

QSS-050-01-F-D-A

QSS-075-01-F-D-A

QSS-025-01-L-D-A

(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  $\mu$ " (1.27  $\mu$ m) 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

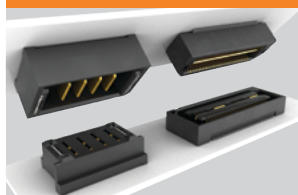
**Board Mates:**  
QTS

**Cable Mates:**  
SQCD

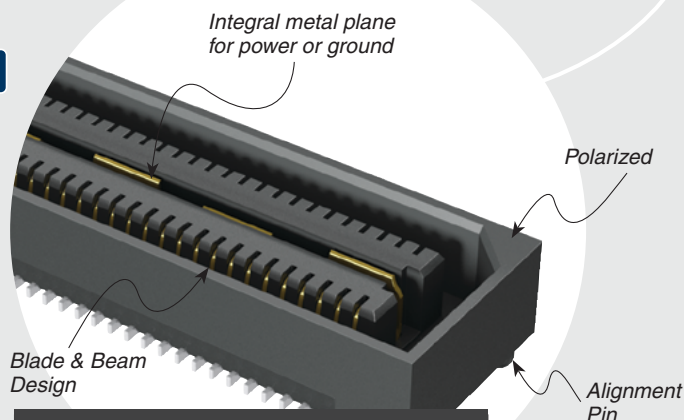
**Standoffs:**  
SO



## POWER/SIGNAL APPLICATION



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



## 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  $\mu$ " (0.76  $\mu$ m) 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.

QSS — NO. OF POSITIONS PER ROW — 01 — PLATING OPTION — D — A — OTHER OPTION

—025, —050, —075  
(50 total positions per bank)

—F

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

—L

= 10  $\mu$ " (0.25  $\mu$ m) Gold on Signal Pins  
and Ground Plane, Matte Tin on tails

—C\*

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

—GP

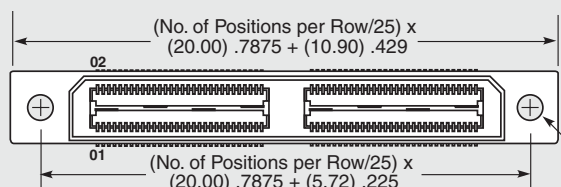
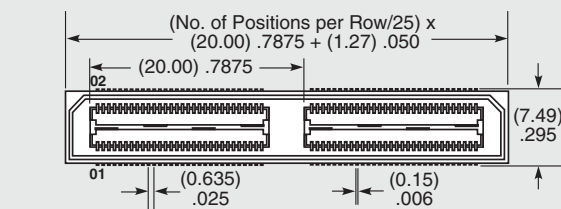
= Guide Holes  
for mating  
with QTS-RA

—K

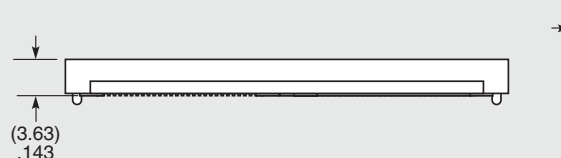
= (8.25 mm)  
.325" DIA  
Polyimide Film  
Pick &  
Place Pad

—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.