

(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

(2 pins powered)

Ground Plane:

23 A per ground plane

(1 ground plane powered)

Operating Temp Range:

-55 °C to +125 °C

Voltage Rating:

225 VAC (5 mm Stack Height)

Max Cycles:

100

RoHS Compliant:

Yes

Board Mates:

QTE

Cable Mates:

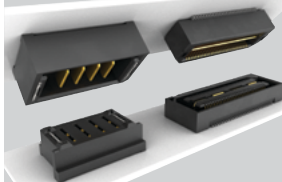
EQCD, EQDP

(See Also Available Note)

Standoffs:

SO

POWER/SIGNAL APPLICATION



Compatible with UMPT/UMPS for flexible two-piece power/signal solutions

Blade & Beam Design

Integral metal plane for power or ground



HIGH-SPEED CHANNEL PERFORMANCE

QTE-D/QSE-D or QTE-DP/QSE-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

QSE-D/QTE-D

14
Gbps

QSE-DP/QTE-DP

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 jpg@samtec.com

RECOGNITIONS

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



FILE NO. E111594

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.

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)

—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

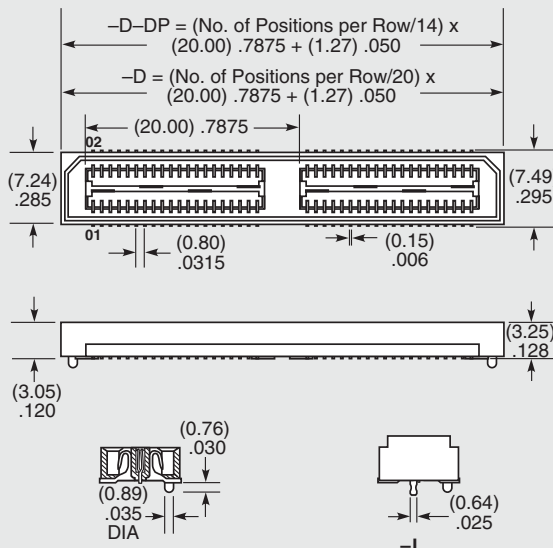
—D-DP
= Differential Pair (-01 only)

—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

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

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

WWW.SAMTEC.COM

All parts within this catalog are built to Samtec's specifications.

Customer specific requirements must be approved by Samtec and identified in a Samtec customer-specific drawing to apply.