



(0,80 mm) .0315"

QTE SERIES

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

QTE-060-01-L-D-A

QTE-040-01-L-D-A

# HIGH SPEED GROUND PLANE HEADER

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?QTE](http://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 per contact @ 95°C

Ground Plane:

10.1A per ground plane @ 95°C

### 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

### 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](mailto: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
  - 56(-DP), 80, 100 positions per row
  - Guide Posts, Screw Down & Friction Lock
  - Retention Option
- Call Samtec.

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

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

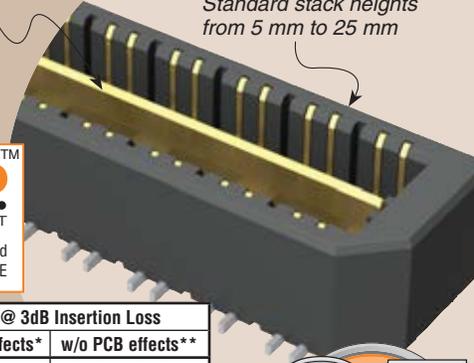
Board Mates: QSE

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



25+ Gbps



QTE/QSE 5 mm 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](http://www.samtec.com?QTE) or contact [sig@samtec.com](mailto:sig@samtec.com)

QTE	PINS PER ROW NO. OF PAIRS	LEAD STYLE	PLATING OPTION	TYPE	A	OTHER OPTION
	-020, -040, -060 (40 total pins per bank = -D)	Specify LEAD STYLE from chart	-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	-TR = Tape & Reel Packaging (N/A on 56 & 80 positions or -05 & -07 lead style)
	-014, -028, -042 (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)		
			-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			-L = Latching Option (N/A on 42, 56, 60 & 80 positions)

-D-DP = (No. of Positions per Row/14) x (20,00) .7875

-D = (No. of Positions per Row/20) x (20,00) .7875

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.

## ALSO AVAILABLE

Board Spacing Standoffs. See SO Series.

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

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