

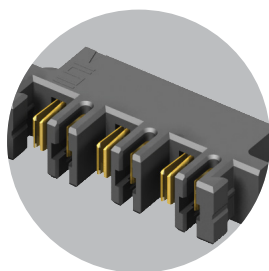


# HIGH POWER SYSTEMS

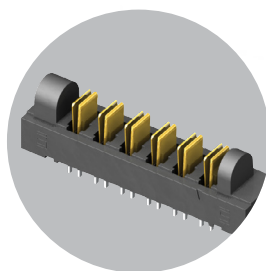
20-60 A  
per blade

## FEATURES & BENEFITS

- Current Rating: 23 A - 58.7 A per power blade
- 3.81 mm, 5.00 mm and 6.35 mm pitch
- Dual blade contact system
- Power only or power/signal combinations available
- Right-angle and vertical orientations
- Rugged screw down and locking clip options
- Wire to board assemblies with 10-16 AWG wire (see pages 262-264)
- "Hinged" for unique mating in any orientation from 0° to 90° and space confined applications



Hermaphroditic options  
[samtec.com?MPPT](http://samtec.com?MPPT) and  
[samtec.com?UPPT](http://samtec.com?UPPT)



Hinging options available  
[samtec.com?FMPT](http://samtec.com?FMPT) and  
[samtec.com?FMPS](http://samtec.com?FMPS)

## CREEPAGE & CLEARANCE

| SERIES            | CREEPAGE | CLEARANCE |
|-------------------|----------|-----------|
| UPT/UPS/UPPT      | 5.50 mm  | 1.51 mm   |
| MPT/MPS/MPTC/MPSC | 2.95 mm  | 2.71 mm   |
| PET/PES/PETC/PESC | 3.66 mm  | 3.31 mm   |

Selectively loading contacts achieves customer specific creepage and clearance requirements.

## KEY SPECIFICATIONS

| SERIES    | PITCH                                                | INSULATOR MATERIAL | CONTACT MATERIAL                                           | PLATING                             | OPERATING TEMP RANGE                             | CURRENT RATING                                                   | VOLTAGE RATING                                       | LEAD-FREE SOLDERABLE |
|-----------|------------------------------------------------------|--------------------|------------------------------------------------------------|-------------------------------------|--------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------|----------------------|
| UPT/UPS   | (3.81 mm)<br>.150"                                   | Black LCP          | BeCu                                                       | Sn or Au over<br>50 μ" (1.27 μm) Ni | -55 °C to +105 °C (Sn)<br>-55 °C to +125 °C (Au) | 23 A<br>(1 pin powered)                                          | 438 VAC/619 VDC                                      | Yes                  |
| UPPT      | (3.81 mm)<br>.150"                                   | Black LCP          | Copper Alloy                                               | Sn or Au over<br>50 μ" (1.27 μm) Ni | -55 °C to +105 °C (Sn)<br>-55 °C to +125 °C (Au) | 21.4 A<br>(1 pin powered)                                        | 425 VAC/601 VDC                                      | Yes                  |
| MPT/MPS   | (5.00 mm)<br>.1969"                                  | Black LCP          | Copper Alloy                                               | Sn or Au over<br>50 μ" (1.27 μm) Ni | -55 °C to +105 °C (Sn)<br>-55 °C to +125 °C (Au) | 28 A<br>(1 pin powered)                                          | 575 VAC/813 VDC                                      | Yes                  |
| MPTC/MPSC | (5.00 mm)<br>.197" (pwr)<br>(2.00 mm)<br>.079" (sig) | Black LCP          | Signal:<br>Phosphor<br>Bronze<br>Terminal:<br>Copper Alloy | Sn or Au over<br>50 μ" (1.27 μm) Ni | -55 °C to +105 °C (Sn)<br>-55 °C to +125 °C (Au) | 28 A<br>(pwr - 1 pin powered)<br>5 A<br>(sig - 4 pins powered)   | 250 VAC/353 VDC                                      | Yes                  |
| PET/PES   | (6.35 mm)<br>.250"                                   | Black LCP          | Copper Alloy                                               | Sn or Au over<br>50 μ" (1.27 μm) Ni | -55 °C to +105 °C (Sn)<br>-55 °C to +125 °C (Au) | 58.7 A<br>(1 pin powered)                                        | 450 VAC/636 VDC                                      | Yes                  |
| PETC/PESC | (6.35 mm)<br>.250" (pwr)<br>(2.54 mm)<br>.100" (sig) | Black LCP          | Copper Alloy                                               | Sn or Au over<br>50 μ" (1.27 μm) Ni | -55 °C to +105 °C (Sn)<br>-55 °C to +125 °C (Au) | 31 A<br>(pwr - 1 pin powered)<br>5.7 A<br>(sig - 4 pins powered) | 650 VAC/920 VDC<br>(pwr)<br>450 VAC/636 VDC<br>(sig) | Yes                  |

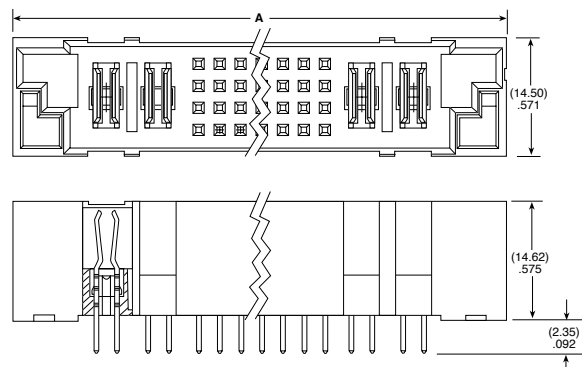
| PETC | POWER PINS       | SIGNAL PINS | POWER PINS       | 01 | PLATING OPTION                                                                                      | TAIL                                           | OTHER OPTION                                                                                          |
|------|------------------|-------------|------------------|----|-----------------------------------------------------------------------------------------------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------|
|      | -01,<br>-02, -04 | -12, -40    | -01,<br>-02, -04 |    | -L<br>= 10 $\mu$ " (0.25 $\mu$ m)<br>Gold on contact,<br>Matte Tin on tail<br><br>-T<br>= Matte Tin | -VT<br>= Vertical<br><br>- RA<br>= Right-angle | -SD<br>= Screw Down<br>(Right-angle only)<br><br>-LC<br>= Locking Clip<br>(Manual placement required) |

## PETC

Board Mates:  
PESC



| POWER PINS/ENDS | A              |                |
|-----------------|----------------|----------------|
|                 | 12 SIGNAL PINS | 40 SIGNAL PINS |
| -01             | (39.37) 1.550  | (57.15) 2.250  |
| -02             | (52.07) 2.050  | (69.85) 2.750  |
| -04             | (77.47) 3.050  | (95.25) 3.750  |



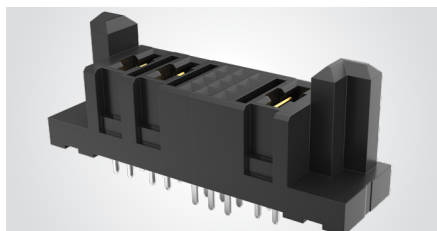
**Note:**  
Some lengths, styles and  
options are non-standard,  
non-returnable

View complete specifications at: [samtec.com?PETC](http://samtec.com?PETC)

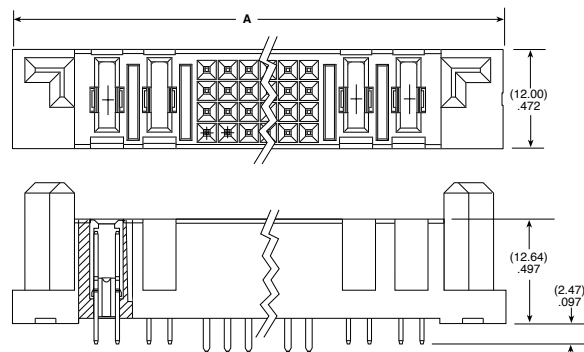
| PESC | POWER PINS       | SIGNAL PINS | POWER PINS       | 01 | PLATING OPTION                                                                                      | TAIL                                           | OTHER OPTION                                                                                          |
|------|------------------|-------------|------------------|----|-----------------------------------------------------------------------------------------------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------|
|      | -01,<br>-02, -04 | -12, -40    | -01,<br>-02, -04 |    | -L<br>= 10 $\mu$ " (0.25 $\mu$ m)<br>Gold on contact,<br>Matte Tin on tail<br><br>-T<br>= Matte Tin | -VT<br>= Vertical<br><br>- RA<br>= Right-angle | -SD<br>= Screw Down<br>(Right-angle only)<br><br>-LC<br>= Locking Clip<br>(Manual placement required) |

## PESC

Board Mates:  
PETC



| POWER PINS/ENDS | A              |                |
|-----------------|----------------|----------------|
|                 | 12 SIGNAL PINS | 40 SIGNAL PINS |
| -01             | (39.37) 1.550  | (57.15) 2.250  |
| -02             | (52.07) 2.050  | (69.85) 2.750  |
| -04             | (77.47) 3.050  | (95.25) 3.750  |



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