

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 female 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

- **High performance contacts**

*Rated to 30 amps per IEC 512-3*

- **Mechanically polarized housings**

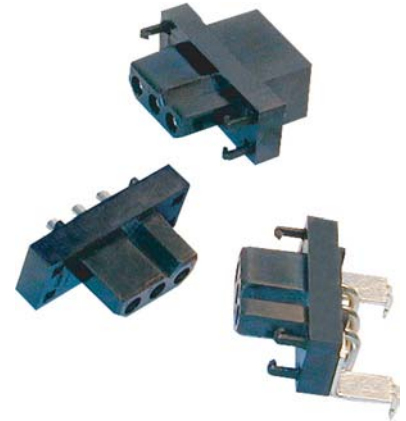
*Only mate one-way, ensuring proper mating*

- **High reliability positive retention latches**

*Are made from stainless steel to provide optimum performance over 1000+ cycles*

- **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*



### SPECIFICATIONS

#### Electrical

Current rating	30 Amps
IEC 512-3, UL 1977	
Voltage Rating UL & CSA	600 Volts
Creepage/Clearance Distance	3.2 mm (.125") Min
Contact Resistance per IEC 512-2	3 milliohms
Dielectric Strength per IEC 512-2	2000 V rms
Contact Wire Range	12 to 24 AWG
	4.0 to .25 mm <sup>2</sup>
Working Temperature Range	-55C to 180C

#### Mechanical

Connect/Disconnect Cycles	1000 cycles
No Load per IEC 512-5	
Mating/Unmating Force per IEC 512-13	10 oz (3N) avg.
Contact Retention per IEC 152-8	18 lb (80N)

#### Materials

Insulator	PPS UL94V-0, material group IIIa
Pins	Copper alloy, 10 μ inch Au over 50 μ inch Ni
Socket Body	Copper alloy, 200 μ inch 90/10 SnPb
Socket Contact	BeCu, 30 μ inch Au over 50 μ inch Ni
Retention Clamps	Stainless steel
Hoods	PBT UL94V-0



### ORDERING INFORMATION

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

Series	Rows	# Poles	Gender	Contact	Latch	Mounting	Customized Connector
P	M	1	0	3	F	B	1
L	C	H	X	X	X		
1							Consult factory for options
03, 04, 06, 08 Poles							
F - Female							
OO - None (Crimp contacts ordered separately)							
B1 - Straight PCB Solder Standard Length							
R1 - R/A PCB Solder Standard Length							
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							
SC - Screw for 1.6mm panel mount							
L - Connector with latch (standard for contact type OO)							
O - No latch							

#### Crimp Contacts

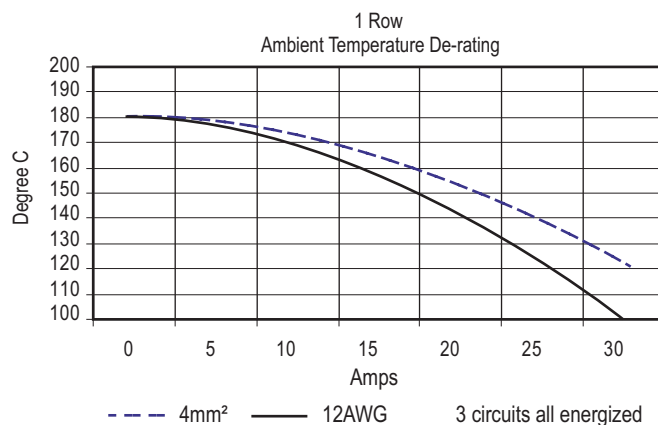
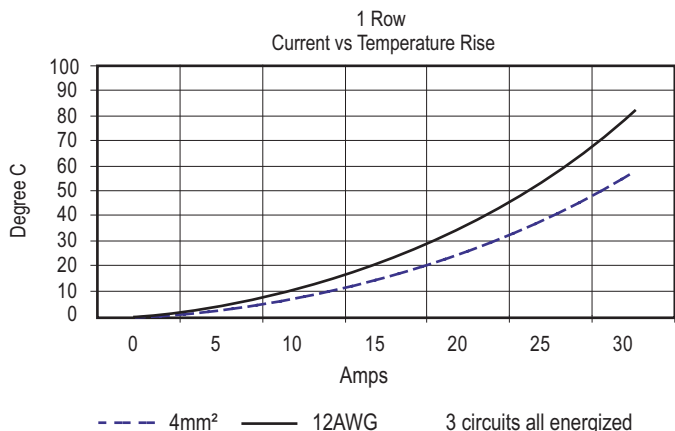
Part Number	Description
PM16S2024S30	Socket AWG 24-20 Au.75
PM16S1620S30	Socket AWG 20-16 Au.75
PM16S1416S30	Socket AWG 16-14 Au.75
PM16S12S30	Socket AWG 12 Au.75

#### Tooling

Part Number	Description
PM1000G1	Four indent hand tool
PM1001G1	Loose crimp piece machine - semi automatic
PM1002G1	Contact insertion tool
PM1003G1	Contact extraction tool

# One Row Cable Connector (female)

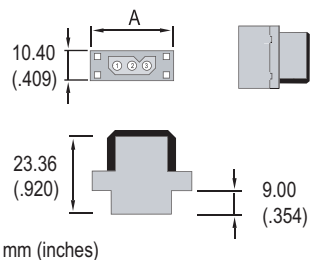
## TEMPERATURE CHARTS



## DIMENSIONS

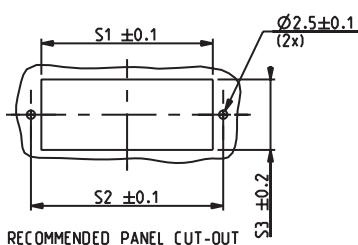
### Cable Connector

ROWS CONTACTS	A
1 - 03	28.5
1 - 04	33.5
1 - 06	43.5
1 - 08	53.5



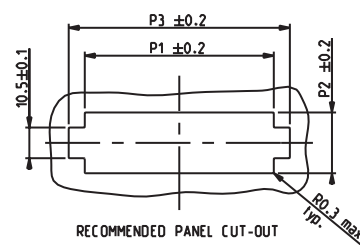
### Panel/Mount With Screws

ROWS CONTACTS	S1	S2	S3
1 - 03	16.1	22.3	11
1 - 04	21.1	27.3	11
1 - 06	31.1	37.3	11
1 - 08	41.1	47.3	11



### Snap-in Panel Clip

ROWS CONTACTS	P1	P2	P3
1 - 03	29.7	10.8	40.7
1 - 04	34.7	10.8	45.7
1 - 06	44.7	10.8	55.7
1 - 08	54.7	10.8	65.7



## ORDERING INFORMATION

### Cable Connector

Part Number	Description
PM103FOOLOO	1x3 FEMALE cable connector
PM104FOOLOO	1x4 FEMALE cable connector
PM106FOOLOO	1x6 FEMALE cable connector
PM108FOOLOO	1x8 FEMALE cable connector

### With Snap-in Panel Clip

Part Number	Description
PM103FOOLPC	1x3 FEMALE cable connector
PM104FOOLPC	1x4 FEMALE cable connector
PM106FOOLPC	1x6 FEMALE cable connector
PM108FOOLPC	1x8 FEMALE cable connector

### Panel Mount With Screws

Part Number	Description
PM103FOOLSC	1x3 FEMALE cable connector
PM104FOOLSC	1x4 FEMALE cable connector
PM106FOOLSC	1x6 FEMALE cable connector
PM108FOOLSC	1x8 FEMALE cable connector

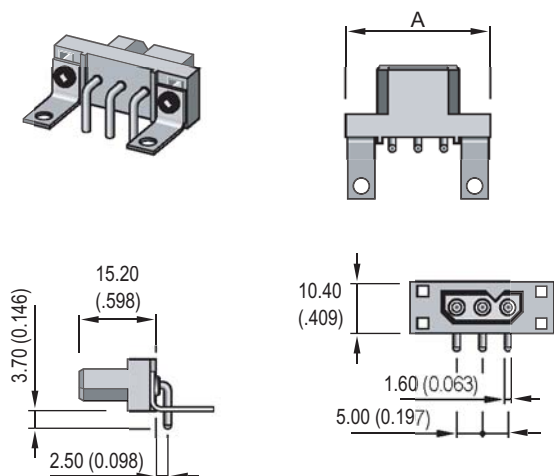
### With Clam Shell Hood & Strain Relief

Part Number	Description
PM103FOOLCH	1x3 FEMALE cable connector
PM104FOOLCH	1x4 FEMALE cable connector
PM106FOOLCH	1x6 FEMALE cable connector
PM108FOOLCH	1x8 FEMALE cable connector

# One Row Right Angle PCB (female)

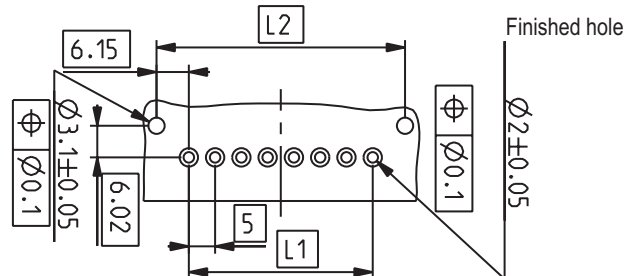
## DIMENSIONS

### PCB Right Angle Connector



### PCB Hole Layout For Right Angle Connector

ROWS CONTACTS	A	L1	L2
1 - 03	28.5	10	22.3
1 - 04	33.5	15	27.3
1 - 06	43.5	25	37.3
1 - 08	53.5	35	47.3



mm (inches)

## ORDERING INFORMATION

### With Latch

Part Number	Description
PM103FR1LOO	1x3 FEMALE Right Angle PCB Solder 3.7mm
PM104FR1LOO	1x4 FEMALE Right Angle PCB Solder 3.7mm
PM106FR1LOO	1x6 FEMALE Right Angle PCB Solder 3.7mm
PM108FR1LOO	1x8 FEMALE Right Angle PCB Solder 3.7mm

### No Latch

Part Number	Description
PM103FR1OOO	1x3 FEMALE Right Angle PCB Solder 3.7mm
PM104FR1OOO	1x4 FEMALE Right Angle PCB Solder 3.7mm
PM106FR1OOO	1x6 FEMALE Right Angle PCB Solder 3.7mm
PM108FR1OOO	1x8 FEMALE Right Angle PCB Solder 3.7mm

### Snap Bracket & Latch

Part Number	Description
PM103FR1LSB	1x3 FEMALE Right Angle PCB Solder 3.7mm
PM104FR1LSB	1x4 FEMALE Right Angle PCB Solder 3.7mm
PM106FR1LSB	1x6 FEMALE Right Angle PCB Solder 3.7mm
PM108FR1LSB	1x8 FEMALE Right Angle PCB Solder 3.7mm

### Snap Bracket & No Latch

Part Number	Description
PM103FR1OSB	1x3 FEMALE Right Angle PCB Solder 3.7mm
PM104FR1OSB	1x4 FEMALE Right Angle PCB Solder 3.7mm
PM106FR1OSB	1x6 FEMALE Right Angle PCB Solder 3.7mm
PM108FR1OSB	1x8 FEMALE Right Angle PCB Solder 3.7mm

### Bracket With Hole & Latch

Part Number	Description
PM104FR1LHB	1x3 FEMALE Right Angle PCB Solder 3.7mm
PM104FR1LHB	1x4 FEMALE Right Angle PCB Solder 3.7mm
PM106FR1LHB	1x6 FEMALE Right Angle PCB Solder 3.7mm
PM108FR1LHB	1x8 FEMALE Right Angle PCB Solder 3.7mm

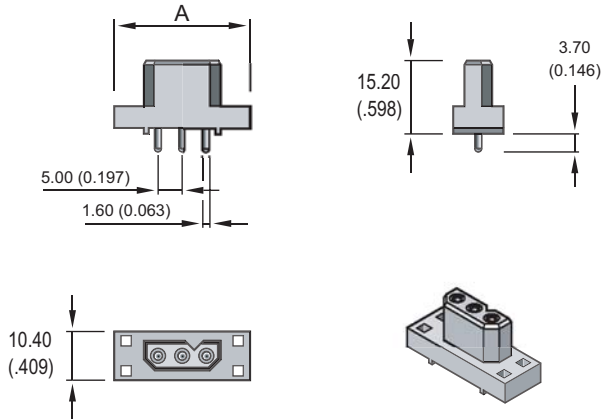
### Bracket With Hole & No Latch

Part Number	Description
PM104FR1OHB	1x3 FEMALE Right Angle PCB Solder 3.7mm
PM104FR1OHB	1x4 FEMALE Right Angle PCB Solder 3.7mm
PM106FR1OHB	1x6 FEMALE Right Angle PCB Solder 3.7mm
PM108FR1OHB	1x8 FEMALE Right Angle PCB Solder 3.7mm

# One Row Straight PCB (female)

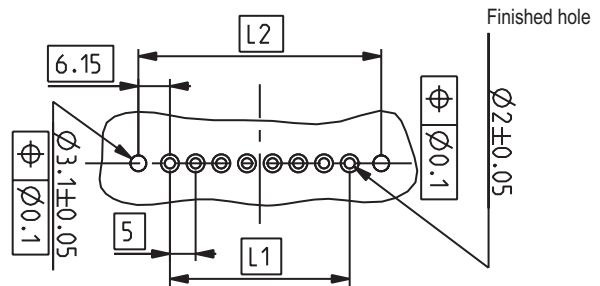
## DIMENSIONS

### PCB Straight Solder Connector



### PCB Hole Layout For Straight Solder Connector

ROWS CONTACTS	A	L1	L2
1 - 03	28.5	10	22.3
1 - 04	33.5	15	27.3
1 - 06	43.5	25	37.3
1 - 08	53.5	35	47.3



mm (inches)

## ORDERING INFORMATION

### With Latch

Part Number	Description
PM103FB1LOO	1x3 FEMALE Straight PCB Solder 3.7mm
PM104FB1LOO	1x4 FEMALE Straight PCB Solder 3.7mm
PM106FB1LOO	1x6 FEMALE Straight PCB Solder 3.7mm
PM108FB1LOO	1x8 FEMALE Straight PCB Solder 3.7mm

### No Latch

Part Number	Description
PM103FB1OOO	1x3 FEMALE Straight PCB Solder 3.7mm
PM104FB1OOO	1x4 FEMALE Straight PCB Solder 3.7mm
PM106FB1OOO	1x6 FEMALE Straight PCB Solder 3.7mm
PM108FB1OOO	1x8 FEMALE Straight PCB Solder 3.7mm

### Push On PCB Fastener & Latch

Part Number	Description
PM103FB1LSP	1x3 FEMALE Straight PCB Solder 3.7mm
PM104FB1LSP	1x4 FEMALE Straight PCB Solder 3.7mm
PM106FB1LSP	1x6 FEMALE Straight PCB Solder 3.7mm
PM108FB1LSP	1x8 FEMALE Straight PCB Solder 3.7mm

### Push On PCB Fastener & No Latch

Part Number	Description
PM103FB1OSP	1x3 FEMALE Straight PCB Solder 3.7mm
PM104FB1OSP	1x4 FEMALE Straight PCB Solder 3.7mm
PM106FB1OSP	1x6 FEMALE Straight PCB Solder 3.7mm
PM108FB1OSP	1x8 FEMALE Straight PCB Solder 3.7mm

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

Part Number	Description
PM103FB1LST	1x3 FEMALE Straight PCB Solder 3.7mm
PM104FB1LST	1x4 FEMALE Straight PCB Solder 3.7mm
PM106FB1LST	1x6 FEMALE Straight PCB Solder 3.7mm
PM108FB1LST	1x8 FEMALE Straight PCB Solder 3.7mm

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

Part Number	Description
PM103FB1OST	1x3 FEMALE Straight PCB Solder 3.7mm
PM104FB1OST	1x4 FEMALE Straight PCB Solder 3.7mm
PM106FB1OST	1x6 FEMALE Straight PCB Solder 3.7mm
PM108FB1OST	1x8 FEMALE Straight PCB Solder 3.7mm