

(0.50 mm) .0197"

SS5, ST5 SERIES

# ULTRA-FINE PITCH SOCKET

SS5 Mates with:  
ST5

ST5 Mates with:  
SS5

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?SS5](http://www.samtec.com?SS5) or [www.samtec.com?ST5](http://www.samtec.com?ST5)

**Insulator Material:**  
Black LCP

**Contact Material:**  
Phosphor Bronze

**Plating:**

Au or Sn over  
50 μm (1.27 μm) Ni

**Operating Temp Range:**  
-55 °C to +125 °C

**Current Rating:**  
1.6 A per pin  
(2 pins powered)

**RoHS Compliant:**  
Yes

## PROCESSING

**Lead-Free Solderable:**  
Yes

**SMT Lead Coplanarity:**  
(0.10 mm) .004" max

## RECOGNITIONS

For complete scope of recognitions see [www.samtec.com/quality](http://www.samtec.com/quality)



| MATED HEIGHT*  |                |             |
|----------------|----------------|-------------|
| ST5 LEAD STYLE | SS5 LEAD STYLE |             |
|                | -3.00          | -3.50       |
| -1.00          | (4.00) .157    | (4.50) .177 |
| -1.50          | (4.50) .177    | (5.00) .197 |

\*Processing conditions will affect mated height.

## ALSO AVAILABLE (MOQ Required)

- Other lead styles
- Contact Samtec.

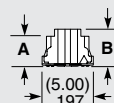
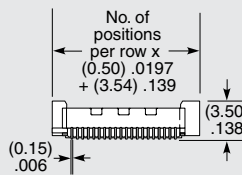
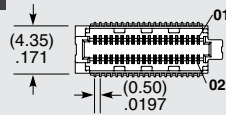
**Note:**  
Some lengths, styles and options are non-standard, non-returnable.

| SS5 | NO. OF POSITIONS   | LEAD STYLE                               | PLATING OPTION   | D | K  | TR  |
|-----|--|--|--|---|--|---|
|     | -10, -15, -20,<br>-30, -40, -50,<br>-60, -70, -80<br>(Per Row) | -3.00<br>= 3.00 mm<br>-3.50<br>= 3.50 mm | -L<br>= 10 μm (0.25 μm)<br>Gold on contact,<br>Matte Tin on tail |   | (Required in callout)<br>-K<br>= (3.50 mm) .138" DIA<br>Polyimide Film<br>Pick & Place Pad | (Required in callout)<br>-TR<br>= Tape & Reel |

## POWER/SIGNAL APPLICATION



Compatible with UMPT/UMPS for flexible two-piece power/signal solutions



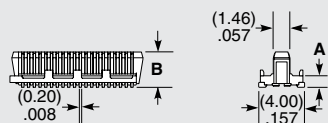
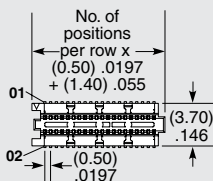
| LEAD STYLE | A           | B           |
|------------|-------------|-------------|
| -3.00      | (2.85) .112 | (3.50) .138 |
| -3.50      | (3.35) .132 | (4.00) .157 |

## HIGH-SPEED CHANNEL PERFORMANCE

SS5/ST5 @ 4 mm Mated Stack Height  
Rating based on Samtec reference channel.  
For full SI performance data visit [Samtec.com](http://Samtec.com) or contact [SIG@samtec.com](mailto:SIG@samtec.com)

PAM 4  
**56**  
Gbps

| ST5 | NO. OF POSITIONS   | LEAD STYLE                               | PLATING OPTION   | D | P   | TR  |
|-----|--|--|--|---|---|---|
|     | -10, -15, -20,<br>-30, -40, -50,<br>-60, -70, -80<br>(Per Row) | -1.00<br>= 1.00 mm<br>-1.50<br>= 1.50 mm | -L<br>= 10 μm (0.25 μm)<br>Gold on contact,<br>Matte Tin on tail |   | (Required in callout)<br>-P<br>= Pick & Place Pad | (Required in callout)<br>-TR<br>= Tape & Reel |



| LEAD STYLE | A           | B           |
|------------|-------------|-------------|
| -1.00      | (1.00) .039 | (3.08) .121 |
| -1.50      | (1.50) .059 | (3.58) .141 |

Due to technical progress, all designs, specifications and components are subject to change without notice.

[WWW.SAMTEC.COM](http://WWW.SAMTEC.COM)

All parts within this catalog are built to Samtec's specifications. Customer specific requirements must be approved by Samtec and identified in a Samtec customer-specific drawing to apply.