



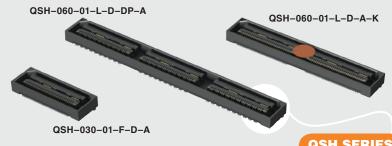
Board Mates:

Cable Mates:

HQCD, HQDF

Standoffs:

(See Also Available Note)



(0.50 mm) .0197"

QSH SERIES

HIGH-SPEED GROUND PLANE SOCKET

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:

RoHS Compliant:

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

Blade & Beam Integral metal plane Design for power or ground EXTENDED LIFE PRODUCT HIGH-SPEED CHANNEL PERFORMANCE

POWER/SIGNAL

APPLICATION



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

PROCESSING

Lead-Free Solderable:

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



STANDARDS

PISMO[™] 1

Visit www.samtec.com/standards for more information.

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**

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



(20.00) .7875

.285

(0.89)

(0.76)

(7.49)

.295

(3.05)

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

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

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

(20.00) .7875 + (1.27) .050

-DP = (No. of Pairs per Row/20) x --- (20.00) .7875 + (1.27) .050 ---

01

PLATING OPTION

= 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 $50 \, \mu^{\text{\tiny H}} \, (1.27 \, \mu \text{m}) \, \text{min}$ Ni on all solder tails

*Note: -C Plating passes 10 year MFG testing

(3.25)

.128

(0.64)

irements must be approved by Samtec and identified in a Samtec customer-specific drawing to apply.

= Single-

·D–DP = Differential Pair (–01 only)

Ended

OTHER

OPTION

-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