



(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 50µ" (1,27 µm) Ni

### Current Rating:

Contact: 1.8 A per pin  
(1 pin powered per row)

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

### Processing:

**Lead-Free Solderable:** Yes

### SMT Lead Coplanarity:

(0,10 mm) .004" max (025-050)  
(0,15 mm) .006" max (075)

### Board Stacking:

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

### Board Mates:

QTS

### Cable Mates:

SQCD



Blade & Beam Design

Integral metal plane for power or ground

Polarized

Alignment Pin

| QSS/QTS<br>5 mm Stack Height | Type | Rated @ 3dB Insertion Loss* |
|------------------------------|------|-----------------------------|
| Single-Ended Signaling       | -D   | 9 GHz / 18 Gbps             |
| Differential Pair Signaling  | -D   | 8.5 GHz / 17 Gbps           |
| Differential Pair Signaling  | -DP  | 8.5 GHz / 17 Gbps           |

\*Performance data includes effects of a non-optimized PCB.

Performance data for other stack heights and complete test data available at [www.samtec.com?QSS](http://www.samtec.com?QSS) or contact [sig@samtec.com](mailto:sig@samtec.com)

**Final Inch**  
CERTIFIED

## RECOGNITIONS

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



FILE NO. E111594

## ALSO AVAILABLE (MOQ Required)

- 11 mm & 16 mm stack height (Caution: Some automatic placement/inspection machines may have component height restrictions. Please consult machinery specifications.)
- 30µ" (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

Contact Samtec.

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

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

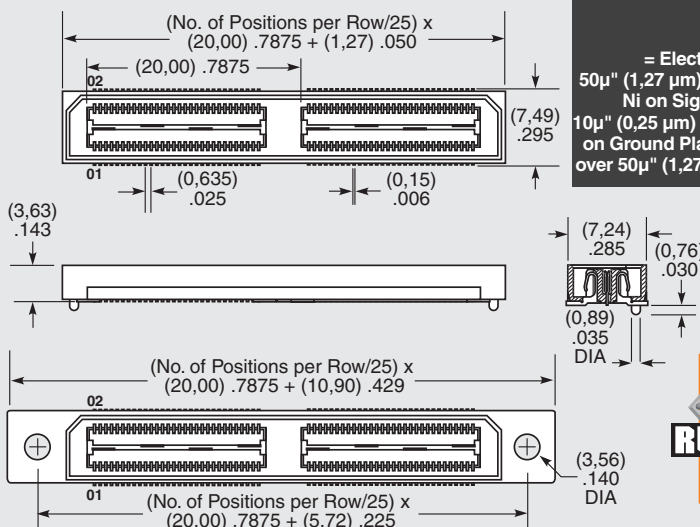
-L  
= 10µ" (0,25 µm) Gold on Signal Pins and Ground Plane, Matte Tin on tails

-C\*  
= Electro-Polished Selective  
50µ" (1,27 µm) min Au over 150µ" (3,81 µm) Ni on Signal Pins in contact area,  
10µ" (0,25 µm) min Au over 50µ" (1,27 µm) Ni on Ground Plane in contact area, Matte Tin over 50µ" (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 and Reel



## OTHER SOLUTIONS

• Board spacing standoffs (See SO Series)