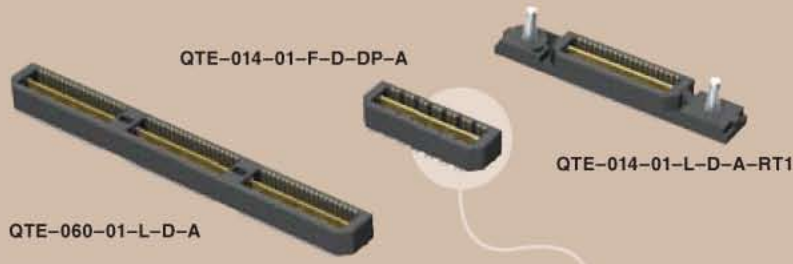




(0,80mm) .0315"

QTE SERIES



# 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" (1,27µm) 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 & 5mm Stack Height
- Max Cycles:** 100
- Unmating Force (-RT1 option):** -RT1 option increases unmating force up to 50%
- RoHS Compliant:** Yes

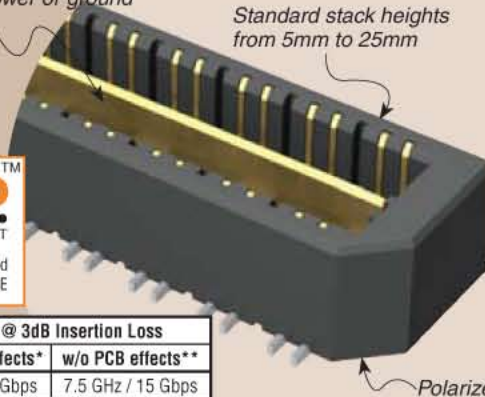


**Board Mates:** QSE  
**Cable Mates:** EQCD, EQSD, EQDP, EQRF (See Application Specific note)



Integral metal plane for power or ground

Standard stack heights from 5mm to 25mm



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	7.5 GHz / 15 Gbps
Differential Pair Signaling	-D	8 GHz / 16 Gbps	8.5 GHz / 17 Gbps
Differential Pair Signaling	-DP	8.5 GHz / 17 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)

**ALSO AVAILABLE**

Board Spacing Standoffs. See SO Series.

## Processing:

- 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](mailto: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.



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

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

Specify LEAD STYLE from chart

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

-L  
= 10µ" (0,25µm) Gold 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

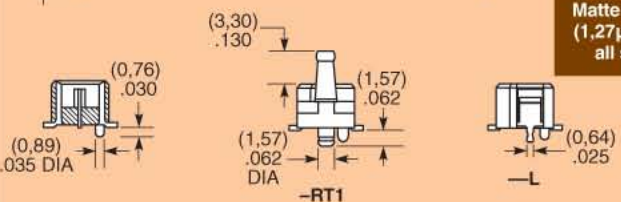
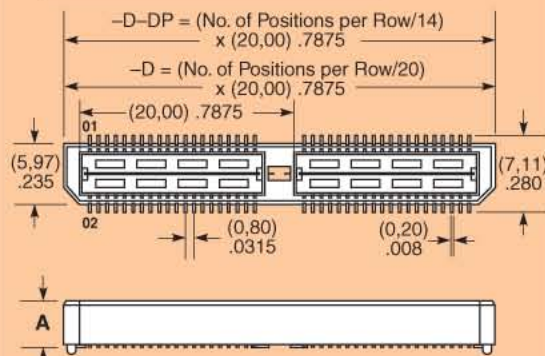
-D  
= Single-Ended  
-D-DP  
= Differential Pair (-01 only)

-K  
= (7,00mm) .275" DIA Polyimide Film Pick & Place Pad

-TR  
= Tape & Reel Packaging (N/A on 56 & 80 positions or -05 & -07 lead style)

-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.

\*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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