



(0.80 mm) .0315" PITCH • QTE/QSE SERIES

NRZ  
28  
Gbps



**QTE**  
Board Mates:  
QSE

**QSE**  
Board Mates:  
QTE

**QTE/QSE**

Cable Mates:  
EQCD, EQDP

Standoffs:  
SO

| QTE | PINS PER ROW<br>NO. OF PAIRS                            | LEAD<br>STYLE                             | PLATING<br>OPTION                                                                                                                    | TYPE                                          | A | OTHER<br>OPTIONS                                                        | "X"R                                                                                                                                                          |
|-----|---------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | -020, -040,<br>-060<br>(40 total pins per<br>bank = -D) | Specify<br>LEAD<br>STYLE<br>from<br>Chart | -F<br>= Gold flash<br>on contact,<br>Matte Tin on tail                                                                               | -D<br>= Single-<br>Ended                      |   | -K<br>= (7.00 mm)<br>.275" DIA<br>Polyimide<br>film Pick &<br>Place Pad | -TR<br>= Tape & Reel<br>(N/A -05 to -07<br>lead style)                                                                                                        |
|     | -014, -028,<br>-042<br>(14 pairs per bank =<br>-D-DP)   |                                           | -L<br>= 10 μ" (0.25 μm)<br>Gold on contact,<br>Matte Tin on tail                                                                     | -D-DP<br>= Differential<br>Pair<br>(-01 only) |   | -L<br>= Latching<br>Option<br>(N/A on<br>-042 &<br>-060<br>positions)   | -FR<br>= Full Reel<br>Tape & Reel<br>(must order<br>max. quantity<br>per reel;<br>contact Samtec<br>for quantity<br>breaks)<br>(N/A -05 to -07<br>lead style) |
|     |                                                         |                                           | -C<br>= 50 μ" (1.27 mm)<br>Electro-Polished<br>Selective Gold<br>on contact,<br>Matte Tin on tail<br>(passes 10 year<br>MFG testing) |                                               |   |                                                                         |                                                                                                                                                               |

## SPECIFICATIONS

### Insulator Material:

Liquid Crystal Polymer

### Contact Material:

Phosphor Bronze

### Plating:

Au or Sn over  
50 μ" (1.27 μm) 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 when mated

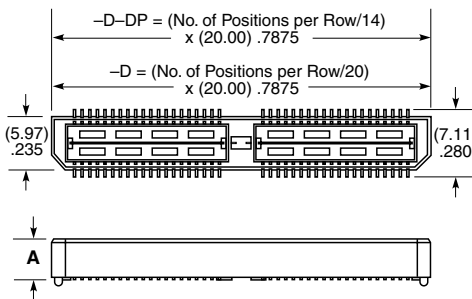
& 5 mm Stack Height

### Max Cycles:

100

| QTE<br>LEAD<br>STYLE | A            | HEIGHT<br>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.



View complete specifications at: [samtec.com?QTE](http://samtec.com?QTE)

## PROCESSING

### Lead-Free Solderable:

Yes

### SMT Lead Coplanarity:

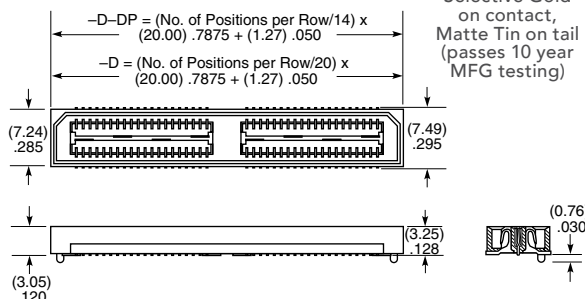
(0.10 mm) .004" max  
(020-060)

### Board Stacking:

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



| QSE | PINS PER ROW<br>NO. OF PAIRS                            | 01 | PLATING<br>OPTION                                                                                                                    | TYPE                                          | A | OTHER<br>OPTIONS                                                        | "X"R                                                                                                                  |
|-----|---------------------------------------------------------|----|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
|     | -020, -040,<br>-060<br>(40 total pins per<br>bank = -D) |    | -F<br>= Gold flash<br>on contact,<br>Matte Tin on tail                                                                               | -D<br>= Single-<br>Ended                      |   | -GP<br>= Guide Post<br>(-020 only)                                      | -TR<br>= Tape & Reel                                                                                                  |
|     | -014, -028,<br>-042<br>(14 pairs per bank<br>= -D-DP)   |    | -L<br>= 10 μ" (0.25 μm)<br>Gold on contact,<br>Matte Tin on tail                                                                     | -D-DP<br>= Differential<br>Pair<br>(-01 only) |   | -K<br>= (8.25 mm)<br>.325" DIA<br>Polyimide Film<br>Pick &<br>Place Pad | -FR<br>= Full Reel<br>Tape & Reel<br>(must order max.<br>quantity per reel;<br>contact Samtec for<br>quantity breaks) |
|     |                                                         |    | -C<br>= 50 μ" (1.27 mm)<br>Electro-Polished<br>Selective Gold<br>on contact,<br>Matte Tin on tail<br>(passes 10 year<br>MFG testing) |                                               |   | -L<br>= Latching<br>Option<br>(N/A on -042<br>& -060<br>positions)      |                                                                                                                       |



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

View complete specifications at: [samtec.com?QSE](http://samtec.com?QSE)

[samtec.com/QStrip](http://samtec.com/QStrip)

F-221 (Rev 12JUL21)

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