

# 0,80mm HI-SPEED HEADER QTE SERIES

## SPECIFICATIONS

For complete specifications see [www.samtec.com?QTE](http://www.samtec.com?QTE)

### Insulator Material:

Liquid Crystal Polymer



### Terminal Material:

Phosphor Bronze



### Current Rating:

Contacts: 2A @ 80°C

Ground Plane: 9.5A @ 80°C

### Operating Temp Range:

-65°C to +125°C

### Voltage Rating:

225 VAC mated with QSE & 5mm Stack Height

### Plating:

Au over 50µ" (1,27µm) Ni

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

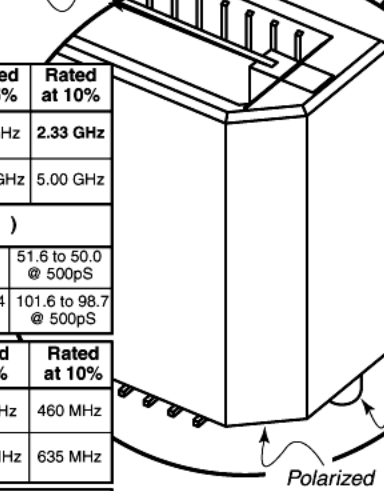
Mates with: QSE

| Configuration (5mm Stack) | Near End Crosstalk                  | Prop. Delay           | Rated at 5%           | Rated at 10%          |
|---------------------------|-------------------------------------|-----------------------|-----------------------|-----------------------|
| Single Ended              | -5% @ 1.20 GHz<br>-9% @ 2.33 GHz    | 35.0pS                | 1.2GHz                | 2.33 GHz              |
| Differential Pair         | -3% @ 2.33 GHz<br>-4.25% @ 5.00 GHz | 35.0pS                | 2.33GHz               | 5.00 GHz              |
| Configuration (5mm Stack) | Impedance Mismatch ( )              |                       |                       |                       |
| Single Ended              | 64.0 to 50.0 @ 50pS                 | 56.2 to 50.0 @ 100pS  | 52.9 to 50.0 @ 250pS  | 51.6 to 50.0 @ 500pS  |
| Differential Pair         | 104.5 to 87.1 @ 50pS                | 102.3 to 92.2 @ 100pS | 101.6 to 96.4 @ 250pS | 101.6 to 98.7 @ 500pS |

| 11mm Stack        | Rated at 5% | Rated at 10% | 22mm Stack        | Rated at 5% | Rated at 10% |
|-------------------|-------------|--------------|-------------------|-------------|--------------|
| Single Ended      | 350 MHz     | 440 MHz      | Single Ended      | 220 MHz     | 460 MHz      |
| Differential Pair | 875 MHz     | 2.30 GHz     | Differential Pair | <350 MHz    | 635 MHz      |

For complete Test Reports logon to [www.samtec.com?QTE](http://www.samtec.com?QTE)

Metal ground plane



## APPLICATION SPECIFIC

30µ" (0,76µm) Gold (Specify -H plating for Data Rate Cable applications), -GP-TY and Friction Lock options. Call Samtec.



## Processing:

Max Processing Temp: 230°C for 60 seconds

SMT Lead Coplanarity: (0,10mm) .004" max (020-060)

(0,15mm) .006" max (080-100)

### Board Stacking:

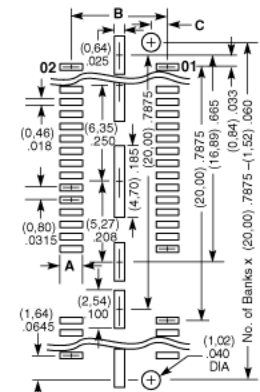
Maximum two connectors per board recommended.

For applications requiring more contact [ipg@samtec.com](mailto:ipg@samtec.com)

### Suggested PCB Layouts:

For reference only. Go to [www.samtec.com?QTE](http://www.samtec.com?QTE)

for recommended PCB layout.



| LEAD STYLE | A      | B      | C      |
|------------|--------|--------|--------|
| -01, -02,  | (1,45) | (6,17) | (3,09) |
| -03, -07,  | .057   | .243   | .1215  |
| -08, -09   |        |        |        |
| -04, -05,  | (1,94) | (5,96) | (2,98) |
| -06        | .0765  | .2345  | .1173  |



**-020, -040, -060, -080, -100**  
(40 total positions per bank)

Specify LEAD STYLE from chart.

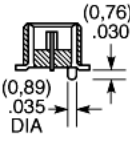
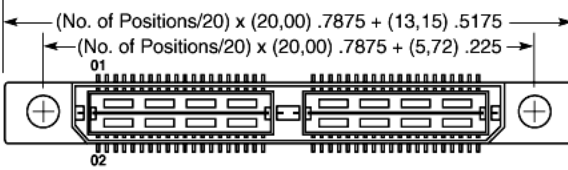
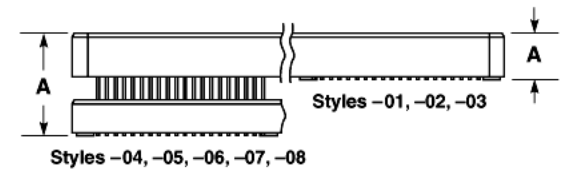
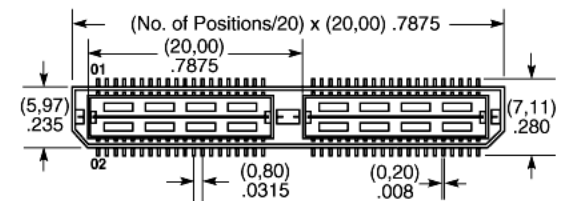
**-F**  
= Gold Flash on Signal Pins and Ground Plane

**-L**  
= 10µ" (0,25µm) Gold on Signal Pins and Ground Plane. Gold Flash on tails

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

**-GP**  
= Guide Posts (Style -01 only)

**-TR**  
= Tape & Reel Packaging (-060 positions maximum; -040 positions maximum with -GP) Styles -05, -06, -07, -08 not available



| LEAD STYLE | A             | HEIGHT WITH QSE |
|------------|---------------|-----------------|
| -01        | (4,27) .168   | (5,00) .198     |
| -02        | (7,26) .286   | (8,00) .316     |
| -03        | (10,26) .404  | (11,00) .434    |
| -09        | (13,27) .522  | (14,00) .551    |
| -04        | (15,34) .604  | (16,00) .630    |
| -05        | (18,33) .722  | (19,00) .748    |
| -06        | (21,33) .840  | (22,00) .866    |
| -07        | (24,23) .954  | (25,00) .984    |
| -08        | (29,23) 1.151 | (30,00) 1.181   |

Processing conditions will affect mated height.

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

[WWW.SAMTEC.COM](http://WWW.SAMTEC.COM)