

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
- 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 | | 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. | Socket Body | Copper alloy, 200 μ inch Sn Bright over Ni |
| UL / CSA Voltage Rating (AC/DC) | 600 | Contact Retention per IEC 512-8 | 18 lb (80N) Crimp 9 lb (40N) PCB Connector | Socket Contact | BeCu, 30 μ inch Au over Ni |
| 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 | | | | |
| (mm²) * | 0.25 to 4.0 | | | | |
| Operating Temperature (°C) | -55° to 180° | | | | |
| (°F) | -67° to 356° | | | | |



US File No. E26226

* Stranding, IEC class 5 or lower

ORDERING INFORMATION

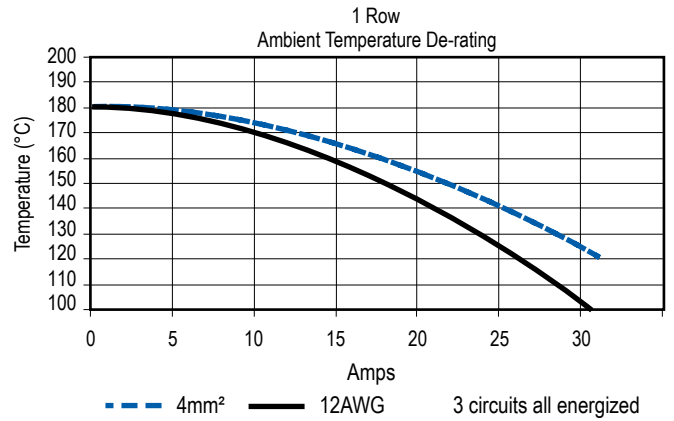
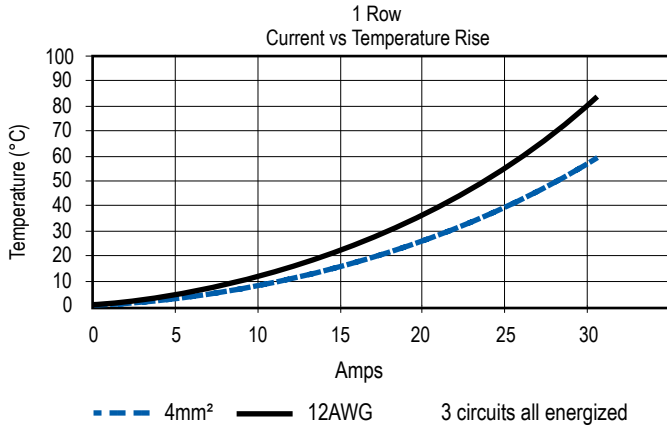
PowerMod Part Number Plan - One Row Female

| Series | Rows | # Poles | Gender | Contact | Latch | Mounting | Customized Connector | | | |
|--------|------|---------|--------|---------|-------|---|-----------------------------|---|---|---|
| PM | 1 | 03 | F | BA | L | CH | - | X | X | X |
| | | | | | | | Consult factory for options | | | |
| | | | | | | 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 | | | | |
| | | | | | | 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 |

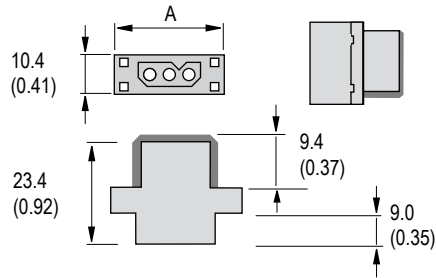
TEMPERATURE CHARTS



DIMENSIONS - mm(in.)

Cable Connector

| ROWS CONTACTS | -A- | |
|------------------|------|------|
| | mm | in. |
| 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

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 |

Panel Mount With Mounting Clip

| Part Number | Description |
|-------------|----------------------------|
| PM103FOOLMC | 1x3 FEMALE Cable Connector |
| PM104FOOLMC | 1x4 FEMALE Cable Connector |
| PM106FOOLMC | 1x6 FEMALE Cable Connector |
| PM108FOOLMC | 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 |

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 Snap-in Panel Clip

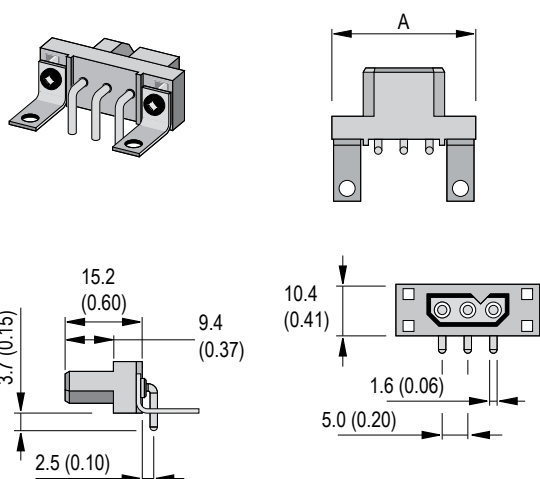
| Part Number | Description |
|-------------|----------------------------|
| PM103FOOLPC | 1x3 FEMALE Cable Connector |
| PM104FOOLPC | 1x4 FEMALE Cable Connector |
| PM106FOOLPC | 1x6 FEMALE Cable Connector |
| PM108FOOLPC | 1x8 FEMALE Cable Connector |

Crimp Contacts

| Part Number | Description | Wire | |
|--------------|-------------|----------|-------------|
| | | AWG | sq. mm |
| PM16S2024S32 | Socket | #24 / 20 | 0.50 / 0.75 |
| PM16S1620S32 | Socket | #20 / 16 | 0.50 / 1.5 |
| PM16S1416S32 | Socket | #16 / 14 | 1.5 / 2.5 |
| PM16S12S32 | Socket | #12 | 2.5 / 4.0 |

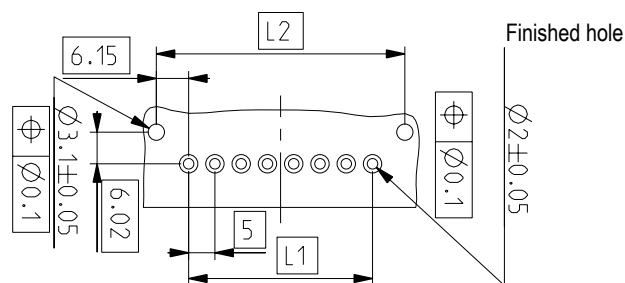
DIMENSIONS - mm(in.)

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 |
|-------------|-----------------------------------|
| PM103FRALOO | 1x3 FEMALE Right Angle PCB Solder |
| PM104FRALOO | 1x4 FEMALE Right Angle PCB Solder |
| PM106FRALOO | 1x6 FEMALE Right Angle PCB Solder |
| PM108FRALOO | 1x8 FEMALE Right Angle PCB Solder |

No Latch

| Part Number | Description |
|-------------|-----------------------------------|
| PM103FRAOOO | 1x3 FEMALE Right Angle PCB Solder |
| PM104FRAOOO | 1x4 FEMALE Right Angle PCB Solder |
| PM106FRAOOO | 1x6 FEMALE Right Angle PCB Solder |
| PM108FRAOOO | 1x8 FEMALE Right Angle PCB Solder |

Snap Bracket & Latch

| Part Number | Description |
|-------------|-----------------------------------|
| PM103FRALSB | 1x3 FEMALE Right Angle PCB Solder |
| PM104FRALSB | 1x4 FEMALE Right Angle PCB Solder |
| PM106FRALSB | 1x6 FEMALE Right Angle PCB Solder |
| PM108FRALSB | 1x8 FEMALE Right Angle PCB Solder |

Snap Bracket & No Latch

| Part Number | Description |
|-------------|-----------------------------------|
| PM103FRAOSB | 1x3 FEMALE Right Angle PCB Solder |
| PM104FRAOSB | 1x4 FEMALE Right Angle PCB Solder |
| PM106FRAOSB | 1x6 FEMALE Right Angle PCB Solder |
| PM108FRAOSB | 1x8 FEMALE Right Angle PCB Solder |

Bracket With Hole & Latch

| Part Number | Description |
|-------------|-----------------------------------|
| PM103FRALHB | 1x3 FEMALE Right Angle PCB Solder |
| PM104FRALHB | 1x4 FEMALE Right Angle PCB Solder |
| PM106FRALHB | 1x6 FEMALE Right Angle PCB Solder |
| PM108FRALHB | 1x8 FEMALE Right Angle PCB Solder |

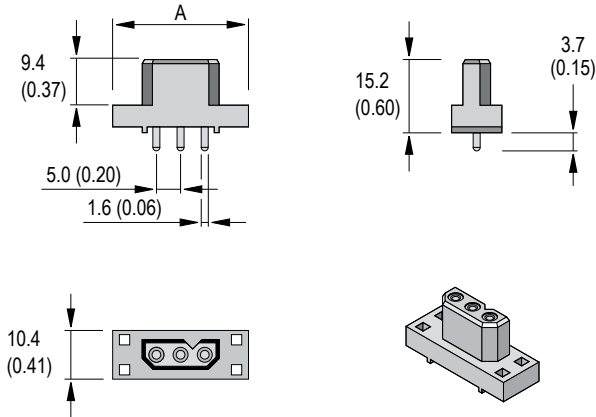
Bracket With Hole & No Latch

| Part Number | Description |
|-------------|-----------------------------------|
| PM103FRAOHB | 1x3 FEMALE Right Angle PCB Solder |
| PM104FRAOHB | 1x4 FEMALE Right Angle PCB Solder |
| PM106FRAOHB | 1x6 FEMALE Right Angle PCB Solder |
| PM108FRAOHB | 1x8 FEMALE 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.

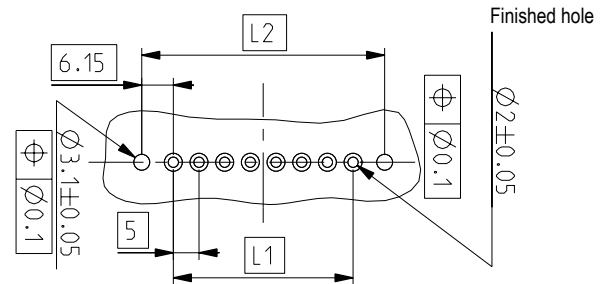
DIMENSIONS - mm(in.)

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 |
|-------------|--------------------------------|
| PM103FBALOO | 1x3 FEMALE Straight PCB Solder |
| PM104FBALOO | 1x4 FEMALE Straight PCB Solder |
| PM106FBALOO | 1x6 FEMALE Straight PCB Solder |
| PM108FBALOO | 1x8 FEMALE Straight PCB Solder |

No Latch

| Part Number | Description |
|-------------|--------------------------------|
| PM103FBAOOO | 1x3 FEMALE Straight PCB Solder |
| PM104FBAOOO | 1x4 FEMALE Straight PCB Solder |
| PM106FBAOOO | 1x6 FEMALE Straight PCB Solder |
| PM108FBAOOO | 1x8 FEMALE Straight PCB Solder |

Push On PCB Fastener & Latch

| Part Number | Description |
|-------------|--------------------------------|
| PM103FBALSP | 1x3 FEMALE Straight PCB Solder |
| PM104FBALSP | 1x4 FEMALE Straight PCB Solder |
| PM106FBALSP | 1x6 FEMALE Straight PCB Solder |
| PM108FBALSP | 1x8 FEMALE Straight PCB Solder |

Push On PCB Fastener & No Latch

| Part Number | Description |
|-------------|--------------------------------|
| PM103FBAOSP | 1x3 FEMALE Straight PCB Solder |
| PM104FBAOSP | 1x4 FEMALE Straight PCB Solder |
| PM106FBAOSP | 1x6 FEMALE Straight PCB Solder |
| PM108FBAOSP | 1x8 FEMALE Straight PCB Solder |

Self-tapping Screws For PCB Mount & Latch

| Part Number | Description |
|-------------|--------------------------------|
| PM103FBALST | 1x3 FEMALE Straight PCB Solder |
| PM104FBALST | 1x4 FEMALE Straight PCB Solder |
| PM106FBALST | 1x6 FEMALE Straight PCB Solder |
| PM108FBALST | 1x8 FEMALE Straight PCB Solder |

Self-tapping Screws For PCB Mount & No Latch

| Part Number | Description |
|-------------|--------------------------------|
| PM103FBAOST | 1x3 FEMALE Straight PCB Solder |
| PM104FBAOST | 1x4 FEMALE Straight PCB Solder |
| PM106FBAOST | 1x6 FEMALE Straight PCB Solder |
| PM108FBAOST | 1x8 FEMALE Straight PCB Solder |

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