

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 three row male PowerMod connectors are offered in 6, 8, 12 and 16 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**

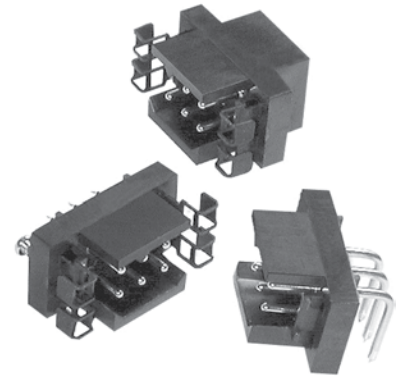
*Are made from stainless steel to provide optimum performance*

- **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

Current Rating		
IEC 512-3, UL 1977 (Amperes)	30	
UL / CSA Voltage Rating (AC/DC)	600	
Creepage / Clearance Distance	3.2 mm (.125") Min	
Contact Resistance per IEC 512-2	3 milliohms	
Dielectric Withstanding Voltage (AC)	2,200	
Contact Wire Range (AWG)	#24 to #12	
(mm²) *	0.25 to 4.0	
Operating Temperature (°C)	-55° to 180°	
(°F)	-67° to 356°	

#### Mechanical

Mating Cycles No Load per IEC 512-5	1,000
Mating / Unmating Force per IEC 512-13	10 oz (3N) avg.
Contact Retention per IEC 512-8	18 lb (80N) Crimp 9 lb (40N) PCB Connector

#### Materials

Insulator	PPS UL94 V-0, material group IIIa
Pins	Copper alloy, 10 μ inch Au over Ni
Tail Solder (PCB contacts)	Sn/Ag/Cu (lead free)
Retention Clips	Stainless steel
Hoods	PBT UL94 V-0



\* Stranding, IEC class 5 or lower

## ORDERING INFORMATION

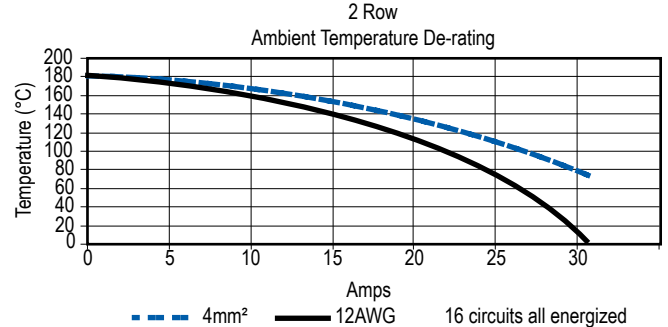
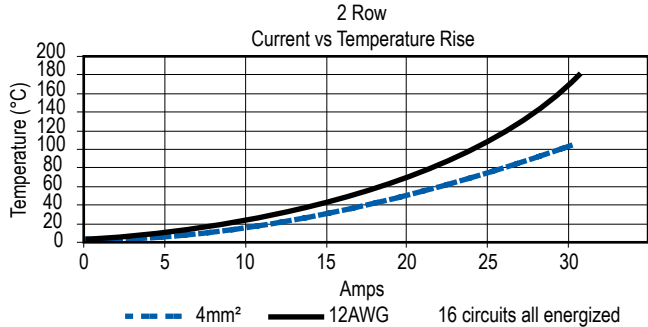
### PowerMod Part Number Plan - Two Row Male

Series	Rows	# Poles	Gender	Contact	Latch	Mounting	Customized Connector			
PM	2	06	M	BA	L	CH	-	X	X	X
2							Consult factory for options			
06, 08, 12, 16 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			

### 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

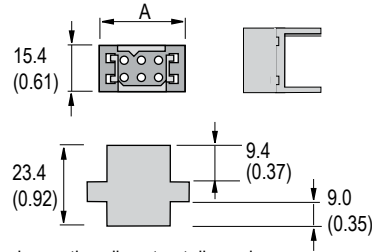
## TEMPERATURE CHARTS



## DIMENSIONS - mm(in.)

### Cable Connector

ROWS CONTACTS	-A-	
	mm	in.
2 - 06	28.5	1.12
2 - 08	33.5	1.32
2 - 12	43.5	1.71
2 - 16	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	sq. mm
Standard Length 7.7mm			
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
Pre-Mate 9.3mm			
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
Pre-Mate 8.5mm			
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
Post-Mate 6.4mm			
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
PM206MOOLOO	2x3 MALE Cable Connector
PM208MOOLOO	2x4 MALE Cable Connector
PM212MOOLOO	2x6 MALE Cable Connector
PM216MOOLOO	2x8 MALE Cable Connector

### Panel Mount With Screws

Part Number	Description
PM206MOOLSC	2x3 MALE Cable Connector
PM208MOOLSC	2x4 MALE Cable Connector
PM212MOOLSC	2x6 MALE Cable Connector
PM216MOOLSC	2x8 MALE Cable Connector

### Panel Mount With Mounting Clip

Part Number	Description
PM206MOOLMC	2x3 MALE Cable Connector
PM208MOOLMC	2x4 MALE Cable Connector
PM212MOOLMC	2x6 MALE Cable Connector
PM216MOOLMC	2x8 MALE Cable Connector

### With Snap-in Panel Clip

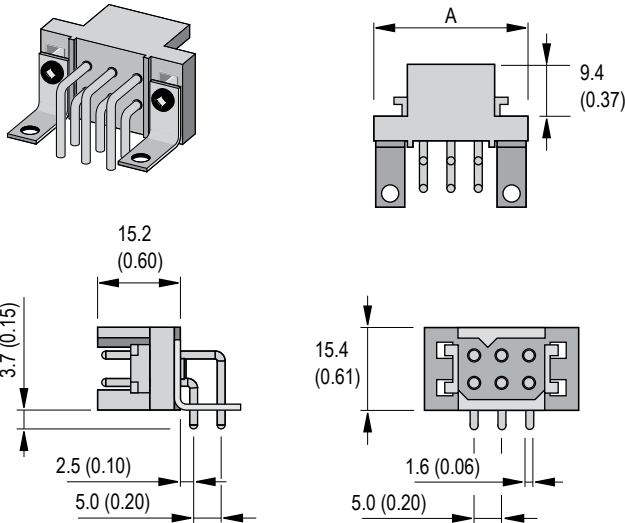
Part Number	Description
PM206MOOLPC	2x3 MALE Cable Connector
PM208MOOLPC	2x4 MALE Cable Connector
PM212MOOLPC	2x6 MALE Cable Connector
PM216MOOLPC	2x8 MALE Cable Connector

### With Clam Shell Hood & Strain Relief

Part Number	Description
PM206MOOLCH	2x3 MALE Cable Connector
PM208MOOLCH	2x4 MALE Cable Connector
PM212MOOLCH	2x6 MALE Cable Connector
PM216MOOLCH	2x8 MALE Cable Connector

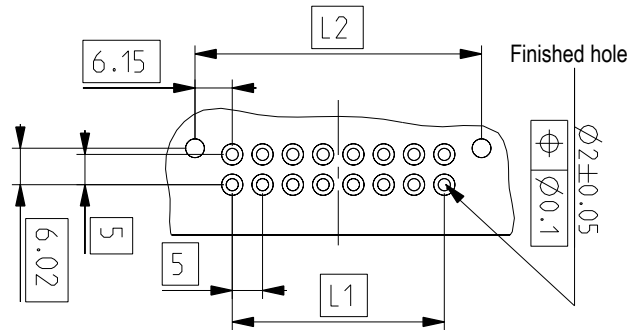
## DIMENSIONS - mm(in.)

### 2 Row - PCB Right Angle Connector



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

ROWS CONTACTS	A		L1		L2	
	mm	in.	mm	in.	mm	in.
2 - 06	28.5	1.12	10	0.39	22.3	0.88
2 - 08	33.5	1.32	15	0.59	27.3	1.07
2 - 12	43.5	1.71	25	0.98	37.3	1.47
2 - 16	53.5	2.11	35	1.38	47.3	1.86



## ORDERING INFORMATION

### With Latch

Part Number	Description
PM206MRALOO	2x3 MALE Right Angle PCB Solder
PM208MRALOO	2x4 MALE Right Angle PCB Solder
PM212MRALOO	2x6 MALE Right Angle PCB Solder
PM216MRALOO	2x8 MALE Right Angle PCB Solder

### No Latch

Part Number	Description
PM206MRAOOO	2x3 MALE Right Angle PCB Solder
PM208MRAOOO	2x4 MALE Right Angle PCB Solder
PM212MRAOOO	2x6 MALE Right Angle PCB Solder
PM216MRAOOO	2x8 MALE Right Angle PCB Solder

### Right Angle PCB Snap Bracket & Latch

Part Number	Description
PM206MRALSB	2x3 MALE Right Angle PCB Solder
PM208MRALSB	2x4 MALE Right Angle PCB Solder
PM212MRALSB	2x6 MALE Right Angle PCB Solder
PM216MRALSB	2x8 MALE Right Angle PCB Solder

### Right Angle Latch PCB Snap Bracket & No Latch

Part Number	Description
PM206MRAOSB	2x3 MALE Right Angle PCB Solder
PM208MRAOSB	2x4 MALE Right Angle PCB Solder
PM212MRAOSB	2x6 MALE Right Angle PCB Solder
PM216MRAOSB	2x8 MALE Right Angle PCB Solder

### Right Angle PCB Bracket With Hole & Latch

Part Number	Description
PM206MRALHB	2x3 MALE Right Angle PCB Solder
PM208MRALHB	2x4 MALE Right Angle PCB Solder
PM212MRALHB	2x6 MALE Right Angle PCB Solder
PM216MRALHB	2x8 MALE Right Angle PCB Solder

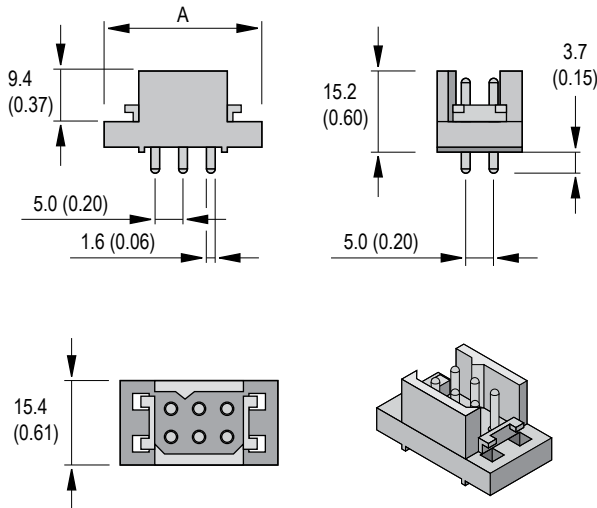
### Right Angle PCB Bracket With Hole & No Latch

Part Number	Description
PM206MRAOHB	2x3 MALE Right Angle PCB Solder
PM208MRAOHB	2x4 MALE Right Angle PCB Solder
PM212MRAOHB	2x6 MALE Right Angle PCB Solder
PM216MRAOHB	2x8 MALE 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.

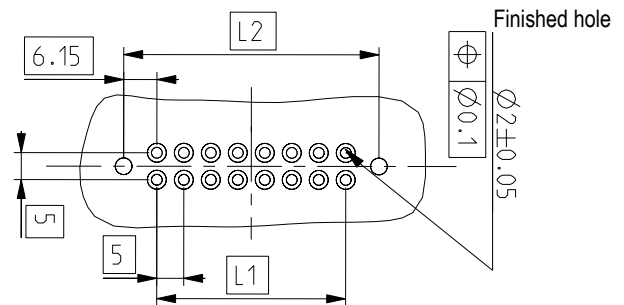
## DIMENSIONS - mm(in.)

### 2 Row - PCB Straight Solder Connector



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

ROWS CONTACTS	A		L1		L2	
	mm	in.	mm	in.	mm	in.
2 - 06	28.5	1.12	10	0.39	22.3	0.88
2 - 08	33.5	1.32	15	0.59	27.3	1.07
2 - 12	43.5	1.71	25	0.98	37.3	1.47
2 - 16	53.5	2.11	35	1.38	47.3	1.86



## ORDERING INFORMATION

### With Latch

Part Number	Description
PM206MBALOO	2x3 MALE Straight PCB Solder
PM208MBALOO	2x4 MALE Straight PCB Solder
PM212MBALOO	2x6 MALE Straight PCB Solder
PM216MBALOO	2x8 MALE Straight PCB Solder

### No Latch

Part Number	Description
PM206MBAOOO	2x3 PIN Straight PCB Solder
PM208MBAOOO	2x4 PIN Straight PCB Solder
PM212MBAOOO	2x6 PIN Straight PCB Solder
PM216MBAOOO	2x8 PIN Straight PCB Solder

### Push On PCB Fastener & Latch

Part Number	Description
PM206MBALSP	2x3 MALE Straight PCB Solder
PM208MBALSP	2x4 MALE Straight PCB Solder
PM212MBALSP	2x6 MALE Straight PCB Solder
PM216MBALSP	2x8 MALE Straight PCB Solder

### Push On PCB Fastener & No Latch

Part Number	Description
PM206MBAOSP	2x3 PIN Straight PCB Solder
PM208MBAOSP	2x4 PIN Straight PCB Solder
PM212MBAOSP	2x6 PIN Straight PCB Solder
PM216MBAOSP	2x8 PIN Straight PCB Solder

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

Part Number	Description
PM206MBALST	2x3 MALE Straight PCB Solder
PM208MBALST	2x4 MALE Straight PCB Solder
PM212MBALST	2x6 MALE Straight PCB Solder
PM216MBALST	2x8 MALE Straight PCB Solder

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

Part Number	Description
PM206MBAOST	2x3 PIN Straight PCB Solder
PM208MBAOST	2x4 PIN Straight PCB Solder
PM212MBAOST	2x6 PIN Straight PCB Solder
PM216MBAOST	2x8 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.