

(0.635 mm) .025"

**QSS SERIES**

# HIGH-SPEED GROUND PLANE SOCKET

## SPECIFICATIONS

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

**Insulator Material:**  
Liquid Crystal Polymer  
**Contact Material:**  
Phosphor Bronze

**Plating:**

Au or Sn over  
50 μ" (1.27 μm) Ni

**Current Rating:**  
Contact: 1.8 A per pin  
(2 pins powered)

**Ground Plane:**  
23.1 A per ground plane  
(1 ground plane powered)

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

**Voltage Rating:**  
285 VAC

**Max Cycles:**  
100

**RoHS Compliant:**  
Yes

**Board Mates:**

QTS

**Cable Mates:**

QCQD

**Standoffs:**

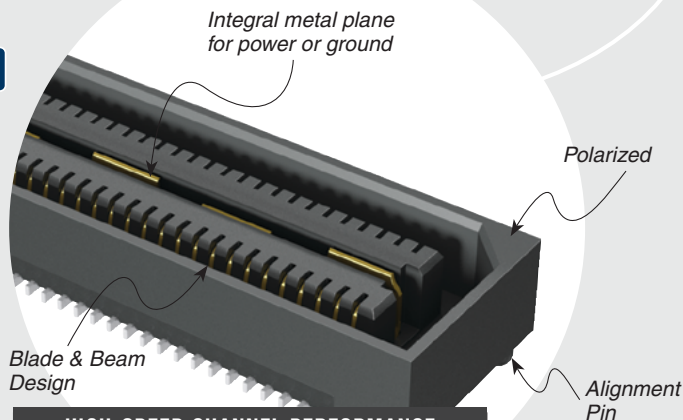
SO



## POWER/SIGNAL APPLICATION



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



Blade & Beam Design

Integral metal plane for power or ground

Polarized

Alignment Pin

## HIGH-SPEED CHANNEL PERFORMANCE

QSS/QTS @ 5 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)

**25**  
Gbps

## PROCESSING

**Lead-Free Solderable:**  
Yes

**SMT Lead Coplanarity:**  
(0.10 mm) .004" max (025-050)  
(0.15 mm) .006" max (075)\*  
\*(.004" stencil solution may be available; contact [IPG@samtec.com](mailto:IPG@samtec.com))

**Board Stacking:**

For applications requiring more than two connectors per board contact [ipg@samtec.com](mailto:ipg@samtec.com)

## RECOGNITIONS

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



## ALSO AVAILABLE (MOQ Required)

- 11 mm & 16 mm stack height
- 30 μ" (0.76 μm) Gold
- Differential Pair and "Partitionable" (combine differential & single-ended banks in same connector) available.
- 100 & 125 positions per row
- Edge Mount
- -LS2 Locking screw hole for QTS-RA-LS2

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



**-025, -050, -075**  
(50 total positions per bank)

**-F**  
= Gold Flash on Signal Pins and Ground Plane, Matte Tin on tails

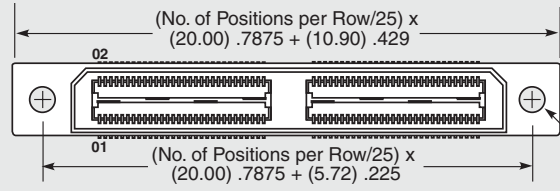
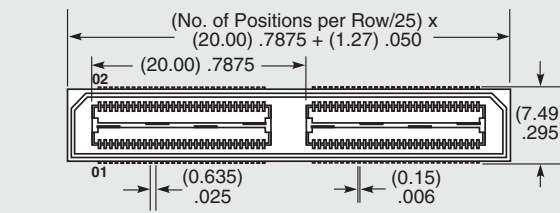
**-L**  
= 10 μ" (0.25 μm) Gold on Signal Pins and Ground Plane, Matte Tin on tails

**-C\***  
= Electro-Polished Selective 50 μ" (1.27 μm) min Au over 150 μ" (3.81 μm) Ni on Signal Pins in contact area, 10 μ" (0.25 μm) min Au over 50 μ" (1.27 μm) Ni on Ground Plane in contact area, Matte Tin over 50 μ" (1.27 μm) min Ni on all solder tails

**-GP**  
= Guide Holes for mating with QTS-RA

**-K**  
= (8.25 mm) .325" DIA Polyimide Film Pick & Place Pad

**-TR**  
= Tape & Reel



\*Note: -C Plating passes 10 year MFG testing



QTS LEAD STYLE	MATED HEIGHT WITH QSS
-01	(5.00) .197
-02	(8.00) .315

Processing conditions will affect mated height. See SO Series for board space tolerances

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.

# Mouser Electronics

Authorized Distributor

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## Samtec:

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[QSS-050-01-F-D-A](#) [QSS-025-01-L-D-A-K](#) [QSS-025-01-L-D-A-K-TR](#) [QSS-025-01-F-D-A](#) [QSS-050-01-F-D-A-GP](#) [QSS-050-01-L-D-A-GP](#) [QSS-050-01-L-D-A-K-TR](#) [QSS-075-01-L-D-A](#) [QSS-025-01-L-D-A-GP](#) [QSS-025-01-F-D-A-LS2](#)  
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