 to 6 pods
- PCB retention clips hold shroud in place during soldering
- Fully customized
- Easy to assemble (no tools required)

Reference Information

Product Specification: PS-43510-00

Packaging Type: Tray

UL File No.: E29179

CSA File No.: LR19980

Mates With: 43838

Use With: 43952, 43954, 44032 Vertical Header Pods

Designed In: Millimeters

Mechanical

Pod Insertion Force: 5kg max.

Pod Retention to Housing: 10kg min.

Insertion force to PCB: 2.0kg max.

Physical

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

Operating Temperature: -40 to +105°C

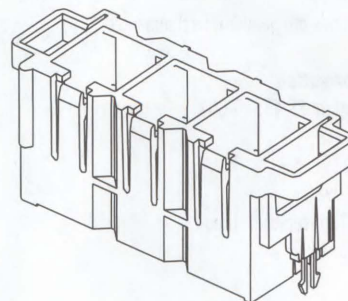
PCB Thickness: 1.57, 2.36 or 3.18mm (.062, .093 or .125")



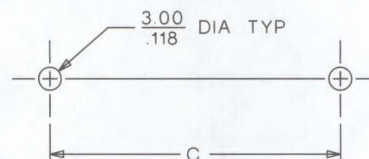
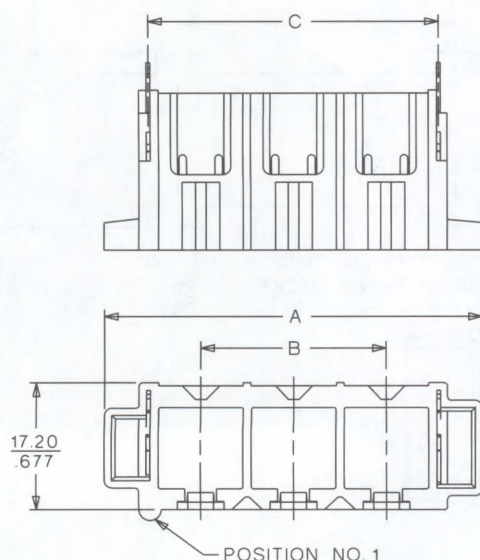
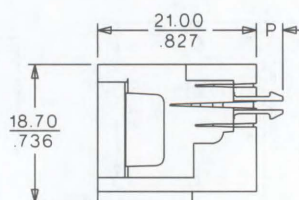
COMPODRE™

Wire-to-Board Header

44040

Header Shrouds
Vertical

CATALOG DRAWING (FOR REFERENCE ONLY)

PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: SEE TABLE

ORDERING INFORMATION AND DIMENSIONS

Description	Order No.	PCB Thickness	Dimensions			
			A	B	C	P
2 Position Vertical Header Shroud	44040-0001	1.57 (.062)	37.80 (1.488)	12.30 (.484)	26.16 (1.030)	3.55 (.140)
3 Position Vertical Header Shroud	44040-0002	1.57 (.062)	50.10 (1.972)	24.60 (.969)	38.46 (1.514)	3.55 (.140)
4 Position Vertical Header Shroud	44040-0003	1.57 (.062)	62.40 (2.457)	36.90 (1.453)	50.76 (1.998)	3.55 (.140)
5 Position Vertical Header Shroud	44040-0004	1.57 (.062)	74.70 (2.941)	49.20 (1.937)	63.06 (2.483)	3.55 (.140)
6 Position Vertical Header Shroud	44040-0005	1.57 (.062)	87.00 (3.425)	61.50 (2.421)	75.36 (2.967)	3.55 (.140)
2 Position Vertical Header Shroud	44040-0006	2.36 (.093)	37.80 (1.488)	12.30 (.484)	26.16 (1.030)	4.35 (.171)
3 Position Vertical Header Shroud	44040-0007	2.36 (.093)	50.10 (1.972)	24.60 (.969)	38.46 (1.514)	4.35 (.171)
4 Position Vertical Header Shroud	44040-0008	2.36 (.093)	62.40 (2.457)	36.90 (1.453)	50.76 (1.998)	4.35 (.171)
5 Position Vertical Header Shroud	44040-0009	2.36 (.093)	74.70 (2.941)	49.20 (1.937)	63.06 (2.483)	4.35 (.171)
6 Position Vertical Header Shroud	44040-0010	2.36 (.093)	87.00 (3.425)	61.50 (2.421)	75.36 (2.967)	4.35 (.171)
2 Position Vertical Header Shroud	44040-0011	3.18 (.125)	37.80 (1.488)	12.30 (.484)	26.16 (1.030)	5.15 (.203)
3 Position Vertical Header Shroud	44040-0012	3.18 (.125)	50.10 (1.972)	24.60 (.969)	38.46 (1.514)	5.15 (.203)
4 Position Vertical Header Shroud	44040-0013	3.18 (.125)	62.40 (2.457)	36.90 (1.453)	50.76 (1.998)	5.15 (.203)
5 Position Vertical Header Shroud	44040-0014	3.18 (.125)	74.70 (2.941)	49.20 (1.937)	63.06 (2.483)	5.15 (.203)
6 Position Vertical Header Shroud	44040-0015	3.18 (.125)	87.00 (3.425)	61.50 (2.421)	75.36 (2.967)	5.15 (.203)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Accommodates from 2 to 6 pods
- PCB retention clips hold shroud in place during soldering
- Fully customized
- Easy to assemble (no tools required)

Reference Information

Product Specification: PS-43510-00

Packaging Type: Tray

UL File No.: E29179 CSA

File No.: LR19980

Mates With: 43838

Use With: 43953, 43955, 44033 Right Angle Header Pods

Designed In: Millimeters

Mechanical

Pod Insertion Force: 5kg max.

Pod Retention to Housing: 10kg min.

Insertion force to PCB: 2.0kg max.

Physical

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

Operating Temperature: -40 to +105°C

PCB Thickness: 1.57, 2.36 or 3.18mm (.062, .093 or .125")

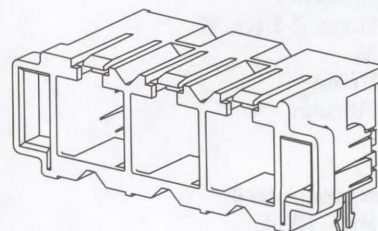


COMPODRE™

Wire-to-Board Header

44041

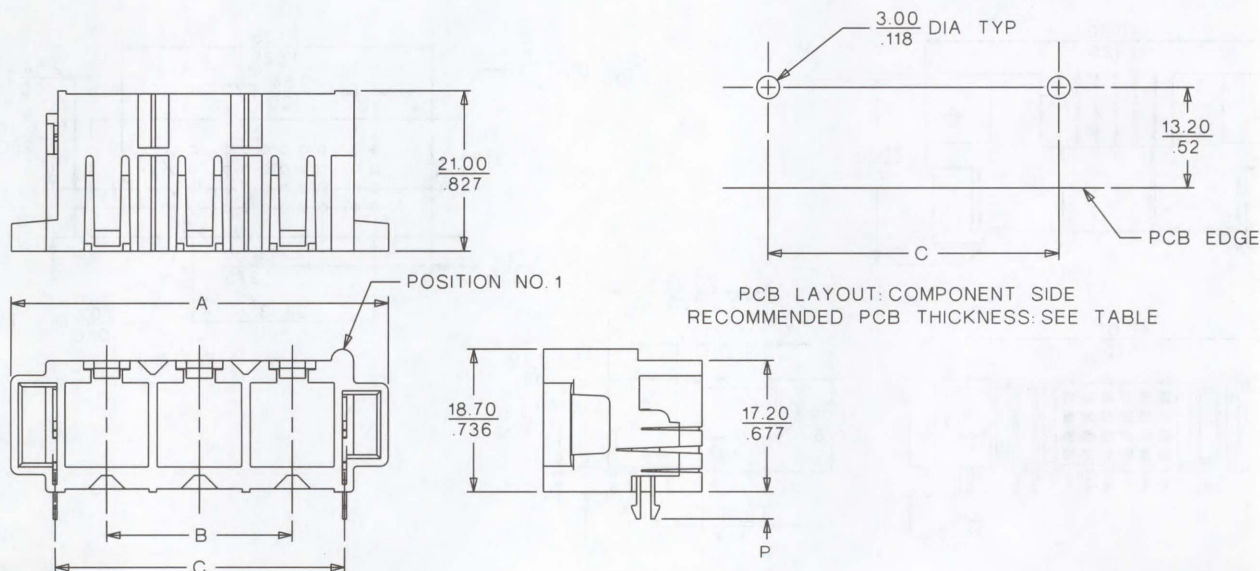
**Header Shrouds
Right Angle**



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Description	Order No.	PCB Thickness	Dimensions			
			A	B	C	P
2 Position Right Angle Header Shroud	44041-0001	1.57 (.062)	37.80 (1.488)	12.30 (.484)	26.16 (1.030)	3.55 (.140)
3 Position Right Angle Header Shroud	44041-0002	1.57 (.062)	50.10 (1.972)	24.60 (.969)	38.46 (1.514)	3.55 (.140)
4 Position Right Angle Header Shroud	44041-0003	1.57 (.062)	62.40 (2.457)	36.90 (1.453)	50.76 (1.998)	3.55 (.140)
5 Position Right Angle Header Shroud	44041-0004	1.57 (.062)	74.70 (2.941)	49.20 (1.937)	63.06 (2.483)	3.55 (.140)
6 Position Right Angle Header Shroud	44041-0005	1.57 (.062)	87.00 (3.425)	61.50 (2.421)	75.36 (2.967)	3.55 (.140)
2 Position Right Angle Header Shroud	44041-0006	2.36 (.093)	37.80 (1.488)	12.30 (.484)	26.16 (1.030)	4.35 (.171)
3 Position Right Angle Header Shroud	44041-0007	2.36 (.093)	50.10 (1.972)	24.60 (.969)	38.46 (1.514)	4.35 (.171)
4 Position Right Angle Header Shroud	44041-0008	2.36 (.093)	62.40 (2.457)	36.90 (1.453)	50.76 (1.998)	4.35 (.171)
5 Position Right Angle Header Shroud	44041-0009	2.36 (.093)	74.70 (2.941)	49.20 (1.937)	63.06 (2.483)	4.35 (.171)
6 Position Right Angle Header Shroud	44041-0010	2.36 (.093)	87.00 (3.425)	61.50 (2.421)	75.36 (2.967)	4.35 (.171)
2 Position Right Angle Header Shroud	44041-0011	3.18 (.125)	37.80 (1.488)	12.30 (.484)	26.16 (1.030)	5.15 (.203)
3 Position Right Angle Header Shroud	44041-0012	3.18 (.125)	50.10 (1.972)	24.60 (.969)	38.46 (1.514)	5.15 (.203)
4 Position Right Angle Header Shroud	44041-0013	3.18 (.125)	62.40 (2.457)	36.90 (1.453)	50.76 (1.998)	5.15 (.203)
5 Position Right Angle Header Shroud	44041-0014	3.18 (.125)	74.70 (2.941)	49.20 (1.937)	63.06 (2.483)	5.15 (.203)
6 Position Right Angle Header Shroud	44041-0015	3.18 (.125)	87.00 (3.425)	61.50 (2.421)	75.36 (2.967)	5.15 (.203)

FEATURES AND SPECIFICATIONS

Features and Benefits

- 30A per power contact, 4A per signal contact
- Hot swappable
- Guide posts for blind-mating applications
- Recessed contacts in housing provide added safety
- Stamped and selectively plated power contacts provide greater electrical reliability
- Foundation for SSI* Specification

Reference Information

Product Specification: PS-87606-002

Packaging: Tray

Mates With: 87606

Designed In: Millimeters

Electrical

Voltage: Power Contact—48V DC

Signal Contact—12V DC

Current: Power Contact—30A

Signal Contact—4A

Contact Resistance: Power Contact—0.5mΩ max.

Signal Contact—20mΩ max.

Electrical

Dielectric Withstanding Voltage:

Power Contact—2,500V AC

Signal Contact—1,000V AC

Insulation Resistance: Power Contact—20,000 MΩ min.

Signal Contact—5,000 MΩ min.

Mechanical

Insertion Force to PCB: 44.6N (10.0 lb) max.

Mating Force: Per Power Contact—6.95N (1.56 lb) max.

Per Signal Contact—1.0N (0.23 lb) max.

Unmating Force: Per Power Contact—2.2N (0.5 lb) min.

Per Signal Contact—0.10N (0.02 lb) min.

Durability: 100 cycles max.

Physical

Housing: Black High-temperature Thermoplastic, UL 94V-0

Contact: Copper Alloy

Plating: Contact Area—30μ" Selective Gold

Solder-Tail Area—Tin/Lead

Underplating—Nickel

Operating Temperature: -20 to +70°C



Power—

6.35mm (.250") Pitch

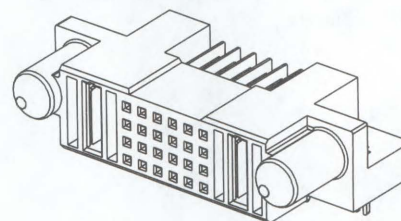
Signal—

2.54mm (.100") Pitch

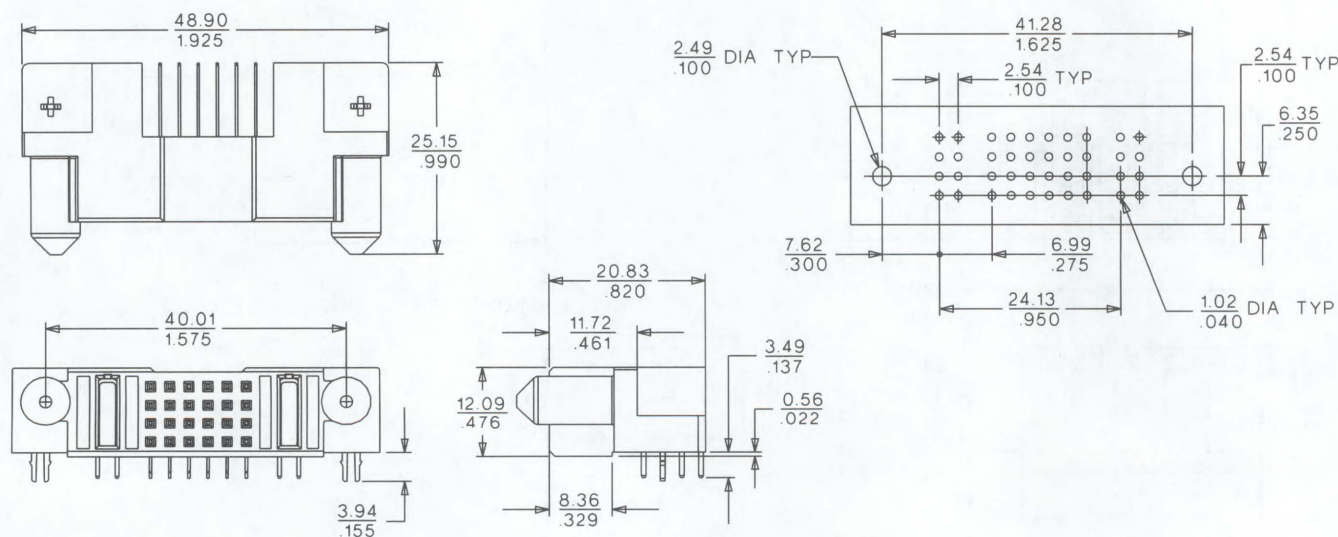
DPS Power Receptacle

87607

Through Hole, Right Angle



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits		Order No.	Tail Length P
Power	Signal	87607-0001	3.49 (.137)
2	24		

* Server System Infrastructure

Note: This product conforms to SSI-DPS open specifications

FEATURES AND SPECIFICATIONS

Features and Benefits

- 30A per power contact, 4A per signal contact
- Hot swappable
- Guide pockets for blind-mating applications
- Shrouded headers prevent contact damage
- Stamped and selectively plated power contacts provide greater electrical reliability
- Foundation for SSI* Specification

Reference Information

Product Specification: PS-87606-002

Packaging: Tray

Mates With: 87607

Designed In: Millimeters

Electrical

Voltage: Power Contact—48V DC

Signal Contact—12V DC

Current: Power Contact—30A

Signal Contact—4A

Contact Resistance: Power Contact—0.5mΩ max.

Signal Contact—20mΩ max.

Electrical

Dielectric Withstanding Voltage:

Power Contact—2,500V AC

Signal Contact—1,000V AC

Insulation Resistance: Power Contact—20,000 MΩ min.

Signal Contact—5,000 MΩ min.

Mechanical

Insertion Force to PCB: 44.6N (10.0 lb) max.

Mating Force: Per Power Contact—6.95N (1.56 lb) max.

Per Signal Contact—1.0N (0.23 lb) max.

Unmating Force: Per Power Contact—2.2N (0.5 lb) min.

Per Signal Contact—0.10N (0.02 lb) min.

Durability: 100 cycles max.

Physical

Housing: Black High-temperature Thermoplastic, UL 94V-0

Contact: Copper Alloy

Plating: Contact Area—30μ" Selective Gold

Solder-Tail Area—Tin/Lead

Underplating—Nickel

Operating Temperature: -20 to +70°C



Power—

6.35mm (.250") Pitch

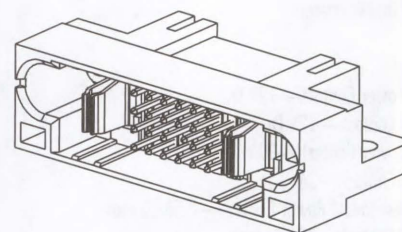
Signal—

2.54mm (.100") Pitch

DPS Power Header

87606

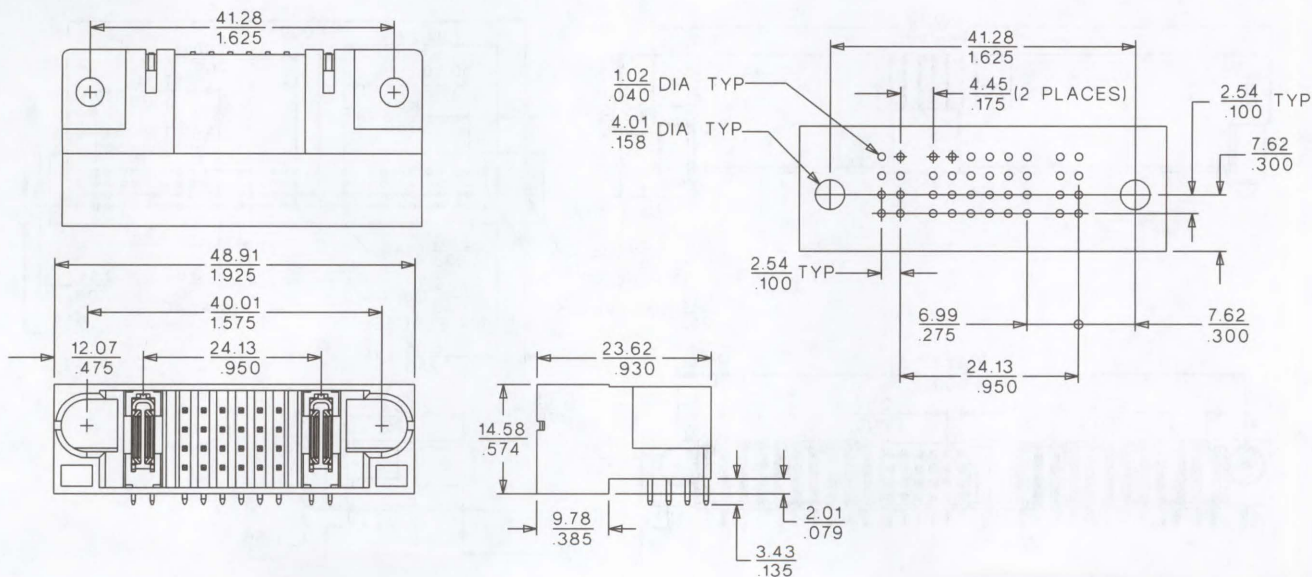
Through Hole, Right Angle



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits		Order No.	Tail Length P
Power	Signal	87606-0001	3.43 (.135)
2	24		

* Server System Infrastructure

Note: This product conforms to SSI-DPS open specifications

FEATURES AND SPECIFICATIONS

Features and Benefits

- 30A per power contact, 3A per signal contact
- Hot swappable
- Guide posts for blind-mating applications
- Recessed contacts in housing provide added safety
- Stamped and selectively plated power contacts provide greater electrical reliability
- Foundation for SSI* Specification

Reference Information

Product Specification: PS-87615-005

Packaging: Tray

Mates With: 87615

Designed In: Millimeters

Electrical

Voltage: Power Contact—12V DC

Signal Contact—12V DC

Current: Power Contact—30A

Signal Contact—3A

Contact Resistance: Power Contact—0.5mΩ max.

Signal Contact—20mΩ max.

Electrical

Dielectric Withstanding Voltage:

Power Contact—2,500V AC

Signal Contact—1,000V AC

Insulation Resistance: Power Contact—20,000 MΩ min.

Signal Contact—5,000 MΩ min.

Mechanical

Insertion Force to PCB: 44.6N (10.0 lb) max.

Mating Force: Per Power Contact—6.95N (1.56 lb) max.

Per Signal Contact—1.0N (0.23 lb) max.

Unmating Force: Per Power Contact—2.2N (0.5 lb) min.

Per Signal Contact—0.10N (0.02 lb) min.

Durability: 100 cycles max.

Physical

Housing: Black High-temperature Thermoplastic, UL 94V-0

Contact: Copper Alloy

Plating: Contact Area—30μ" Selective Gold

Solder-Tail Area—Tin/Lead

Underplating—Nickel

Operating Temperature: -20 to +70°C



Power—

6.35mm (.250") Pitch

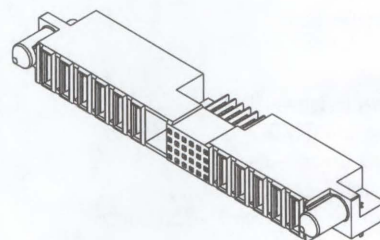
Signal—

2.54mm (.100") Pitch

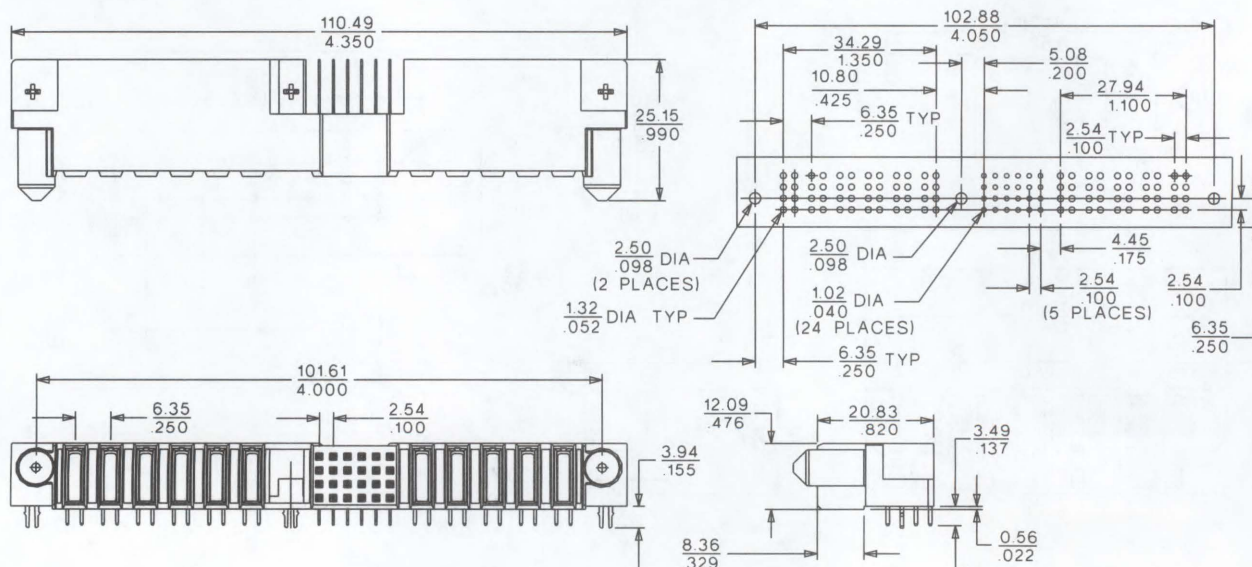
MPS Power Receptacle

87616

Through Hole, Right Angle



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits		Order No.	Tail Length P
Power	Signal		
11	24	87616-0001	3.49 (.137)

* Server System Infrastructure

Note: This product conforms to SSI-MPS open specifications

FEATURES AND SPECIFICATIONS

Features and Benefits

- 30A per power contact, 3A per signal contact
- Hot swappable
- Guide pockets for blind-mating applications
- Shrouded headers prevent contact damage
- Stamped and selectively plated power contacts provide greater electrical reliability
- Foundation for SSI* Specification

Reference Information

Product Specification: PS-87615-005

Packaging: Tray

Mates With: 87616

Designed In: Millimeters

Electrical

Voltage: Power Contact—12V DC

Signal Contact—12V DC

Current: Power Contact—30A

Signal Contact—3A

Contact Resistance: Power Contact—0.5mΩ max.

Signal Contact—20mΩ max.

Electrical

Dielectric Withstanding Voltage:

Power Contact—2,500V AC

Signal Contact—1,000V AC

Insulation Resistance: Power Contact—20,000 MΩ min.

Signal Contact—5,000 MΩ min.

Mechanical

Insertion Force to PCB: 44.6N (10.0 lb) max.

Mating Force: Per Power Contact—6.95N (1.56 lb) max.

Per Signal Contact—1.0N (0.23 lb) max.

Unmating Force: Per Power Contact—2.2N (0.5 lb) min.

Per Signal Contact—0.10N (0.02 lb) min.

Durability: 100 cycles max.

Physical

Housing: Black High-temperature Thermoplastic, UL 94V-0

Contact: Copper Alloy

Plating: Contact Area—30μ" Selective Gold

Solder-Tail Area—Tin/Lead

Underplating—Nickel

Operating Temperature: -20 to +70°C

molex® Power—

6.35mm (.250") Pitch

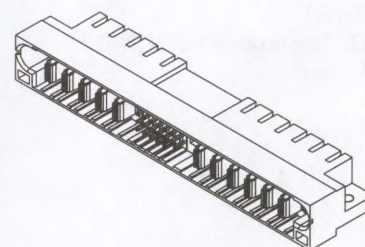
Signal—

2.54mm (.100") Pitch

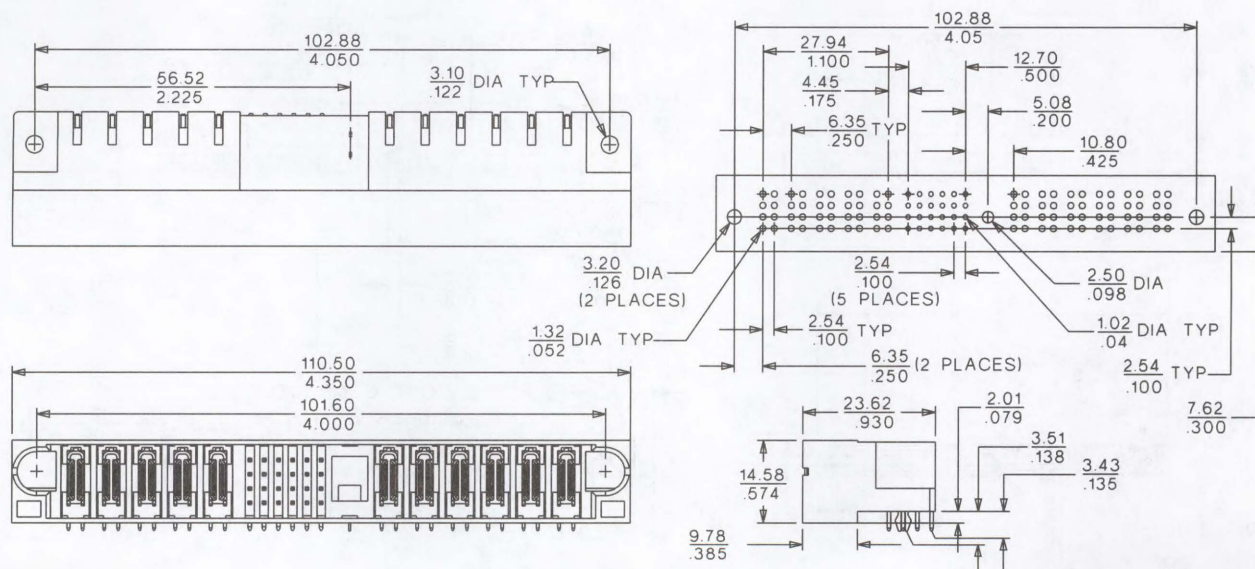
MPS Power Header

87615

Through Hole, Right Angle



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits		Order No.	Tail Length P
Power	Signal		
11	24	87615-0001	3.43 (.135)

* Server System Infrastructure

Note: This product conforms to SSI-MPS open specifications

FEATURES AND SPECIFICATIONS

Features and Benefits

- Mechanically robust for multiple mating cycles
- For PCB thickness 1.07mm (+0.13/-0.03)
- High contact reliability
- Packaging options available for robotic delivery (contact Molex)
- High-temperature material for I.R. reflow (Surface Mount Compatible)

Reference Information

Product Specification: PS-87221-0001

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980A

Mates With: 8981, 2mm receptacle and 70498-4068

Designed In: Millimeters

Electrical

Voltage: 4-Pin Connector—12V

12-Pin Connector—5V

68-Pin Connector—5V

Current: 4-Pin Connector—5.0A

12-Pin Connector—1.0A

68-Pin Connector—1.0A

Contact Resistance: 68-Circuit Connector—20mΩ max.

Dielectric Withstanding Voltage: 1000V AC /1 min.

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 1.0kg

Mating Force: 68-Pin Connector—6kg

Unmating Force: 68-Pin Connector—2kg

Durability: 68-Pin Connector—100 cycles

Physical

Housing: High-temperature thermoplastic, UL 94V-0

Terminal: Phosphor Bronze

Plating: Wide SCSI/2mm—0.76μ" Gold

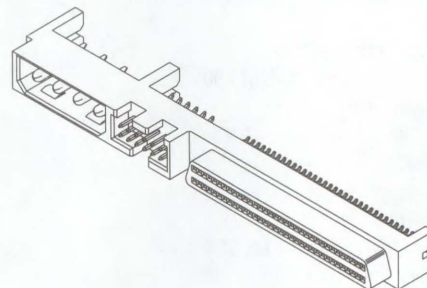
Power—2.54μm Tin/Lead

Operating Temperature: -40 to +105°C

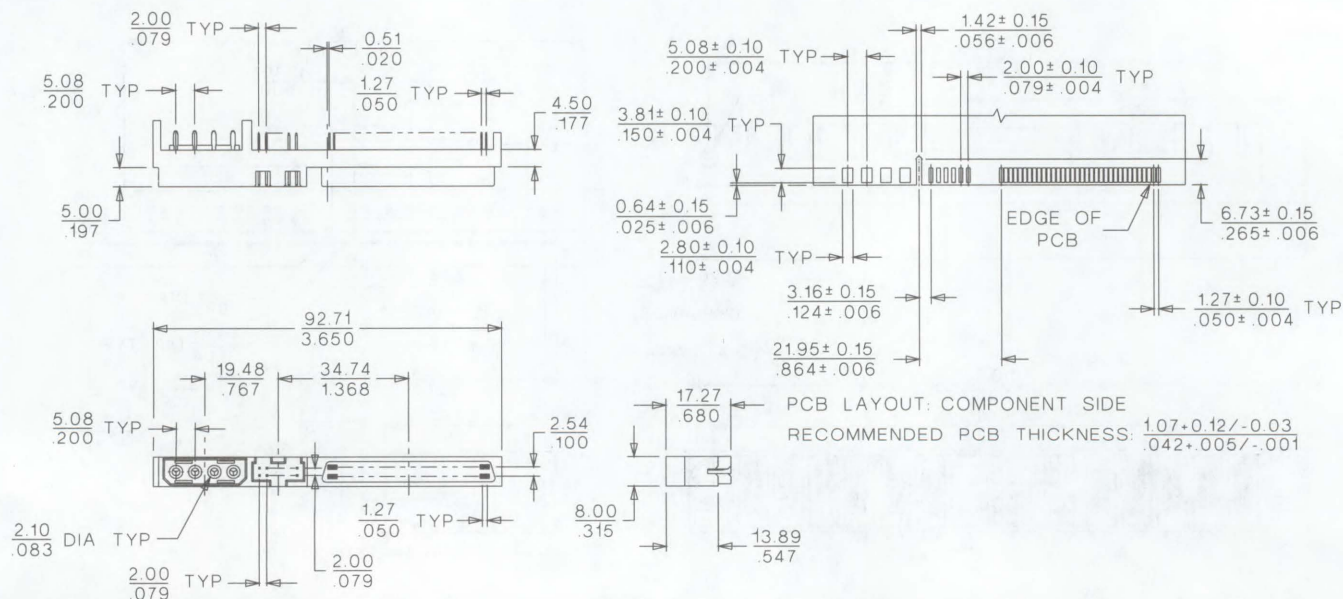
3-in-1 Combo Connector
Wide SCSI/2.00mm/Power

87221

Straddle Mount



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.

87221-0001

FEATURES AND SPECIFICATIONS

Features and Benefits

- Multiple seating plane heights are available, providing design flexibility to different drive manufacturers
- Mechanically robust for multiple mating cycles
- Locating pins provide alignment and retention on PCB
- High contact reliability
- Compatible with paste-in-hole SMT reflow (Surface Mount Compatible)

Reference Information

Product Specification: PS-87360

Packaging: Tray or tube*

UL File No.: E29179

CSA File No.: LR19980A

Mates With: 8981, 2mm shunt/receptacle and 70498-2068

Designed In: Millimeters

Electrical

Voltage: SCSI and 2.00mm—5V

Power—12V

Current: SCSI and 2.00mm—1.0A

Power—5.0A

Contact Resistance:

SCSI and 2.00mm—20mΩ max.

Power—30mΩ max.

Dielectric Withstanding Voltage: 1000V AC /1 min.

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 1kg

Mating Force: SCSI and Power—2kg max.

2.00mm—2kg max.

Unmating Force: SCSI and Power—6kg max.

2.00mm—0.5kg max.

Physical

Housing: Thermoplastic, UL 94V-0

Contact: SCSI and Power—Phosphor Bronze

2.00mm—Brass

Plating: SCSI and 2.00mm—0.76μm Gold with 2.54μm

Tin/Lead on PC tails

Power—2.54μm Tin/Lead over 1.27μm Nickel

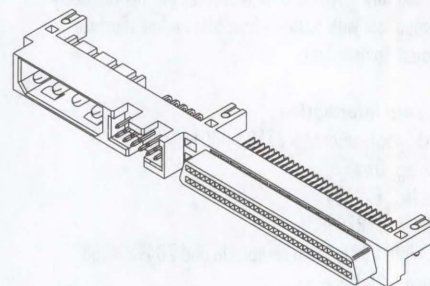
Operating Temperature: -40 to +105°C



3-in-1 Combo Connector Wide SCSI/2.00mm/Power

87360

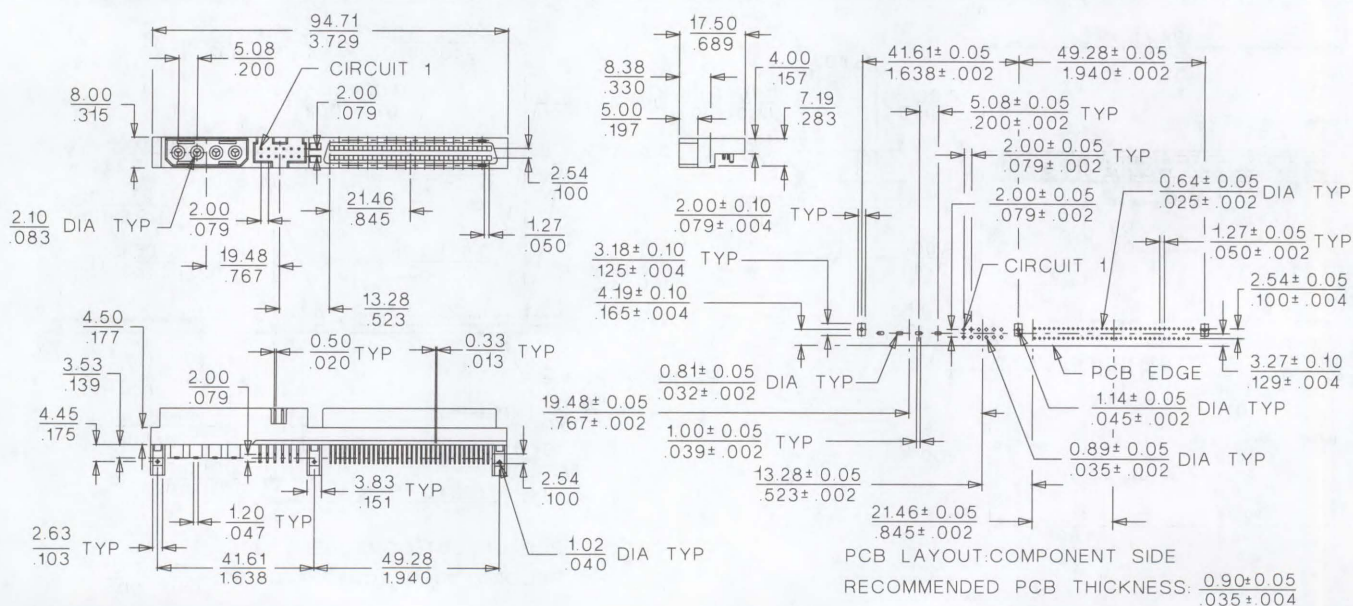
Right Angle



Power Connectors

F

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	Packaging*
87360-0001	Tray

* Contact Molex for tube packaging

FEATURES AND SPECIFICATIONS

Features and Benefits

- Reverse face enables mounting on bottom of the board for more platter space in drive application
- Mechanically robust for multiple mating cycles
- 2-row footprint provides PCB real estate saving as compared with 4-row PC tails
- 3 locating pins provide alignment and retention to PCB
- Tuning fork terminal design ensures contact reliability
- Compatible with paste-in-hole SMT reflow (Surface Mount Compatible)

Reference Information

Product Specification: PS-87520-0001

Packaging: Tray

UL File No.: E29179

CSA File No.: LR19980A

Mates With: 8981, 2mm receptacle and 70498-4068

Designed In: Millimeters

Electrical

Voltage: 4-Pin Connector—12V

12-Pin Connector—5V

68-Pin Connector—5V

Current: 4-Pin Connector—5.0A

12-Pin Connector—1.0A

68-Pin Connector—1.0A

Contact Resistance: 68-Pin Connector—20mΩ max.

Dielectric Withstanding Voltage: 1000V AC /1 min.

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 1.0kg

Mating Force: 68-Pin Connector—6kg

Unmating Force: 68-Pin Connector—2kg

Durability: 68-Pin Connector—100 cycles

Physical

Housing: High-temperature thermoplastic, UL 94V-0

Terminal: Phosphor Bronze

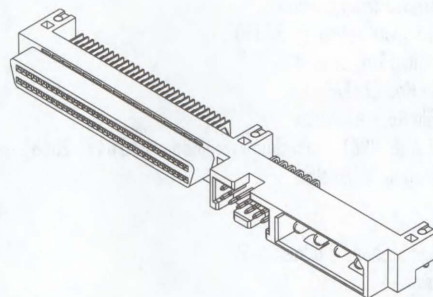
Plating: Wide SCSI/2mm—0.76μ" Gold

Power—2.54μm Tin/Lead

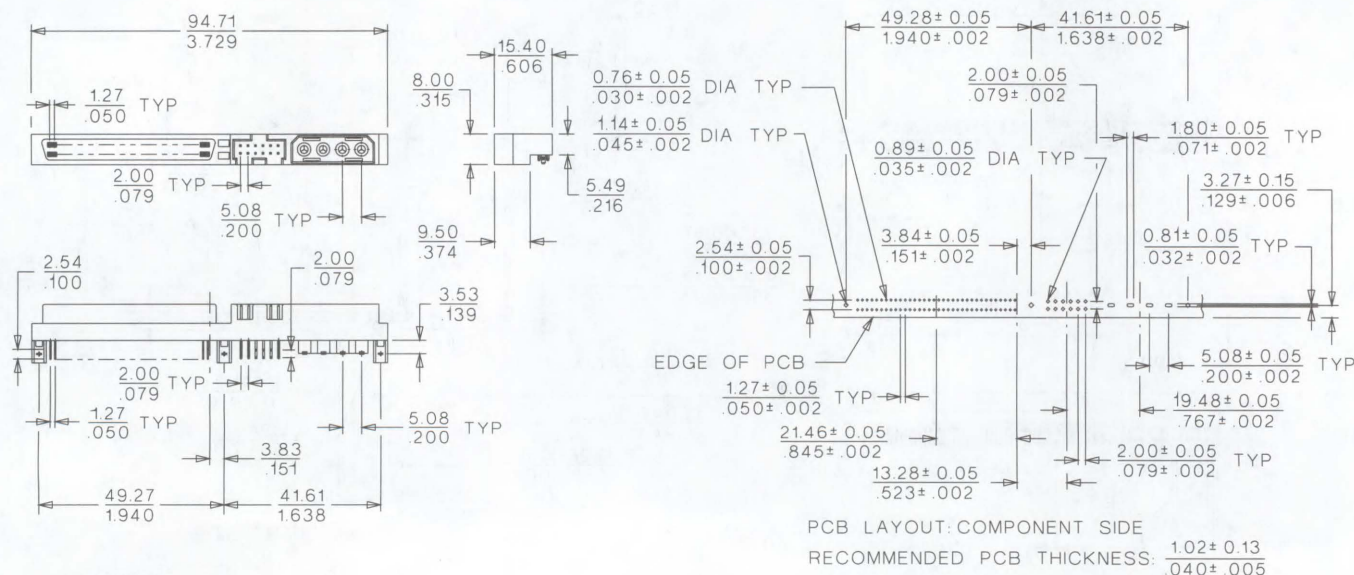
Operating Temperature: -40 to +105°C

3-in-1 Combo Connector
Wide SCSI/2.00mm/Power

87520

Reverse Face
Right Angle

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.

87520-0001

molex® 3-in-1 Combo Connector
Mini-Fuse/Power
2.50mm (.098")

Features and Benefits

- Size 16 circuits
- 3-in-1 combo (Signal, Power & Mini-Fuse Socket)
- Low profile

Reference Information

Product Specification: PS-87527

Packaging: Bag

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 4.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1000V AC

Insulation Resistance: 1000 M Ω min.

Mechanical

Contact Retention to Housing: 8N min.

Physical

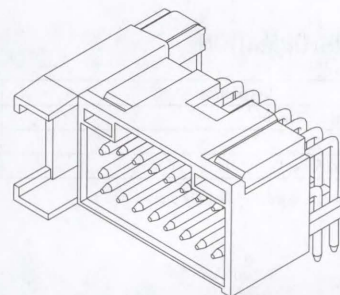
Housing: Nylon, UL94-V2

Plating: Tin/Lead

Operating Temperature: -40 to +105°C

87527

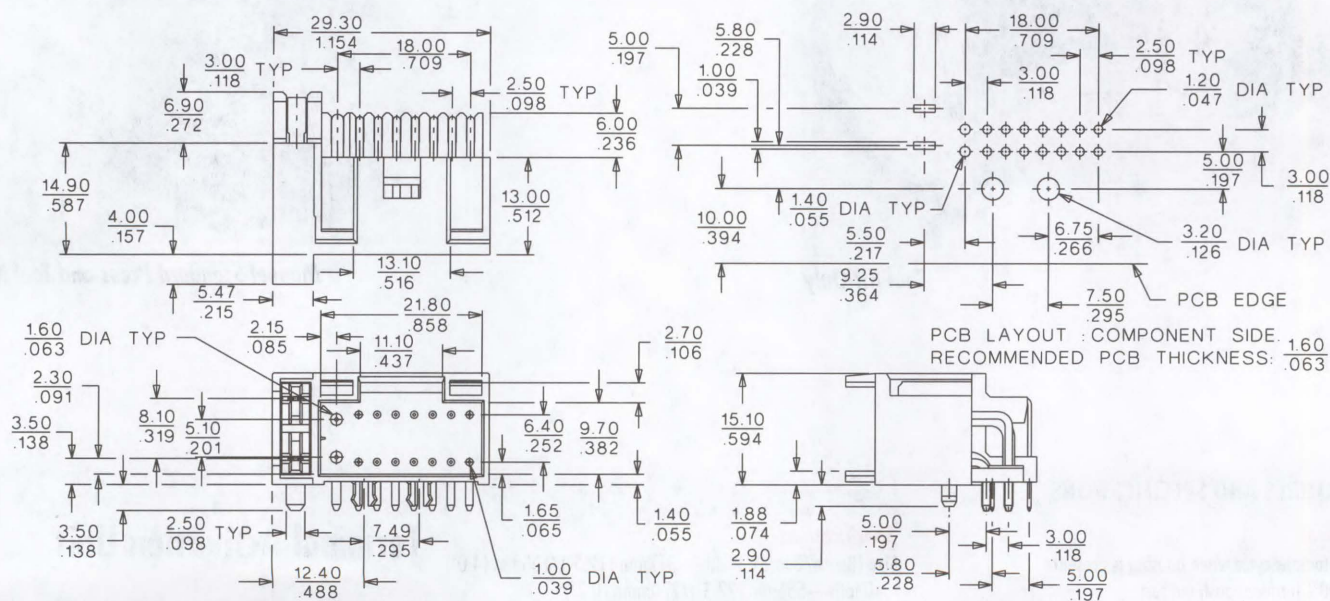
Right Angle



Power Connectors

P

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
16	87527-1611

FEATURES AND SPECIFICATIONS

Features

- Accommodates 4 to 24 circuits
- Tool rotates to allow four separate connector orientations
- Laser locator included for accurate board positioning
- Accommodates left and right handed operators
- Full cycle ratchet insures proper seating
- Fits in Molex Standard Manual Press (11-31-6356)
- Adjustable for PCB thickness of 2.3mm (.090") to 6.3mm (.250")

Specifications

Weight: Including press 24.1kg (53 lb)

Size: Including press

Height—498mm (19.6")

Length—269mm (10.6")

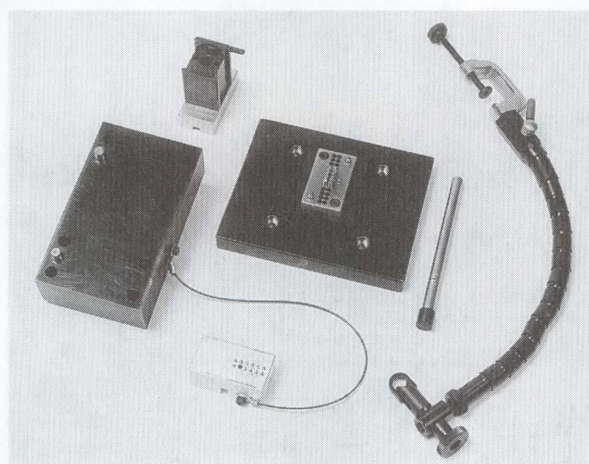
Depth—152.4mm (6.0")

Rate: 120 connectors per hour dependent on operator skill

ORDERING INFORMATION

Description	Order No.
Manual Standard Press and Tool Kit	62200-6900
Tool Kit Only	62200-5800
Flatrock Press Tool (Not Shown)*	62200-9400

* For backplane applications in industry standard presses

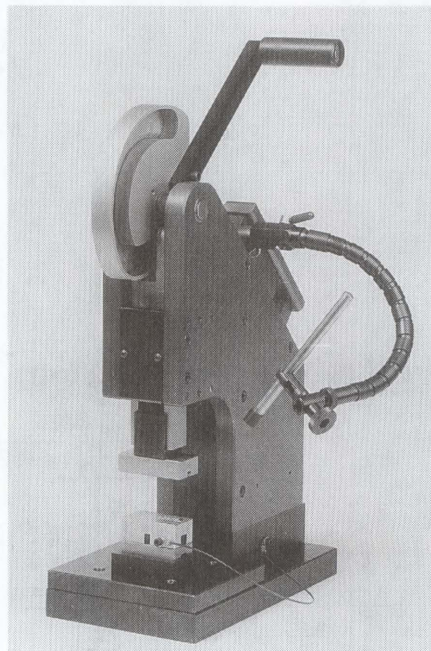


Tool Kit Only

molex® Application Tooling

43879

Manual Standard Press and Insertion Tool for Mini-Fit, CPI™



Manual Standard Press and Tool Kit

FEATURES AND SPECIFICATIONS

Features

- Automatic cycle when housing is present
- 100% terminal push out test
- Available in bench top design or TSK test board integratable modules
- Dip switch control panel allows users to customize the machine to select voided circuits
- Each circuit size requires one unit

Specifications

Size (Bench/Board): Width—317mm (12.5")/100mm (4.0")

Depth—556mm (22.3")/270mm (10.7")

Height—254mm (10.0")/100mm (4.0")

Weight (Bench/Board): 16.8kg (37 lb)/7.9kg (17.5 lb)

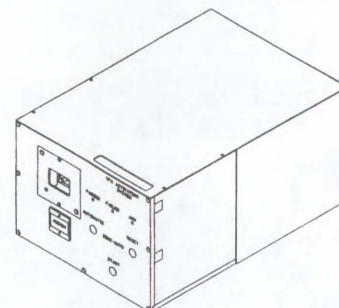
Pneumatics: 5.9 BAR (85psi) at 2.8L per minute (.100 CFM)

Electric: 110V, 50/60 Hz, 1A

Rate: Up to 360 terminal activations per hour, dependent on operator skill

Terminal Activation Unit

**For Sabre Terminals
43375 and 43178**



ORDERING INFORMATION

Contact Molex

Full harness testing activation equipment available through:

TSK Innovations Co.
1057 Doniphan Park Circle
Suite H
El Paso, TX 79922
(915) 581-9718

FEATURES

- For prototype and repairs



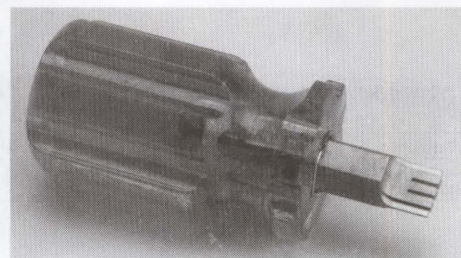
Application Tooling

Manual Termination and Extraction Hand Tool for Mini-Fit, IDT™

ORDERING INFORMATION

Description	Order No.	Connector
Manual Termination Hand Tool for Mini-Fit IDT	11-02-0023	71690, 71694
Extraction Tool*	11-03-0044	71690, 71694

* Not shown



Power Connectors

F

FEATURES

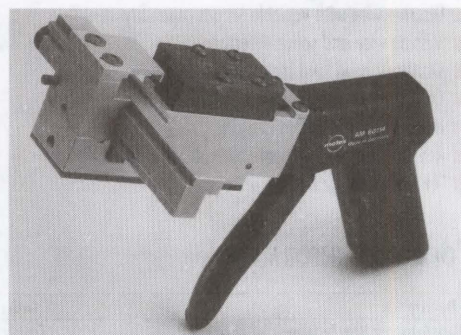
- For prototype and repairs
- Auto-indexing to next position after each termination
- For feed-to and feed-through terminations

Manual Termination Hand Tool for Discrete Wire Mini-Fit, IDT

ORDERING INFORMATION

Description	Order No.	Connector
Pistol*	63600-0478	
Module for Mini-Fit IDT	11-39-0303	71690, 71694

* Complete tool includes the pistol and a module



FEATURES AND SPECIFICATIONS

Features

- Mass termination for discrete wires
- Feed-to or feed-through capability
- Full cycle ratchet to assure complete termination

Specifications

Size: Width—270mm (10.5")
 Depth—150mm (6.0")
 Height—530mm (21.0")
 Weight: 18kg (40 lb)
 Rate: Up to 700 terminations per hour, dependent on operator speed and application

Manual Standard Press for Mass Termination of Discrete Wire for Mini-Fit, IDT

ORDERING INFORMATION

Description	Order No.	Connector
Manual Standard Press	11-31-6356	
Tool Kit for Mini-Fit IDT	11-39-0277	71690, 71694
Complete Press Assembly	11-20-1328	71690, 71694



FEATURES AND SPECIFICATIONS

Features

- Can terminate feed-to, feed-through or reverse feed-to
- Quick and easy tooling change from feed-to to feed-through
- Feed-to configuration has positive wire stop
- Adjustable wire length stop for daisy chain applications
- "CE" certified for Europe

Specifications

Size: Width—605mm (23.81")
 Depth—138mm (5.43")
 Height—307mm (12.12")
 Weight: 21kg (46.3 lb)
 Pneumatics: Pressure—5 to 6 BAR (80 to 90psig)
 Consumption—7L per minute (0.25 CFM)
 Electrical: 110V, 60 Hz or 220V, 50 Hz
 Connector to Connector Spacing: 38mm (1.5") for daisy chain
 Rate: Up to 1200 terminations per hour, dependent on

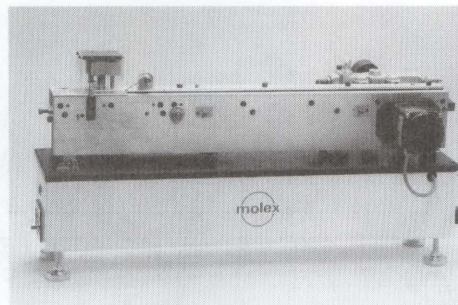
ORDERING INFORMATION

Description	Order No.	Connector
Mini-Com IV Semi-Automatic Termination Machine for Mini-Fit IDT	62300-0200	71690, 71694



Application Tooling

Semi-Automatic Termination Machine for Mini-Fit, IDT



FEATURES AND SPECIFICATIONS

Features

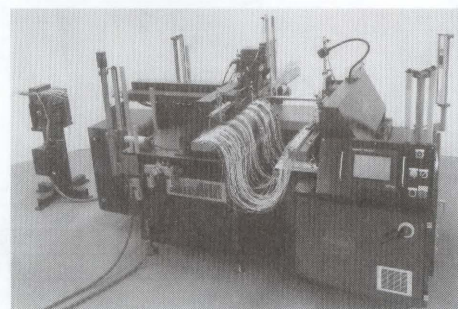
- Dereel or debarrel systems for discrete wire available
- Double- or single-ended harness capabilities without strip
- Single-ended harness capabilities with full or partial strip
- Up to 48 terminations per cycle, dependent on circuit size (multi-up on smaller circuit sizes)
- Discrete wire with variable length capability
- Missing wire and splice detector
- Vibratory bowl feed for connector loading
- Continuity testing (double-ended assemblies)
- Ink Jet programmable marking
- Reject station to segregate assemblies
- "CE" certified for Europe

Specifications

Pneumatics: Pressure—5 BAR (80psig)
 Consumption—142L per minute (5 CFM)
 Electrical: 120V, 60 Hz or 220V, 50 Hz
 Rate: 300 cycles per hour average, dependent on harness length

62700-XXXX

Fully Automatic Termination Machine for Mini-Fit, IDT*



ORDERING INFORMATION

Description	Order No.	Connector
Fully Automatic Mass Terminator for Discrete Wire	Contact Molex	71690, 71694

*Due to the special nature of these machines, contact Molex for information related to specific harness requirements