

## ISOLATED POWER SYSTEMS

### FEATURES & BENEFITS

- Individually shrouded contacts for electrical and mechanical protection
- .100" (2.54 mm) and .165" (4.19 mm) pitch
- Surface mount or through-hole
- Vertical and right-angle for parallel, perpendicular and coplanar applications
- Locking clip, key polarization and guide post options
- Wire to board assemblies with 16-30 AWG PVC or Teflon™ fluoropolymer wire.
- Metal or plastic rugged latching system

\*Teflon™ is a trademark of The Chemours Company FC, LLC used under license by Samtec



Selectively loading contacts achieves customer specific creepage and clearance requirements.



Flexible standard or high-power stacking systems with Power Eye three-finger BeCu contacts for reliable connection. For available series, visit [samtec.com/flexiblestrips](http://samtec.com/flexiblestrips)

### CREEPAGE & CLEARANCE

|                                   | CREEPAGE | CLEARANCE |
|-----------------------------------|----------|-----------|
| IPT1/IP51<br>MMSS(T)/MMSD(T)/IPL1 | 2.54 mm  | 1.91 mm   |
| IPBT/IPBS<br>PMSS(T)/PMSD(T)      | 4.27 mm  | 3.05 mm   |

Selectively loading contacts achieves customer specific creepage and clearance requirements.

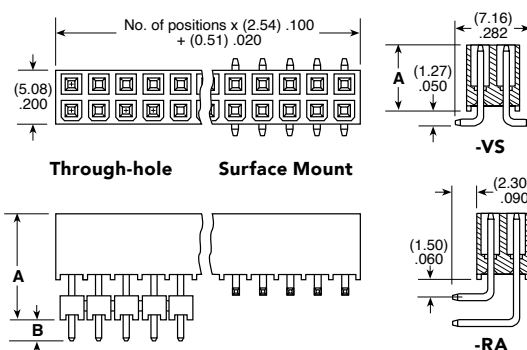
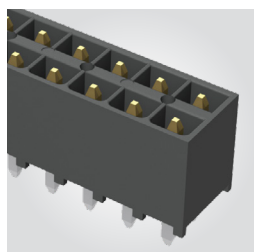
### KEY SPECIFICATIONS

| SERIES    | PITCH           | INSULATOR MATERIAL | CONTACT MATERIAL                                | PLATING                              | OPERATING TEMP RANGE | CURRENT RATING       | VOLTAGE RATING   | LEAD-FREE SOLDERABLE |
|-----------|-----------------|--------------------|-------------------------------------------------|--------------------------------------|----------------------|----------------------|------------------|----------------------|
| IPT1/IP51 | .100" (2.54 mm) | Black LCP          | Phosphor Bronze                                 | Sn or Au over 50 μ" (1.27 μm) Nickel | -55 °C to +125 °C    | 5.9 A (2 pins power) | 700 VAC/ 990 VDC | Yes                  |
| IPBT/IPBS | .165" (4.19 mm) | Black LCP          | High Copper Alloy (IPBT) Phosphor Bronze (IPBS) | Sn over 50 μ" (1.27 μm) Nickel       | -55 °C to +105 °C    | 9.3 A (2 pins power) | 400 VAC/ 566 VDC | Yes                  |

## (2.54 mm) .100" PITCH • SHROUDED POWER CONNECTOR SET

| IPT1 | 1 | NO. PINS PER ROW       | LEAD STYLE                             | PLATING OPTION                                                                    | D | TAIL OPTION                                                     | OTHER OPTIONS                                                                           |
|------|---|------------------------|----------------------------------------|-----------------------------------------------------------------------------------|---|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|      |   | 05                     | Specify<br>LEAD<br>STYLE<br>from chart | <b>-L</b><br>= 10 $\mu$ " (0.25 $\mu$ m)<br>Gold on contact,<br>Matte Tin on tail |   | Requires -01<br>Lead Style<br>(Leave blank for<br>Through-hole) | <b>-A</b><br>= Alignment Pin<br>(-VS only) (N/A with -LC)                               |
|      |   | 10                     |                                        |                                                                                   |   |                                                                 |                                                                                         |
|      |   | 15                     |                                        |                                                                                   |   | <b>-RA</b><br>= Right-angle                                     | <b>-LC</b><br>= Locking Clip<br>(Manual placement required)<br>(-VS only) (N/A with -A) |
|      |   | 20                     |                                        |                                                                                   |   | <b>-VS</b><br>= Surface Mount                                   | <b>-K</b><br>= (6.00 mm) .236" DIA<br>Polyimide film<br>Pick & Place Pad<br>(-VS only)  |
|      |   | 25<br>(Standard Sizes) |                                        |                                                                                   |   |                                                                 | <b>-TR</b><br>= Tape & Reel<br>(-VS only)                                               |

### IPT1 Board Mates: IPS1

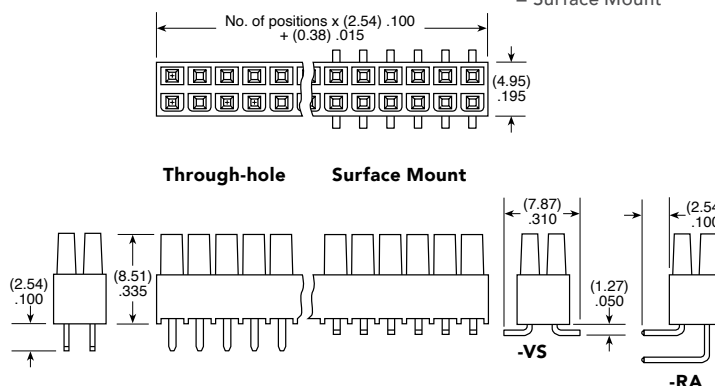
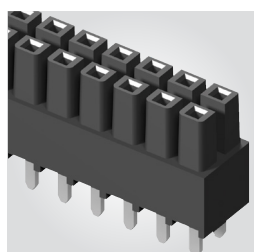


| IPT1/IPS1 |                                 |
|-----------|---------------------------------|
| PINS      | CURRENT RATING<br>(PER CONTACT) |
| 2         | 5.9 A                           |
| 4         | 4.8 A                           |
| 6         | 4.1 A                           |
| 8         | 3.6 A                           |
| 50        | 2.3 A                           |

| LEAD STYLE | MATED HEIGHT  | A             | B           |
|------------|---------------|---------------|-------------|
| -01        | (11.05) .435  | (6.35) .250   | (2.16) .085 |
| -01-VS     | (13.59) .535  | (6.35) .250   | N/A         |
| -02        | (14.00) .551  | (9.30) .366   | (2.64) .104 |
| -03        | (16.00) .630  | (11.30) .445  | (2.16) .085 |
| -04        | (17.00) .669  | (12.30) .484  | (2.69) .106 |
| -05        | (19.00) .748  | (14.30) .563  | (2.46) .097 |
| -06        | (20.00) .787  | (15.30) .602  | (2.35) .093 |
| -07        | (25.00) .984  | (20.30) .799  | (2.31) .091 |
| -08        | (30.00) 1.181 | (25.30) .996  | (2.39) .094 |
| -09        | (35.00) 1.378 | (30.30) 1.193 | (2.46) .097 |

| IPS1 | 1 | NO. PINS PER ROW       | 01 | PLATING OPTION                                                                    | D | TAIL OPTION                     | OTHER OPTIONS                                                                                                                        |
|------|---|------------------------|----|-----------------------------------------------------------------------------------|---|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
|      |   | 05                     |    | <b>-L</b><br>= 10 $\mu$ " (0.25 $\mu$ m)<br>Gold on contact,<br>Matte Tin on tail |   | Leave blank for<br>Through-hole | <b>-LC</b><br>= Locking Clip<br>(Manual placement required)<br>(-VS only)                                                            |
|      |   | 10                     |    |                                                                                   |   |                                 |                                                                                                                                      |
|      |   | 15                     |    |                                                                                   |   | <b>-RA</b><br>= Right-angle     | <b>-K</b><br>= (5.50 mm) .217" DIA<br>Polyimide film<br>Pick & Place Pad<br>(-VS only)                                               |
|      |   | 20                     |    |                                                                                   |   | <b>-VS</b><br>= Surface Mount   | <b>-TR</b><br>= Tape & Reel<br>(-VS only)                                                                                            |
|      |   | 25<br>(Standard Sizes) |    |                                                                                   |   |                                 | <b>-FR</b><br>= Full Reel Tape & Reel<br>(must order max. quantity<br>per reel; contact Samtec<br>for quantity breaks)<br>(-VS only) |

### IPS1 Board Mates: IPT1



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

View complete specifications at: [samtec.com?IPT1](http://samtec.com?IPT1) & [samtec.com?IPS1](http://samtec.com?IPS1)