



(0,80 mm) .0315"

QTE SERIES

QTE-014-01-F-D-DP-A

QTE-060-01-L-D-A

QTE-014-01-L-D-A-RT1

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

50µ" (1,27 µm) Ni

Current Rating:

Contacts: 1.3A @ 95°C

Ground Plane: 10.1A @ 95°C

Operating Temp Range:

-55°C to +125°C

Voltage Rating:

225 VAC mated with QSE

& 5 mm Stack Height

Max Cycles: 100

Unmating Force (-RT1 option):

-RT1 option increases

unmating force up to 50%

RoHS Compliant:

Yes

Processing:

Lead-Free Solderable:

Yes

SMT Lead Coplanarity:

(0,10 mm) .004" max (020-060)

(0,15 mm) .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, 15 mm, 22 mm and 30 mm stack height (Caution: Some automatic placement/inspection machines may have component height restrictions. Please consult machinery specifications.)
 - 30µ" (0,76 µm) 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

Cable Mates:

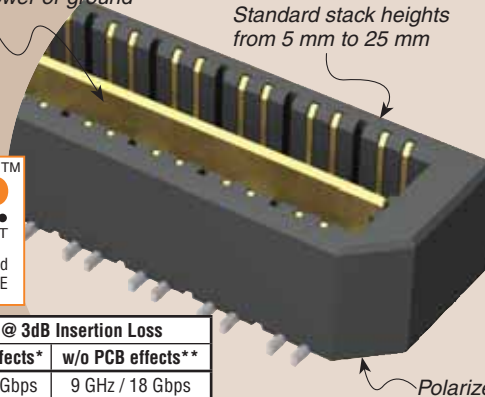
EQCD, EQSD, EQDP, EQRF

(See Application Specific note)



Integral metal plane
for power or ground

Standard stack heights
from 5 mm to 25 mm



Polarized

QTE/QSE 5mm Stack Height	Type	Rated @ 3dB Insertion Loss	
		with PCB effects*	w/o PCB effects**
Single-Ended Signaling	-D	9 GHz / 18 Gbps	9 GHz / 18 Gbps
Differential Pair Signaling	-D	8 GHz / 16 Gbps	14 GHz / 28 Gbps
Differential Pair Signaling	-DP	8.5 GHz / 17 Gbps	13.5 GHz / 27 Gbps

*Performance data includes effects of a non-optimized PCB.

**Test board losses de-embedded from performance data.

Performance data for other stack heights and complete test data available at www.samtec.com?QTE or contact sig@samtec.com

ALSO AVAILABLE

Board Spacing Standoffs.
See SO Series.



Protocols
Supported

XAUI

PCI Express®

SATA

MGT (Rocket I/O)

InfiniBand™

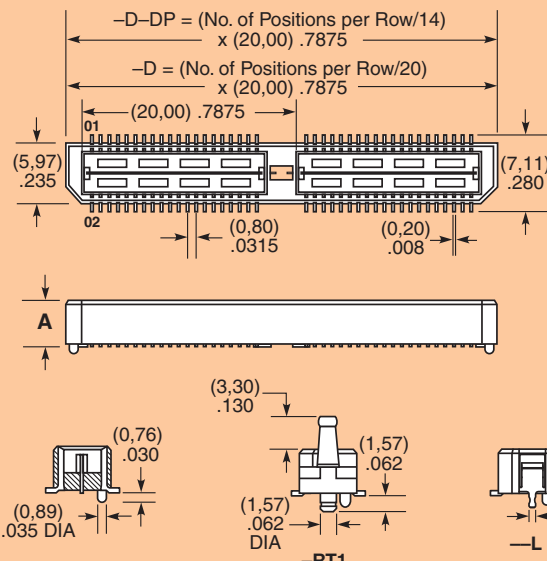
Download app notes at

www.samtec.com/appnote

Contact SIG @ samtec.com

for questions on protocols

QTE	PINS PER ROW NO. OF PAIRS	LEAD STYLE	PLATING OPTION	TYPE	A	OTHER OPTION
		Specify LEAD STYLE from chart				
	-020, -040, -060, -080 (40 total pins per bank = -D)		-F = Gold Flash on Signal Pins and Ground Plane, Matte Tin on tails	-D = Single-Ended		-K = (7,00 mm) .275" DIA Polyimide Film Pick & Place Pad
	-014, -028, -042, -056 (14 pairs per bank = -D-DP)		-L = 10µ" (0,25 µm) Gold on Signal Pins and Ground Plane, Matte Tin on tails	-D-DP = Differential Pair (-01 only)		-TR = Tape & Reel Packaging (N/A on 56 & 80 positions or -05 & -07 lead style)
			-C* = Electro-Polished Selective 50µ" (1,27 µm) min Au over 150µ" (3,81 µm) Ni on Signal Pins in contact area, 10µ" (0,25 µm) min Au over 50µ" (1,27 µm) Ni on Ground Plane in contact area, Matte Tin over 50µ" (1,27 µm) min Ni on all solder tails			-RT1 = Retention Option (-01 Lead Style only) (N/A on 56 & 80 positions or -L (latch) option)
						-L = Latching Option (N/A on 42, 56, 60 & 80 positions or -RT1 option)



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

*Processing conditions
will affect mated height.

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

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