



(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 50 μ " (1.27 μ m) Ni
Current Rating:
Contacts:
2 A per pin
(1 pin powered per row)
Ground Plane:
23 A per ground plane
(1 ground plane powered)
Operating Temp Range:
-55 $^{\circ}$ C to +125 $^{\circ}$ C
Voltage Rating:
225 VAC (5 mm Stack Height)
Max Cycles: 100
RoHS Compliant: Yes

Board Mates:

QTE

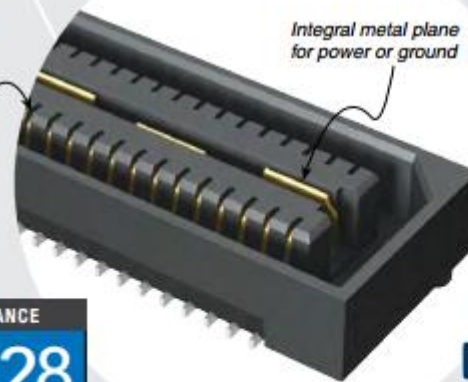
Cable Mates:

EQCD, EQDP

(See Also Available Note)

Standoffs:

SO

Blade &
Beam
DesignIntegral metal plane
for power or ground

HIGH-SPEED CHANNEL PERFORMANCE

QSE-DP/QTE-DP @ 5 mm Mated Stack Height

Rating based on Samtec reference channel.
For full SI performance data visit Samtec.com
or contact SIG@samtec.com

28

Gbps


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

RECOGNITIONS

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



PROTOCOLS

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

ALSO AVAILABLE (MOQ Required)

- 15 mm, 22 mm and 30 mm stack height
 - 30 μ " (0.76 μ m) Gold (Specify -H plating for Data Rate cable mating applications.)
 - Edge Mount
 - 56 (-DP), 80, 100 positions per row
 - Retention, Guide Posts and Friction Lock options.
- Contact Samtec.

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

= 10 μ " (0.25 μ m) Gold
on Signal Pins
and Ground Plane,
Matte Tin on tails

-C*

= Electro-Polished
Selective
50 μ " (1.27 μ m) min
Au over 150 μ "
(3.81 μ m) Ni on Signal
Pins in contact area,
10 μ " (0.25 μ m) min
Au over 50 μ " (1.27 μ m)
Ni on Ground Plane
in contact area,
Matte Tin over 50 μ "
(1.27 μ m) min Ni on
all solder tails

-D

= Single-
Ended

-D-DP

= Differential
Pair
(-01 only)

-GP

= Guide Post
(-020 only)

-K

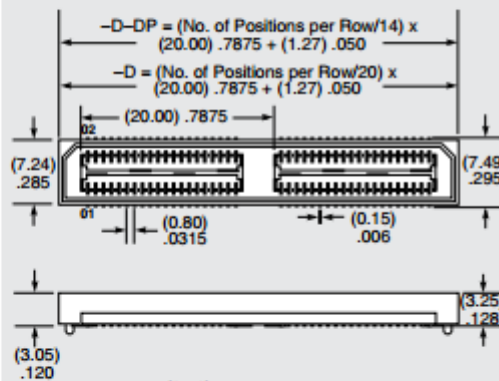
= (8.25 mm) .325"
DIA Polyimide
Film Pick &
Place Pad

-TR

= Tape & Reel
Packaging

-L

= Latching Option
(N/A on -042
& -060 positions)



*Note: -C Plating passes
10 year MFG testing

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

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
-09	(14.00) .551

*Processing conditions will affect mated height. See SO Series for board space tolerances