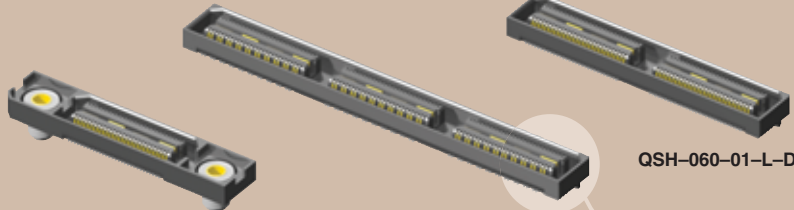




(0,50mm) .0197"

QSH SERIES

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



QSH-060-01-L-D-A

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

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 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



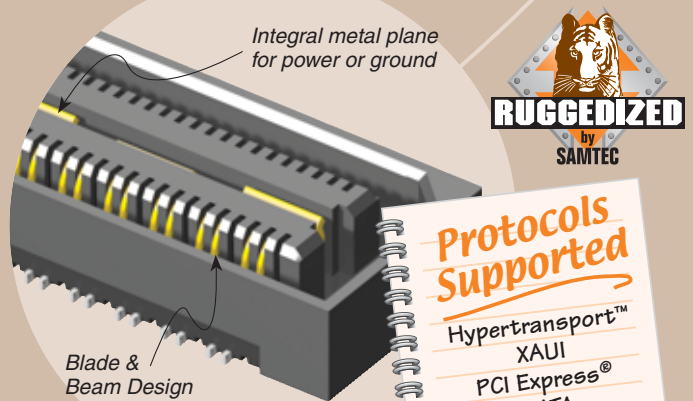
Board Mates: QTH

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 and complete test data available at www.samtec.com?QSH or contact sig@samtec.com



Protocols Supported

Hypertransport™
 XAUI
 PCI Express®
 SATA
 Infiniband

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

ALSO AVAILABLE

Board Spacing Standoffs. See SO Series.

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

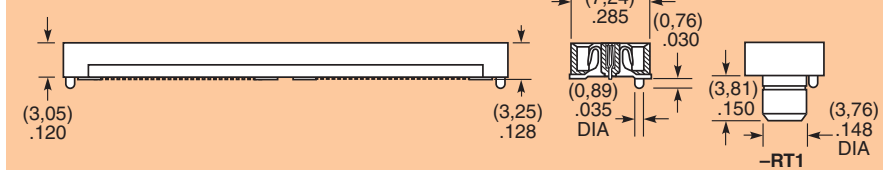
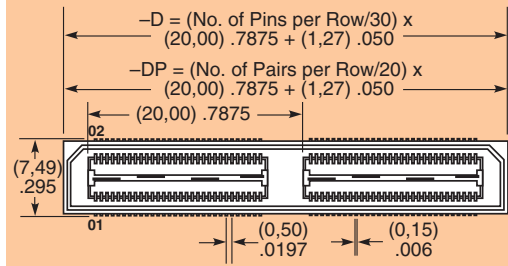
APPLICATION SPECIFIC OPTION

- 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.

QSH	PINS PER ROW NO. OF PAIRS	01	PLATING OPTION	TYPE	A	OTHER OPTION
	-030, -060, -090, -120 (60 total pins per bank = -D)		-F = Gold Flash 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)		-L = 10µ" (0,25µm) Gold 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)



STACK HEIGHTS

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

Processing conditions will affect mated height.

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

WWW.SAMTEC.COM