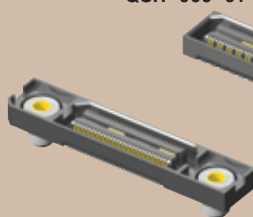
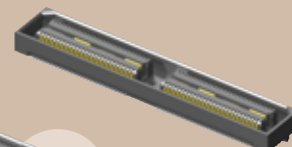




QSH-060-01-L-D-DP-A



QSH-030-01-F-D-A-RT1



QSH-060-01-L-D-DP-A

0,50mm HI-SPEED SOCKET QSH SERIES

SPECIFICATIONS

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

Insulator Material:

Liquid Crystal

Polymer

Contact Material:

Phosphor Bronze

Plating:

Au over 50µ" (1,27µm) Ni

Current Rating:

Contact: 1.0A @ 30°C

Temperature Rise

Ground Plane: 7.8A @ 30°C

Temperature Rise

Operating Temp Range:

-55°C to +125°C

Voltage Rating:

125 VAC (5mm Stack Height)

Max Cycles:

100

Unmating Force (-RT1 option):

-RT1 option increases

unmating force up to 50%

RoHS Compliant:

Yes

Processing:

Max Processing Temp:

230°C for 60 seconds, or

260°C for 20 seconds 3x

Lead-Free Solderable:

Yes

SMT Lead Coplanarity:

(0,10mm) .004" max (030-060)

(0,15mm) .006" max (090-120)

Board Stacking:

For applications requiring more than two connectors per board or 4 banks or more, contact ipg@samtec.com

APPLICATION SPECIFIC OPTION

- 14mm, 15mm, 22mm and 30mm stack height (Caution: Some automatic placement/inspection machines may have component height restrictions. Please consult machinery specifications.)
 - 30µ" (0,76µm) Gold (Specify -H plating for Data Rate cable mating applications.)
 - Edge Mount & Guide Posts
 - 150 positions per row
- Call Samtec.

*Note: -C Plating passes 10 year MFG testing

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

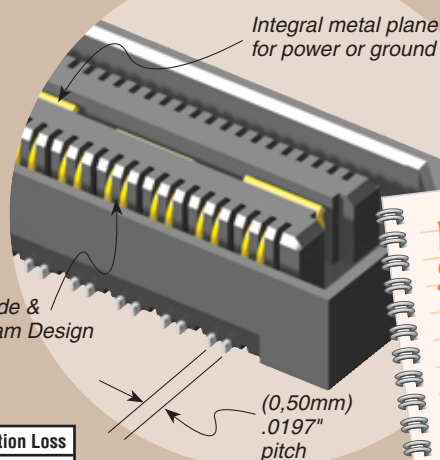
Board Mates:
QTH

Cable Mates:
HQCD, HQDP, HFHM2
(See Application Specific note)



5mm Stack Height	Type	Rated @ -3dB Insertion Loss
Single-Ended Signaling	-D	9 GHz / 18 Gbps
Differential Pair Signaling	-D	8 GHz / 16 Gbps
Differential Pair Signaling	-DP	9.5 GHz / 19 Gbps

Performance data for other stack heights available at www.samtec.com?QSH



ALSO AVAILABLE

Board Spacing Standoffs.
See SO Series.



Protocols Supported

Hypertransport

XAUI

PCI Express®

SATA

Infiniband

Download app notes at
www.samtec.com/appnote
Contact SIG @ samtec.com
for questions on protocols

QSH	PINS PER ROW NO. OF PAIRS	01	PLATING OPTION	TYPE	A	OTHER OPTION
-030, -060, -090, -120 (60 total pins per bank = -D)		-L = 10µ" (0,25µm) Gold on Signal Pins and Ground Plane, Matte Tin on tails		-D = Single-Ended		-K = (8,25mm) .325" DIA Polyimide Film Pick & Place Pad
-020, -040, -060, -080 (20 pairs per bank = -D-DP)		-F = Gold Flash on Signal Pins and Ground Plane, Matte Tin on tails		-D-DP = Differential Pair (-01 only)		-TR = Tape & Reel (-090 positions maximum)
		-C* = Electro-Polished Selective 50µ" (1,27µm) min Au over 150µ" (3,81µm) Ni on Signal Pins in contact area, 10µ" (0,25µm) min Au over 50µ" (1,27µm) Ni on Ground Plane in contact area, Matte Tin over 50µ" (1,27µm) min Ni on all solder tails				-RT1 = Retention Option (-090 positions maximum)

Diagram showing dimensions for QSH connector: (7,49) .295, (0,50) .0197, (0,15) .006, (3,05) .120, (3,25) .128

Diagram showing dimensions for QSH connector: (7,24) .285, (0,76) .030, (0,89) .035 DIA, (3,81) .150, (3,76) .148 DIA

STACK HEIGHTS

QTH LEAD STYLE	MATED HEIGHT WITH QSH
-01	(5,00) .198
-02	(8,00) .315
-03	(11,00) .433
-04	(16,00) .630
-05	(19,00) .748
-07	(25,00) .984

Processing conditions will
affect mated height.

Due to technical progress, all designs, specifications and components are subject to change without notice.

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