

(0.80 mm) .0315"

QTE SERIES

HIGH-SPEED GROUND PLANE HEADER

SPECIFICATIONS

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

Insulator Material:
Liquid Crystal Polymer
Terminal Material:
Phosphor Bronze

Plating: Au or Sn over
50 μ " (1.27 μ m) Ni

Current Rating:
Contact:

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 mated with QSE

& 5 mm Stack Height

Max Cycles: 100

RoHS Compliant: Yes

Board Mates:
QSE

Cable Mates:
EQCD, EQDP
(See Also Available Note)

Standoffs:
SO

POWER/SIGNAL APPLICATION



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

Integral metal plane
for power or ground

Standard stack heights
from 5 mm to 25 mm

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/contact
SIG@samtec.com

14
G b p s

28
G b p s



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, Guide Posts, Screw Down & Friction Lock
 - 56 (-DP), 80, 100 positions per row
 - Retention Option
- Contact Samtec.

| QTE | PINS PER ROW NO. OF PAIRS | LEAD STYLE | PLATING OPTION | TYPE | A | OTHER OPTION |
|--|---|---|---|--|--|--------------|
| | <p>–020, –040, –060 (40 total pins per bank = –D)</p> <p>–014, –028, –042 (14 pairs per bank = –D–DP)</p> | Specify LEAD STYLE from chart | <p>–F = Gold Flash on Signal Pins and Ground Plane, Matte Tin on tails</p> <p>–L = 10 μ" (0.25 μm) Gold on Signal Pins and Ground Plane, Matte Tin on tails</p> <p>–C* = Electro-Polished Selective 50 μ" (1.27 μm) min Au over 150μ" (3.81 μm) Ni on Signal Pins in contact area, 10 μ" (0.25 μm) min Au over 50 μ" (1.27 μm) Ni on Ground Plane in contact area, Matte Tin over 50μ" (1.27 μm) min Ni on all solder tails</p> | <p>–D = Single-Ended</p> <p>–D–DP = Differential Pair (–01 only)</p> | <p>–K = (7.00 mm) .275" DIA Polyimide Film Pick & Place Pad</p> <p>–TR = Tape & Reel Packaging (N/A –05 & –07 lead style)</p> <p>–L = Latching Option (N/A on –042 & –060 positions)</p> | |
| <p>–D–DP = (No. of Positions per Row/14) x (20.00) .7875</p> <p>–D = (No. of Positions per Row/20) x (20.00) .7875</p> <p>(20.00) .7875</p> <p>(5.97) .235</p> <p>(7.11) .280</p> <p>(0.80) .0315</p> <p>(0.20) .008</p> <p>A</p> <p>(0.76) .030</p> <p>(0.89) .035 DIA</p> <p>(0.64) .025</p> <p>–L</p> | | | | | | |

*Note: –C Plating passes 10 year MFG testing

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

| QTE LEAD STYLE | A | HEIGHT WITH QSE* |
|----------------|--------------|------------------|
| –01 | (4.27) .168 | (5.00) .197 |
| –02 | (7.26) .286 | (8.00) .315 |
| –03 | (10.27) .404 | (11.00) .433 |
| –04 | (15.25) .600 | (16.00) .630 |
| –05 | (18.26) .718 | (19.00) .748 |
| –07 | (24.24) .954 | (25.00) .984 |
| –09 | (13.26) .522 | (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.