

0,80mm HI-SPEED SOCKET QSE SERIES

SPECIFICATIONS

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

Insulator Material: Liquid Crystal Polymer



Terminal Material: Phosphor Bronze

Plating: Au over 50µ" (1,27µm) Ni

Current Rating: Contacts: 2A @ 80°C

Ground Plane: 9.5A @ 80°C

Operating Temp Range: -55°C to +125°C

Voltage Rating: 225 VAC (5mm Stack Height)

Max Cycles: 100

Unmating Force (-RT1 option): -RT1 option increases unmating force up to 50%

RoHS Compliant: Yes

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 (020-060)

(0,15mm) .006" max (080)

Board Stacking:

For applications requiring more than two connectors per board or 4 banks or more, contact ipg@samtec.com

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Board Mates: QTE

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



Blade & Beam Design

Integral metal plane for power or ground

(0,80mm) .0315" pitch

Protocols Supported

- 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

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	8.5 GHz / 17 Gbps

Performance data for other stack heights available at www.samtec.com?QSE



ALSO AVAILABLE

Board Spacing Standoffs. See SO Series.

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

-020, -040, -060, -080
(40 total pins per bank = -D)

-014, -028, -042, -056
(14 pairs per bank = -D-DP)

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

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

-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

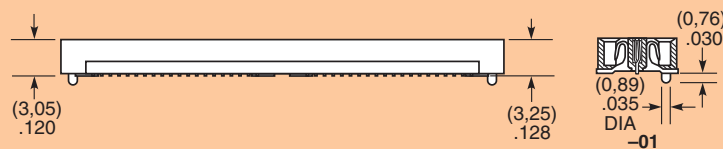
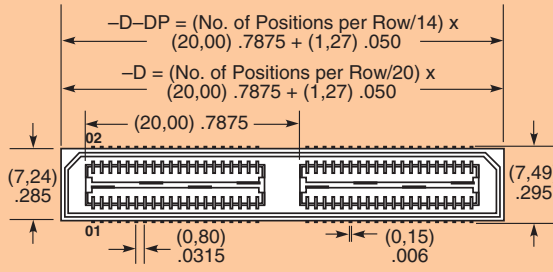
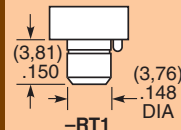
-D
= Single-Ended

-D-DP
= Differential Pair (-01 only)

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

-TR
= Tape & Reel Packaging (-060 positions maximum)

-RT1
= Retention Option (-060 positions maximum)



STACK HEIGHTS

QTE LEAD STYLE	MATED HEIGHT WITH QSE
-01	(5,00) .198
-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.

*Note: -C Plating passes 10 year MFG testing

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

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

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