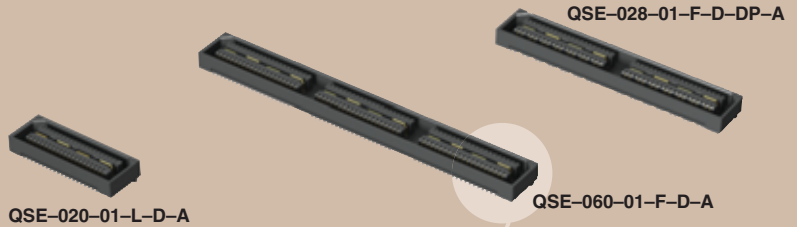




(0,80 mm) .0315"

QSE SERIES



HIGH SPEED GROUND PLANE SOCKET

SPECIFICATIONS

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

Insulator Material:

Liquid Crystal Polymer

Terminal Material:

Phosphor Bronze

Plating: Au or Sn over 50µ" (1,27 µm) Ni

Current Rating:

Contacts: 1.3A per contact @ 95°C

Ground Plane: 10.1A per ground plane @ 95°C

Operating Temp Range: -55°C to +125°C

Voltage Rating: 225 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

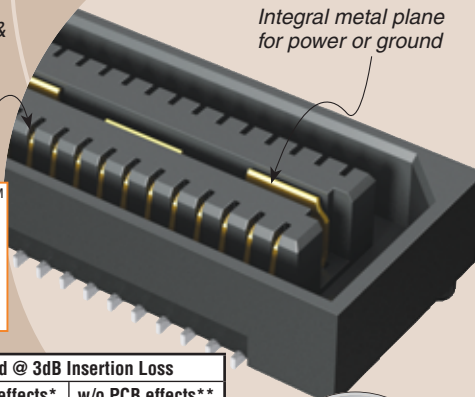
Board Mates:
QTE

Cable Mates:
EQCD, EQSD, EQDP, EQRF
(See Application Specific note)



Blade & Beam Design

Integral metal plane for power or ground



Protocols Supported

- 100 GbE
- XAUI
- PCI Express®
- SATA
- MGT (Rocket I/O)
- InfiniBand™

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

QTE/QSE 5 mm Stack Height	Type	Rated @ 3dB Insertion Loss	
		with PCB effects*	w/o PCB effects**
Single-Ended Signaling	-D	9 GHz / 18 Gbps	9 GHz / 18 Gbps
Differential Pair Signaling	-D	8 GHz / 16 Gbps	14 GHz / 28 Gbps
Differential Pair Signaling	-DP	8.5 GHz / 17 Gbps	13.5 GHz / 27 Gbps

*Performance data includes effects of a non-optimized PCB.
**Test board losses de-embedded from performance data.

Performance data for other stack heights and complete test data available at www.samtec.com?QSE or contact sig@samtec.com

25+ Gbps

RECOGNITIONS

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



ALSO AVAILABLE (MOQ Required)

- 14 mm, 15 mm, 22 mm and 30 mm stack height (Caution: Some automatic placement/inspection machines may have component height restrictions. Please consult machinery specifications.)
 - 30µ" (0,76 µm) Gold (Specify -H plating for Data Rate cable mating applications.)
 - Edge Mount
 - 56 (-DP), 80, 100 positions per row
 - Guide Posts and Friction Lock options.
 - Retention Option
- Contact Samtec..

*Note: -C Plating passes 10 year MFG testing

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

QSE	PINS PER ROW NO. OF PAIRS	01	PLATING OPTION	TYPE	A	OTHER OPTION
	-020, -040, -060 (40 total pins per bank = -D)		-F = Gold Flash on Signal Pins and Ground Plane, Matte Tin on tails	-D = Single-Ended		-GP = Guide Post (-020 only)
	-014, -028, -042 (14 pairs per bank = -D-DP)		-L = 10µ" (0,25 µm) Gold on Signal Pins and Ground Plane, Matte Tin on tails	-D-DP = Differential Pair (-01 only)		-K = (8,25 mm) .325" DIA Polyimide Film Pick & Place Pad
			-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			-TR = Tape & Reel Packaging
						-L = Latching Option (N/A on -042 & -060 positions)

$-D-DP = (\text{No. of Positions per Row}/14) \times (20,00) .7875 + (1,27) .050$
 $-D = (\text{No. of Positions per Row}/20) \times (20,00) .7875 + (1,27) .050$

QTE LEAD STYLE	MATED HEIGHT WITH QSE*
-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.

OTHER SOLUTIONS
Board Spacing Standoffs. See SO Series.

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

WWW.SAMTEC.COM