

0,80mm HI-SPEED HEADER QTE SERIES

SPECIFICATIONS

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

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 mated with QSE

& 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

APPLICATION SPECIFIC OPTION

• 14mm, 15mm, 22mm and 30mm stack height (Caution: Some automatic placement/inspection machines may have component height restrictions. Please consult machinery specifications.)

• 30µ" (0,76µm) Gold (Specify -H plating for Data Rate cable mating applications.)

• Edge Mount

• 100 positions per row

• Guide Posts, Screw Down & Friction Lock

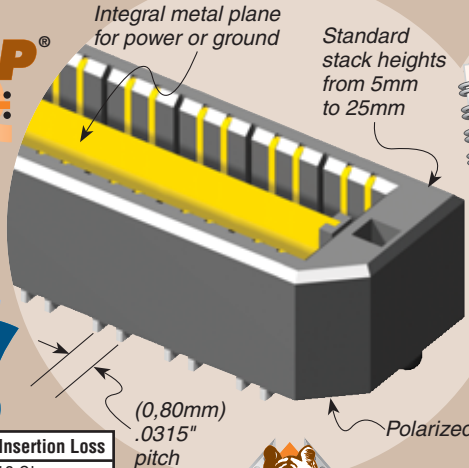
Call Samtec.

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

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

Board Mates: QSE

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



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 |

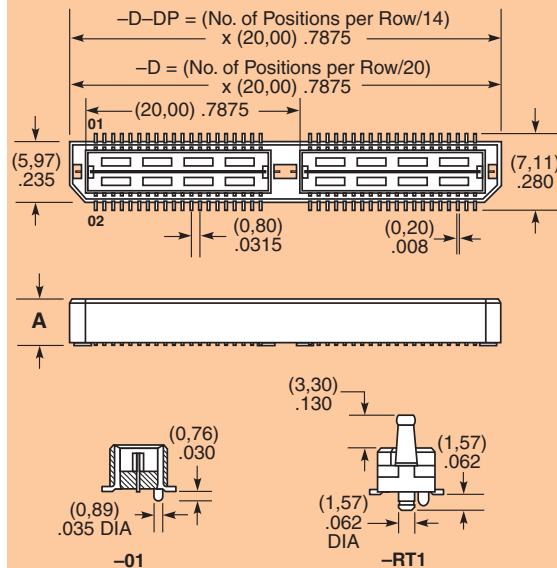
Performance data for other stack heights available at www.samtec.com?QTE



ALSO AVAILABLE

Board Spacing Standoffs. See SO Series.

| QTE | PINS PER ROW NO. OF PAIRS | LEAD STYLE | PLATING OPTION | TYPE | A | OTHER OPTION |
|---|-------------------------------|-------------------------------|--|---|---|---|
| -020, -040, -060, -080 | (40 total pins per bank = -D) | Specify LEAD STYLE from chart | -L = 10µ" (0,25µm) Gold on Signal Pins and Ground Plane, Matte Tin on tails | -D = Single-Ended | -K = (7,00mm) .275" DIA Polyimide Film Pick & Place Pad | -TR = Tape & Reel Packaging (-060 positions maximum) |
| -014, -028, -042, -056 | (14 pairs per bank = -D-DP) | | -F = Gold Flash on Signal Pins and Ground Plane, Matte Tin on tails | -D-DP = Differential Pair (-01 only) | | |
| $-D-DP = (\text{No. of Positions per Row}/14) \times (20,00) .7875$ $-D = (\text{No. of Positions per Row}/20) \times (20,00) .7875$ | | | -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 | | | -RT1 = Retention Option (-01 Lead Style only & -060 positions maximum) |



| QTE LEAD STYLE | A | HEIGHT WITH QSE |
|----------------|--------------|-----------------|
| -01 | (4,27) .168 | (5,00) .198 |
| -02 | (7,26) .286 | (8,00) .316 |
| -03 | (10,27) .404 | (11,00) .433 |
| -04 | (15,25) .600 | (16,00) .630 |
| -05 | (18,24) .718 | (19,00) .748 |
| -07 | (24,24) .954 | (25,00) .984 |

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

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