

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<br>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 |

### 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 |

### 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 |

### 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 & 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 & 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 |

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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.