

(0.50 mm) .0197"

**QSH SERIES** 

# **HIGH-SPEED GROUND PLANE SOCKET**

Blade &

## **SPECIFICATIONS**

For complete specifications and recommended PCB layouts see www.samtec.com?QSH

Insulator Material: Liquid Crystal Polymer Contact Material: Phosphor Bronze Plating: Au or Sn over 50 μ" (1.27 μm) Ni Current Rating: Contact: 2 A per pin

(2 pins powered) Ground Plane: 25 A per ground plane (1 ground plane powered) **Operating Temp Range:** -55 °C to +125 °C Voltage Rating:

175 VAC (5 mm Stack Height) Max Cycles: 100 RoHS Compliant: Yes

#### **PROCESSING**

Lead-Free Solderable: Yes SMT Lead Coplanarity: (0.10 mm) .004" max (020-060) Board Stacking: For applications requiring more

than two connectors per board contact ipg@samtec.com

### **RECOGNITIONS**

For complete scope of recognitions see www.samtec.com/quality





### **PROTOCOLS**

- 100 GbE
- Hypertransport<sup>™</sup>
- XAUI
- PCI Express®
- InfiniBand™

#### ALSO AVAILABLE (MOQ Required)

- 15 mm, 22 mm and 30 mm stack height
- 30 μ" (0.76 μm) Gold (Specify -H plating for Data Rate cable mating applications.)
- · Edge Mount & Guide Posts
- 80 (-DP), 120, 150 positions per row
- · Retention Option

Contact Samtec.

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



Cable Mates:

HQCD, HQDF (See Also Available Note)

Standoffs:

QSH

Beam Design EXTENDED LIFE PRODUCT

Integral metal plane for power or ground

> POWER/SIGNAL **APPLICATION**



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

HIGH-SPEED CHANNEL PERFORMANCE

QTH/QSH @ 5 mm Mated Stack Height

Rating based on Samtec reference channel For full SI performance data visit Samtec.com or contact SIG@samtec.com

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**PLATING** 

**OPTION** 

**OTHER OPTION** 

-030, -060, -090 (60 total pins per bank = -D)

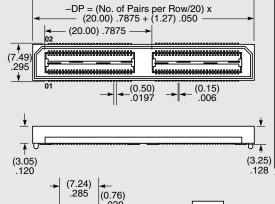
**PINS PER ROW** 

NO. OF PAIRS

-020, -040, -060 (20 pairs per bank = -D-DP)

-D = (No. of Pins per Row/30) x

(20.00) .7875 + (1.27) .050



= Gold Flash

on Signal Pins and Ground Plane, Matte Tin on tails

= 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

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

= Single-

·D–DP = Differential Pair (–01 only)

Ended

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

–TR = Tape & Reel

(-090 positions maximum)

> -L = Latching

Option (Not available on -060 (-D-DP) & -090 positions

QTH LEAD STYLE	MATED HEIGHT WITH QSH*
-01	(5.00) .197
-02	(8.00) .315
-03	(11.00) .433
-04	(16.00) .630
-05	(19.00) .748
-07	(25.00) .984
-09	(14.00) .551

\*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.

(0.64)