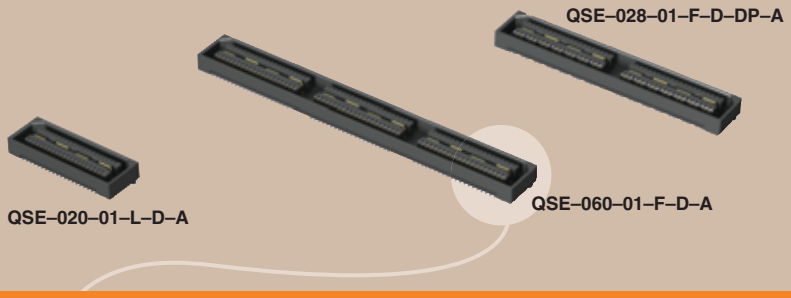
samtec

QSTRIP®

(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

APPLICATION SPECIFIC OPTION

- 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

Call Samtec.

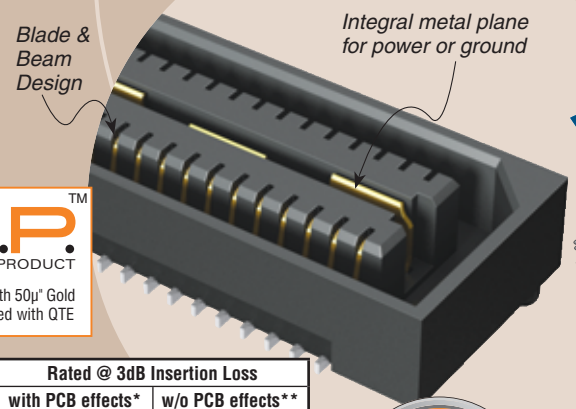
***Note:** –C Plating passes 10 year MFG testing

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

Board Mates:
QTE

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

E.L.P.™ EXTENDED LIFE PRODUCT
10 year Mixed Flowing Gas with 50µ" Gold
Call Samtec for maximum cycles mated with QTE



Final Inch® Break Out Region Performance Certified finalinch.com

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

25+ Gbps

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

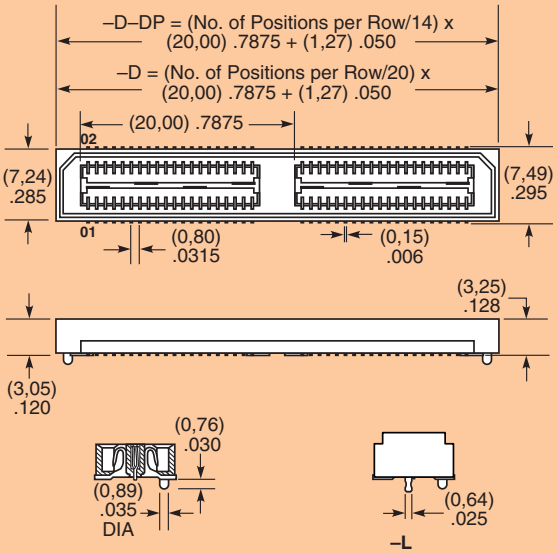
*Performance data includes effects of a non-optimized PCB.
**Test board losses de-embedded from performance data.

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

QSE – PINS PER ROW NO. OF PAIRS – 01 – PLATING OPTION – TYPE – A – OTHER OPTION

–020, –040, –060
(40 total pins per bank = –D)

–014, –028, –042
(14 pairs per bank = –D–DP)



–F
= Gold Flash on Signal Pins and Ground Plane, Matte Tin on tails

–L
= 10µ" (0,25 µm) Gold on Signal Pins and Ground Plane, Matte Tin on tails

–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

–D
= Single-Ended

–D–DP
= Differential Pair (–01 only)

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.

–K
= (8,25 mm) .325" DIA Polyimide Film Pick & Place Pad

–TR
= Tape & Reel Packaging (N/A on 56 & 80 positions)

–L
= Latching Option (N/A on 42, 56, 60 & 80 positions)

ALSO AVAILABLE

Board Spacing Standoffs. See SO Series.

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

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