

The PowerMod® connector family offers minimum size and high power. The high performance contacts and insulator are rated for 30 amps continuous. Applications requiring lower operating temperatures can be de-rated using our current-temperature chart.

The one row male PowerMod connectors are offered in 3, 4, 6 and 8 circuit sizes. The connectors are available with straight crimp, straight PCB or right angle PCB contacts.

APP connectors are manufactured using the finest materials and world-class manufacturing processes. They embody the highest quality in the industry and meet all applicable industry standards.

### FEATURES

- **Mechanically polarized housings**

*Only mate one-way, ensuring proper mating*

- **High reliability positive retention latches**

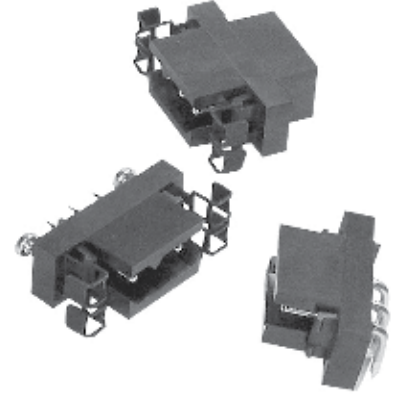
*Are made from stainless steel to provide optimum performance*

- **PCB, panel or cable mounting**

*A wide variety of contact styles with optional mounting brackets, panel clips and back-shell hoods provide broad design flexibility*

- **Optional sequential contact mating**

*4 pin contact lengths can be custom specified for make-first/break-last or make-last/break-first circuits*



### SPECIFICATIONS

Electrical		Mechanical		Materials	
Current Rating		Mating Cycles No Load per IEC 512-5	1,000	Insulator	PPS UL94 V-0, material group IIIa
IEC 512-3, UL 1977 (Amperes)	30	Mating / Unmating Force per IEC 512-13	10 oz (3N) avg.	Pins	Copper alloy, 10 μ inch Au over Ni
UL / CSA Voltage Rating (AC/DC)	600	Contact Retention per IEC 512-8	18 lb (80N) Crimp 9 lb (40N) PCB Connector	Tail Solder (PCB contacts)	Sn/Ag/Cu (lead free)
Creepage / Clearance Distance	3.2 mm (.125") Min			Retention Clips	Stainless steel
Contact Resistance per IEC 512-2	3 milliohms			Hoods	PBT UL94 V-0
Dielectric Withstanding Voltage (AC)	2,200				
Contact Wire Range (AWG)	#24 to #12				
(mm <sup>2</sup> ) *	0.25 to 4.0				
Operating Temperature (°C)	-55° to 180°				
(°F)	-67° to 356°				



\* Stranding, IEC class 5 or lower

### ORDERING INFORMATION

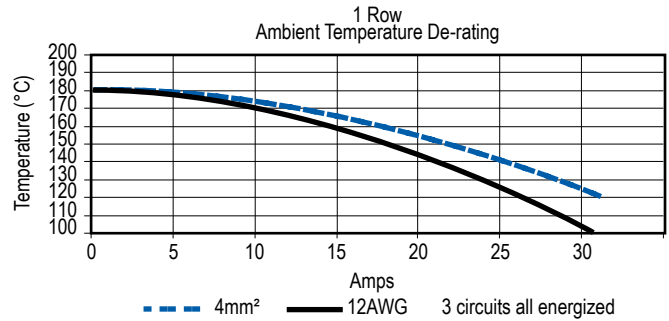
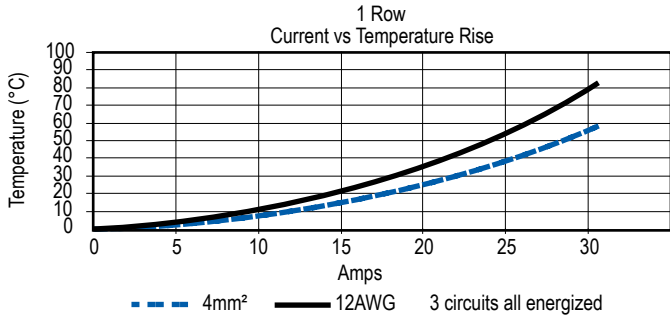
#### PowerMod Part Number Plan - One Row Male

Series	Rows	# Poles	Gender	Contact	Latch	Mounting	Customized Connector				
P M	1	03	M	BA	L	CH	-	X	X	X	
1							Consult factory for options				
03, 04, 06, 08 Poles						OO - None SB - R/A PCB Snap Bracket HB - R/A PCB Bracket with Hole ST - Self-tapping screws for straight PCB mount SP - Push in fastener for straight PCB mount CH - With clam-shell hood PC - Panel Clip MC - Mounting Clip SC - Screw for 1.6mm panel mount					
M - Male						L - Connector with latch (standard for contact type OO) O - No latch					
OO - None (Crimp contacts ordered separately) BA - Straight PCB Solder Standard Length-RoHS RA - R/A PCB Solder Standard Length-RoHS											

#### Tooling

Part Number	Mil-Standard	Description
TM0001	M22520/1-01	AF8 hand tool
TP0001	N/A	WA27F pneumatic crimp tool
Turret & Locator for TM0001 & TP0001		
TL0001	N/A	For pin contacts
TL0002	N/A	For socket contacts
PM1000G1	N/A	Four indent hand tool with locator
PM1002G1	N/A	Contact insertion tool
PM1003G1	N/A	Contact extraction tool

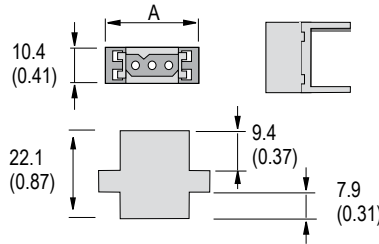
## TEMPERATURE CHARTS



## DIMENSIONS - mm(in.)

### Cable Connector

ROWS CONTACTS	-A-	
	mm	in.
1 - 03	28.5	1.12
1 - 04	33.5	1.32
1 - 06	43.5	1.71
1 - 08	53.5	2.11



See accessory section for panel clip and mounting clip cut-out dimensions.

## ORDERING INFORMATION

### Crimp Contacts

Part Number	Description	Wire AWG	Wire sq. mm
<b>Standard Length 7.7mm</b>			
PM16P2024S30	Pin	#24 / 20	0.50 / 0.75
PM16P1620S30	Pin	#20 / 16	0.50 / 1.5
PM16P1416S30	Pin	#16 / 14	1.5 / 2.5
PM16P12S30	Pin	#12	2.5 / 4.0
<b>Pre-Mate 9.3mm</b>			
PM16P2024A30	Pin	#24 / 20	0.50 / 0.75
PM16P1620A30	Pin	#20 / 16	0.50 / 1.5
PM16P1416A30	Pin	#16 / 14	1.5 / 2.5
PM16P12A30	Pin	#12	2.5 / 4.0
<b>Pre-Mate 8.5mm</b>			
PM16P2024B30	Pin	#24 / 20	0.50 / 0.75
PM16P1620B30	Pin	#20 / 16	0.50 / 1.5
PM16P1416B30	Pin	#16 / 14	1.5 / 2.5
PM16P12B30	Pin	#12	2.5 / 4.0
<b>Post-Mate 6.4mm</b>			
PM16P2024C30	Pin	#24 / 20	0.50 / 0.75
PM16P1620C30	Pin	#20 / 16	0.50 / 1.5
PM16P1416C30	Pin	#16 / 14	1.5 / 2.5
PM16P12C30	Pin	#12	2.5 / 4.0

### Cable Connector

Part Number	Description
PM103MOOLOO	1x3 PIN Cable Connector
PM104MOOLOO	1x4 PIN Cable Connector
PM106MOOLOO	1x6 PIN Cable Connector
PM108MOOLOO	1x8 PIN Cable Connector

### Panel Mount With Screws

Part Number	Description
PM103MOOLSC	1x3 PIN Cable Connector
PM104MOOLSC	1x4 PIN Cable Connector
PM106MOOLSC	1x6 PIN Cable Connector
PM108MOOLSC	1x8 PIN Cable Connector

### Panel Mount With Mounting Clip

Part Number	Description
PM103MOOLMC	1x3 PIN Cable Connector
PM104MOOLMC	1x4 PIN Cable Connector
PM106MOOLMC	1x6 PIN Cable Connector
PM108MOOLMC	1x8 PIN Cable Connector

### With Snap-in Panel Clip

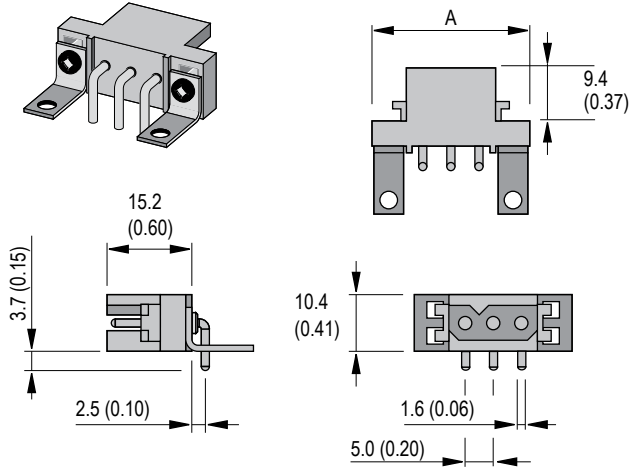
Part Number	Description
PM103MOOLPC	1x3 PIN Cable Connector
PM104MOOLPC	1x4 PIN Cable Connector
PM106MOOLPC	1x6 PIN Cable Connector
PM108MOOLPC	1x8 PIN Cable Connector

### With Clam Shell Hood & Strain Relief

Part Number	Description
PM103MOOLCH	1x3 PIN Cable Connector
PM104MOOLCH	1x4 PIN Cable Connector
PM106MOOLCH	1x6 PIN Cable Connector
PM108MOOLCH	1x8 PIN Cable Connector

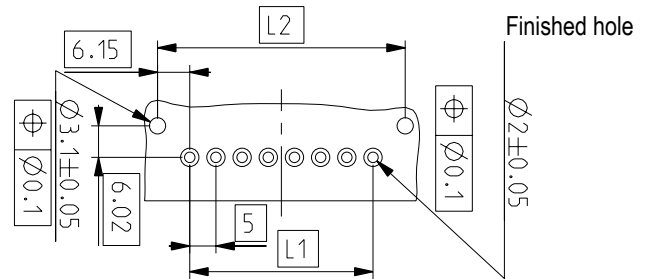
## DIMENSIONS - mm(in.)

### 1 Row - PCB Right Angle Connector



### 1 Row - PCB Hole Layout For Right Angle Connector

ROWS CONTACTS	A		L1		L2	
	mm	in.	mm	in.	mm	in.
1 - 03	28.5	1.12	10	0.39	22.3	0.88
1 - 04	33.5	1.32	15	0.59	27.3	1.07
1 - 06	43.5	1.71	25	0.98	37.3	1.47
1 - 08	53.5	2.11	35	1.38	47.3	1.86



## ORDERING INFORMATION

### With Latch

Part Number	Description
PM103MRALOO	1x3 PIN Right Angle PCB Solder
PM104MRALOO	1x4 PIN Right Angle PCB Solder
PM106MRALOO	1x6 PIN Right Angle PCB Solder
PM108MRALOO	1x8 PIN Right Angle PCB Solder

### No Latch

Part Number	Description
PM103MRAOOO	1x3 PIN Right Angle PCB Solder
PM104MRAOOO	1x4 PIN Right Angle PCB Solder
PM106MRAOOO	1x6 PIN Right Angle PCB Solder
PM108MRAOOO	1x8 PIN Right Angle PCB Solder

### Right Angle PCB Snap Bracket & Latch

Part Number	Description
PM103MRALSB	1x3 PIN Right Angle PCB Solder
PM104MRALSB	1x4 PIN Right Angle PCB Solder
PM106MRALSB	1x6 PIN Right Angle PCB Solder
PM108MRALSB	1x8 PIN Right Angle PCB Solder

### Right Angle PCB Snap Bracket & No Latch

Part Number	Description
PM103MRAOSB	1x3 PIN Right Angle PCB Solder
PM104MRAOSB	1x4 PIN Right Angle PCB Solder
PM106MRAOSB	1x6 PIN Right Angle PCB Solder
PM108MRAOSB	1x8 PIN Right Angle PCB Solder

### Right Angle PCB Bracket With Hole & Latch

Part Number	Description
PM103MRALHB	1x3 PIN Right Angle PCB Solder
PM104MRALHB	1x4 PIN Right Angle PCB Solder
PM106MRALHB	1x6 PIN Right Angle PCB Solder
PM108MRALHB	1x8 PIN Right Angle PCB Solder

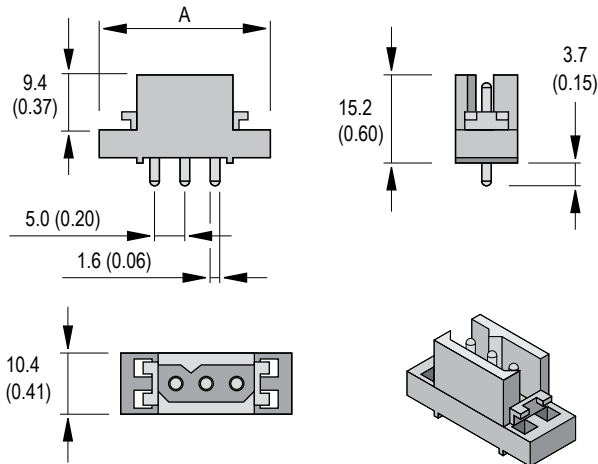
### Right Angle PCB Bracket With Hole & No Latch

Part Number	Description
PM103MRAOHB	1x3 PIN Right Angle PCB Solder
PM104MRAOHB	1x4 PIN Right Angle PCB Solder
PM106MRAOHB	1x6 PIN Right Angle PCB Solder
PM108MRAOHB	1x8 PIN Right Angle PCB Solder

PCB contacts and mounting accessories are designed for a board thickness of 1.60mm (.063) with a contact protrusion of 2.10 (.083). Other contact lengths are available upon request.

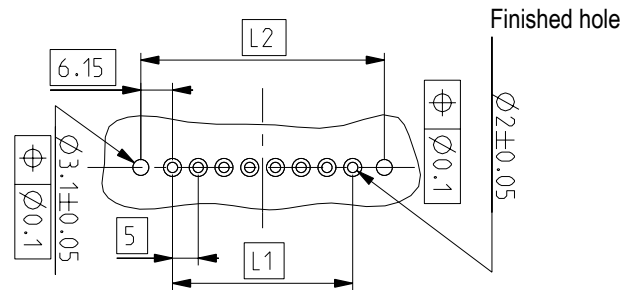
## DIMENSIONS - mm(in.)

### 1 Row - PCB Straight Solder Connector



### 1 Row - PCB Hole Layout For Straight Solder Connector

ROWS CONTACTS	A		L1		L2	
	mm	in.	mm	in.	mm	in.
1 - 03	28.5	1.12	10	0.39	22.3	0.88
1 - 04	33.5	1.32	15	0.59	27.3	1.07
1 - 06	43.5	1.71	25	0.98	37.3	1.47
1 - 08	53.5	2.11	35	1.38	47.3	1.86



## ORDERING INFORMATION

### With Latch

Part Number	Description
PM103MBALOO	1x3 PIN Straight PCB Solder
PM104MBALOO	1x4 PIN Straight PCB Solder
PM106MBALOO	1x6 PIN Straight PCB Solder
PM108MBALOO	1x8 PIN Straight PCB Solder

### Push On PCB Fastener & Latch

Part Number	Description
PM103MBALSP	1x3 PIN Straight PCB Solder
PM104MBALSP	1x4 PIN Straight PCB Solder
PM106MBALSP	1x6 PIN Straight PCB Solder
PM108MBALSP	1x8 PIN Straight PCB Solder

### Self-tapping Screws For PCB Mount & Latch

Part Number	Description
PM103MBALST	1x3 PIN Straight PCB Solder
PM104MBALST	1x4 PIN Straight PCB Solder
PM106MBALST	1x6 PIN Straight PCB Solder
PM108MBALST	1x8 PIN Straight PCB Solder

### No Latch

Part Number	Description
PM103MBAOOO	1x3 PIN Straight PCB Solder
PM104MBAOOO	1x4 PIN Straight PCB Solder
PM106MBAOOO	1x6 PIN Straight PCB Solder
PM108MBAOOO	1x8 PIN Straight PCB Solder

### Push On PCB Fastener & No Latch

Part Number	Description
PM103MBAOSP	1x3 PIN Straight PCB Solder
PM104MBAOSP	1x4 PIN Straight PCB Solder
PM106MBAOSP	1x6 PIN Straight PCB Solder
PM108MBAOSP	1x8 PIN Straight PCB Solder

### Self-tapping Screws For PCB Mount & No Latch

Part Number	Description
PM103MBAOST	1x3 PIN Straight PCB Solder
PM104MBAOST	1x4 PIN Straight PCB Solder
PM106MBAOST	1x6 PIN Straight PCB Solder
PM108MBAOST	1x8 PIN Straight PCB Solder

PCB contacts and mounting accessories are designed for a board thickness of 1.60mm (.063) with a contact protrusion of 2.10 (.083). Other contact lengths are available upon request.

# Mouser Electronics

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