

DO NOT SCALE FROM THIS PRINT

TABLE 1						MATED HEIGHT WITH QSE-DP-01
STYLE	"B"	"C"	BODY	GROUND PLANE	TERMINAL	
-01	.1680 [4.267]	.1600 [4.064]	QTE-20-01-D-XX	T-1G1-01-XXX	T-1S39-01-XXX	.197 [5.00] REF
-02	.2861 [7.267]	.2781 [7.064]	QTE-20-02-D-XX	T-1G1-02-XXX	T-1S59-02-XXX	.315 [8.00] REF
-03	.4042 [10.267]	.3962 [10.063]	QTE-20-03-D-XX	T-1G1-03-XXX	T-1S39-03-XXX	.433 [11.00] REF

TABLE 3		
No OF POS	"A"	"D"
-014	.788 [20.00]	.728 [18.48]
-028	1.575 [40.01]	1.515 [38.48]
-042	2.363 [60.01]	2.303 [58.48]
-056	3.150 [80.01]	3.090 [78.49]
-070	3.938 [100.01]	3.878 [98.49]

TABLE 2	
No OF POSITIONS	COPLANARITY (INCLUDES GROUND PLANE)
-014 THRU -042	.004 [0.10]
-056 THRU -070	.006 [0.15]

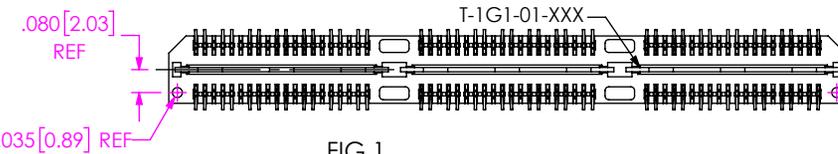
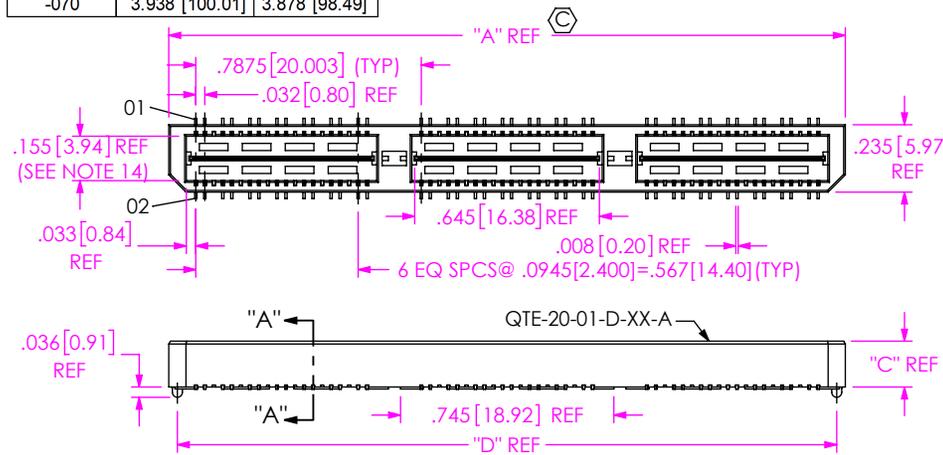
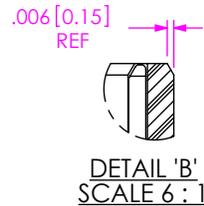


FIG 1  
-A: ALIGNMENT PIN OPTION (QTE-042-01-XXX-D-DP-A SHOWN) (STYLE -01, -02 & -03 ONLY)



- NOTES:
1. Ⓢ REPRESENTS A CRITICAL DIMENSION.
  2. MINIMUM TERMINAL RETENTION: 5 OZ.
  3. MINIMUM GROUND PLANE RETENTION: 1 LB
  4. PARTS TO BE MOLDED TO POSITION.
  5. NOTE DELETED.
  6. NOTE DELETED.
  7. NOTE DELETED.
  8. NOTE DELETED.
  9. -L PLATING CAN BE SUBSTITUTED FOR -F PLATING.
  10. NOTE DELETED.
  11. T-1R36 RETENTION TO BODY TO BE 1.0 LBF.
  12. NOTE DELETED.
  13. DUE TO THE HIGH AMOUNT OF INSERTION FORCE NEEDED, THE -LC OPTION IS NOT COMPATIBLE WITH AUTO PLACEMENT. SAMTEC RECOMMENDS MANUAL PLACEMENT FOR ALL ASSEMBLIES WITH THE -LC OPTION.
  14. MAXIMUM PIN CAN EXTEND PAST WALL: .003 [0.08].
  15. AVAILABLE FOR EXISTING CUSTOMERS ONLY.
  16. TRAYS ARE STANDARD PACKAGING.
  17. ORDERS WILL BE PACKAGED ACCORDING TO THE SAMTEC PACKAGING EFFICIENCY STANDARDS (SPES) FOUND ON WWW.SAMTEC.COM.
  18. ATTACH LABEL -4X2 TO EACH REEL.
  19. DIMENSION MEASURED, ON EACH BANK, FROM A PLANE CREATED FROM THE SIGNAL PINS.
  20. COPLANARITY INCLUDES SIGNAL PINS AND GROUND PLANES.

QTE-XXX-XX-XXX-D-DP-XXX-X-XX

No OF POSITIONS

- 014, -028, -042, \*-056, \*-070 (PER ROW) (\*SEE NOTE 15)

LEAD STYLE

- 01: .1680 [4.267] (SEE FIG 1)
- 02: .2861 [7.264] (SEE FIG 1)
- 03: .4042 [1.123] (SEE FIG 1)
- 04: .600 [15.24] (SEE FIG 4, SHT 3)
- 05: .718 [18.237] (SEE FIG 4, SHT 3)
- 06: .835 [21.209] (SEE FIG 4, SHT 3)
- 07: .954 [24.232] (SEE FIG 4, SHT 3)
- 08: 1.15 [29.24] (SEE FIG 4, SHT 3)
- 09: .522 [13.258] (SEE FIG 4, SHT 3)
- 10: .5606 [14.239] (SEE FIG 4, SHT 3)

PLATING SPECIFICATION

- F: 3μ" FLASH GOLD IN CONTACT AREA, MATTE TIN ON TAIL (USE T-1SXX-XX-F, T-1G1-XX-F) (SEE NOTE 9)
- L: 10μ" LIGHT GOLD IN CONTACT AREA, MATTE TIN ON TAIL (USE T-1SXX-XX-L, T-1G1-XX-L)
- H: 30μ" HEAVY GOLD IN CONTACT AREA, 3μ" GOLD ON TAIL (USE T-1SXX-XX-H, T-1G1-XX-G)
- C: 50μ" ELECTRO-POLISHED SELECTIVE IN CONTACT AREA, MATTE TIN ON TAIL (USE T-1SXX-XX-C, T-1G1-XX-L)
- STL: 30μ" HEAVY SELECTIVE GOLD IN CONTACT AREA, TIN LEAD ON TAIL (USE T-1SXX-XX-STL, T-1G1-XX-STL)
- FTL: 3μ" FLASH SELECTIVE GOLD IN CONTACT AREA, TIN LEAD ON TAIL (USE T-1SXX-XX-FTL, T-1G1-XX-FTL)

PACKAGING  
BLANK: TRAY (SEE NOTES 16 & 17)  
-TR: TAPE & REEL (SEE NOTES 17 & 18)  
-FR: FULL REEL QTY TAPE & REEL (SEE NOTES 17 & 18)

PICK & PLACE OPTION  
-K: POLYIMIDE FILM (USE K-DOT-276-.375-.005) (SEE FIG 3, SHT 2) (N/A ON STYLES -07 & -08)

OPTION

- A: ALIGNMENT PINS
- LC: LOCKING CLIPS (SEE NOTE 13) (USE LC-08-TM-01) (SEE FIG 2, SHT 2)
- GP: GUIDE POSTS (AVAILABLE ON -01 ONLY) (USE QTE-20-01-D-XX-X-GP) (SEE FIG 4, SHT 3)
- RT1: RETENTION OPTION (SEE FIG 9, SHT 5) (ONLY AVAILABLE ON -01 LEAD STYLE) (MUST USE -A OPTION) (USE QTE-20-01-D-XX-A-RT1 & T-1R36-01-F) (NOT AVAILABLE WITH -LC, -GP, OR -L) (NOT AVAILABLE ON -056 & -070 POS)
- L: LATCHING OPTION (28 POS. MAX.) (SEE FIG 10, SHT 5) (MUST USE -A OPTION) (AVAILABLE ON -01 ONLY) (NOT AVAILABLE WITH -LC, -GP, OR -RT1)

BODY STYLE

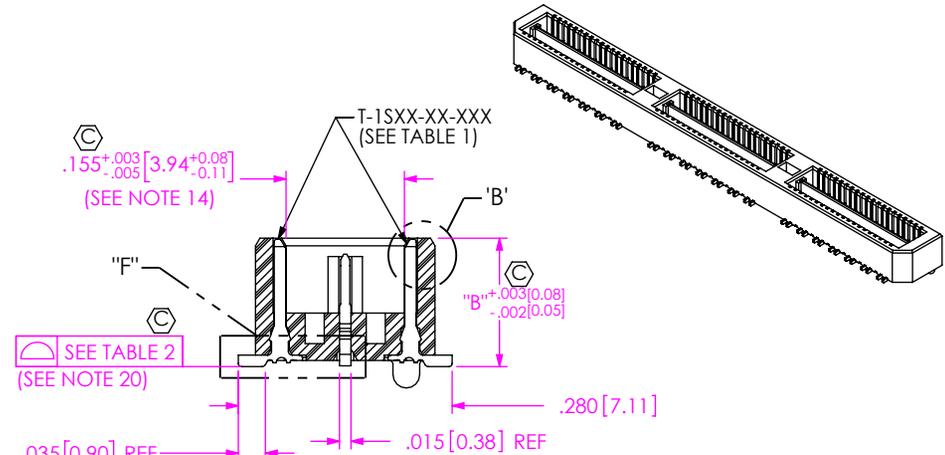
- DP: DIFFERENTIAL PAIRS

ROW SPECIFICATION

- D: DOUBLE (USE QTE-20-XX-D-XX & QTEH-20-XX-D-XX)

No OF BANKS

⊗ = ASO ONLY (APPLICATION SPECIFIC ORDER)



UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE:  
DECIMALS: .XX: ±.01 [3]  
.XXX: ±.005 [13]  
.XXXX: ±.0020 [051]

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e-Mail: info@SAMTEC.com code 55322

MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 1.5:1  
INSULATOR: LCP, UL94V-0; COLOR: BLACK  
TERMINAL: PHOS BRONZE  
GROUND PLANE: PHOS BRONZE

DESCRIPTION: .8mm DIFFERENTIAL PAIRS HS TERMINAL ASSEMBLY  
DWG. NO. QTE-XXX-XX-XXX-D-DP-XXX-X-XX  
BY: DEAN P 4/28/2000 SHEET 1 OF 5

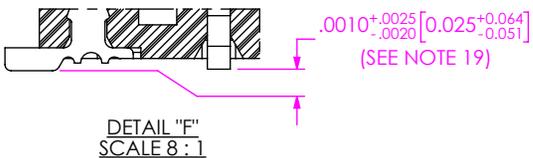


FIG 2  
-LC: LOCKING CLIP OPTION  
(QTS-042-01-XXX-D-DP-LC SHOWN)  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

No OF POS	"R"				"S"			
	-LC, -A, -FL	-GP, -SD	-RT1	-L	-LC, -A, -FL	-GP, -SD	-RT1	-L
-014	.788 [20.00]	1.305 [33.15]	1.438 [36.53]	.906 [23.00]	.256 [6.50]	.515 [13.07]	.581 [14.76]	.315 [7.99]
-028	1.575 [40.01]	2.093 [53.15]	2.226 [56.53]	1.693 [43.00]	.650 [16.50]	.908 [23.07]	.975 [24.76]	.709 [18.00]
-042	2.363 [60.01]	2.880 [73.15]	3.013 [76.53]	N/A	1.043 [26.50]	1.302 [33.07]	1.369 [34.76]	N/A
-056	3.150 [80.01]	3.668 [93.15]	N/A	N/A	1.437 [36.50]	1.696 [43.07]	N/A	N/A
-070	3.938 [100.01]	4.455 [113.16]	N/A	N/A	1.831 [46.50]	2.090 [53.07]	N/A	N/A

STYLE	"T"
-01	.173[4.39]
-02	.291[7.39]
-03	.409[10.39]
-04	.605[15.37]
-05	.723[18.36]
-06	.841[21.36]
-09	.527[13.39]
-10	.567[14.37]

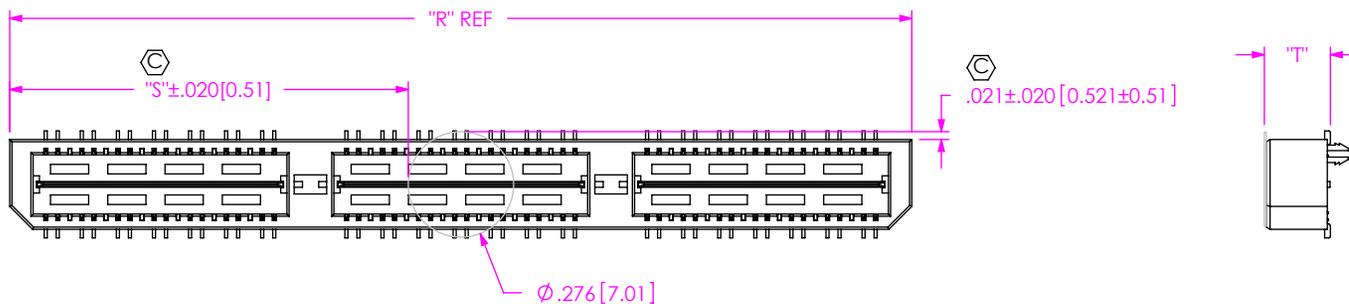


FIG 3  
-K: POLYIMIDE FILM PAD  
(USE K-DOT-.276-.375-.005)

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DO NOT SCALE DRAWING

SHEET SCALE: 2:1

DESCRIPTION:  
.8mm DIFFERENTIAL PAIRS HS TERMINAL ASSEMBLY

DWG. NO.  
QTE-XXX-XX-XXX-D-DP-XXX-X-XX

BY: DEAN P 4/28/2000 SHEET 2 OF 5

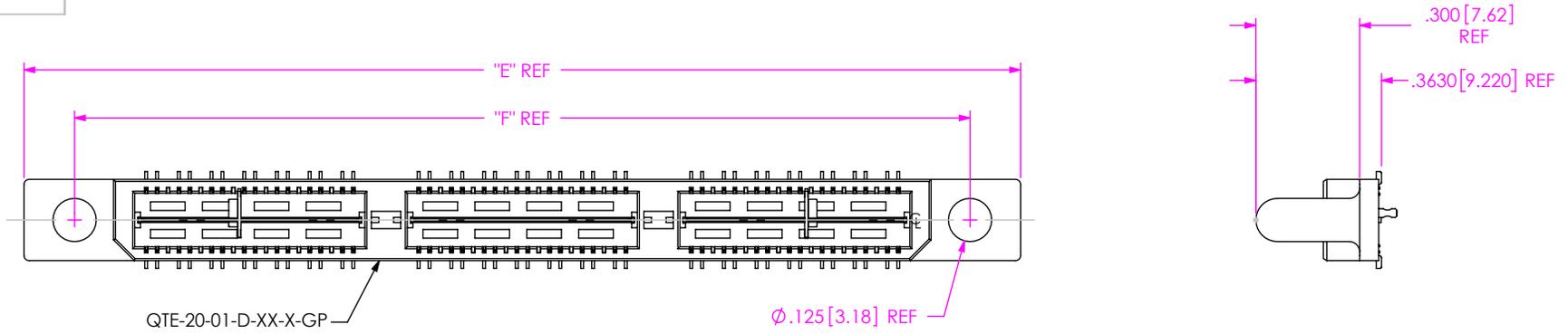


FIG 4  
 -GP: GUIDE POST OPTION  
 (QTE-042-01-XXX-D-DP-GP SHOWN)  
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)  
 (AVAILABLE ON STYLE -01 ONLY)

POS	"E"	"F"
-014	1.305 [33.15]	1.013 [25.72]
-028	2.093 [53.15]	1.800 [45.72]
-042	2.880 [73.15]	2.588 [65.72]
-56	3.668 [93.15]	3.375 [85.73]
-070	4.455 [113.16]	4.163 [105.73]

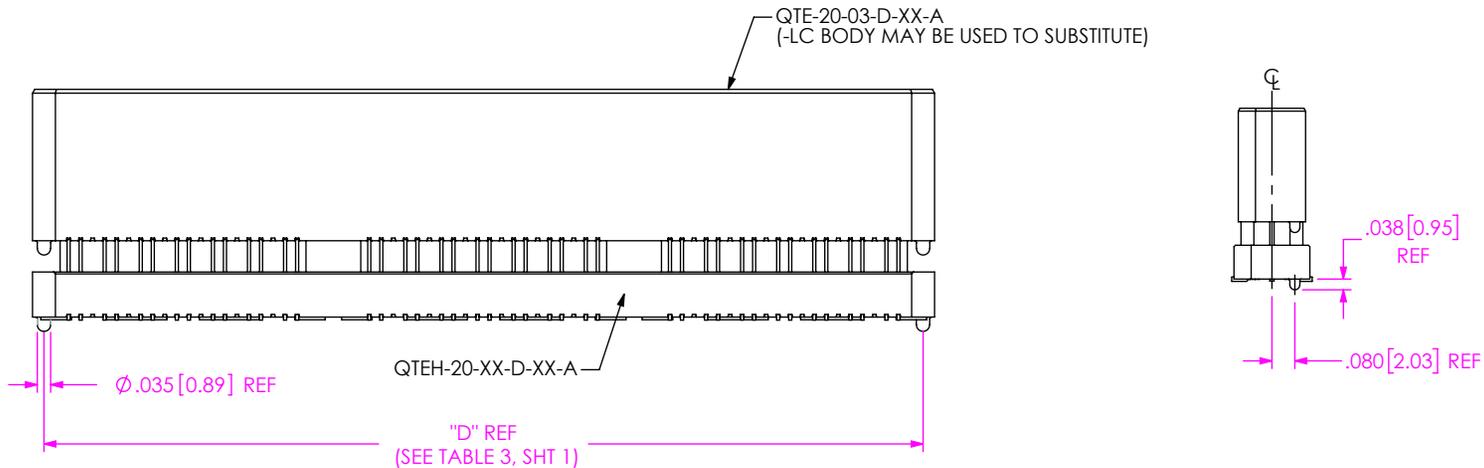


FIG 5  
 (QTE-020-04-XXX-D-A SHOWN)  
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)  
 (STYLES -04, -05, -06, -07, -08, -09 & -10, SEE TABLE 7, SHT 4)

<p>DO NOT SCALE DRAWING</p> <p>SHEET SCALE: 2:1</p>	<p><b>PROPRIETARY NOTE</b></p> <p>THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.</p>	 <p>520 PARK EAST BLVD, NEW ALBANY, IN 47150                  PHONE: 812-944-6733 FAX: 812-948-5047                  e-Mail info@SAMTEC.com code 55322</p>
	<p>DESCRIPTION:                  .8mm DIFFERENTIAL PAIRS HS TERMINAL ASSEMBLY</p>	
	<p>DWG. NO.                  QTE-XXX-XX-XXX-D-DP-XXX-X-XX</p>	
<p>BY: DEAN P 4/28/2000</p>	<p>SHEET 3 OF 5</p>	

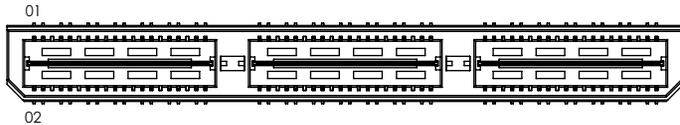


TABLE 7						MATED HEIGHT WITH QSE-DP-01
STYLE	"B"	GROUND PLANE	TERMINAL	FILLER BODY	SPACER BODY	
-04	.600[15.24]	T-1G1-04-XXX	T-1S41-04-XXX	QTE-20-03-D-XX	QTEH-20-01-D-XX-X	.630 [16.00] REF
-05	.718[18.237]	T-1G1-05-XXX	T-1S41-05-XXX	QTE-20-03-D-XX	QTEH-20-01-D-XX-X	.748 [19.00] REF
-06	.835[21.209]	T-1G1-06-XXX	T-1S41-06-XXX	QTE-20-03-D-XX	QTEH-20-02-D-XX-X	.866 [22.00] REF
-07	.954[24.232]	T-1G17-01-XXX	T-1S61-21-XXX	QTE-20-02-D-XX-X	QTEH-20-04-D-XX-X	.984 [25.00] REF
-08	1.151[29.24]	T-1G17-02-XXX	T-1S61-22-XXX	QTE-20-02-D-XX-X	QTEH-20-04-D-XX-X	1.181 [30.00] REF
-09	.522[13.259]	T-1G1-09-XXX	T-1S60-09-XXX	QTE-20-02-D-XX-X	QTEH-20-01-D-XX-X	.551[14.00] REF
-10	.5606[14.239]	T-1G1-10-XXX	T-1S60-10-XXX	QTE-20-02-D-XX-X	QTEH-20-01-D-XX-X	.591[15.00] REF

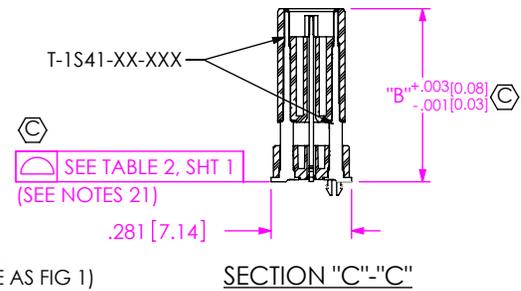
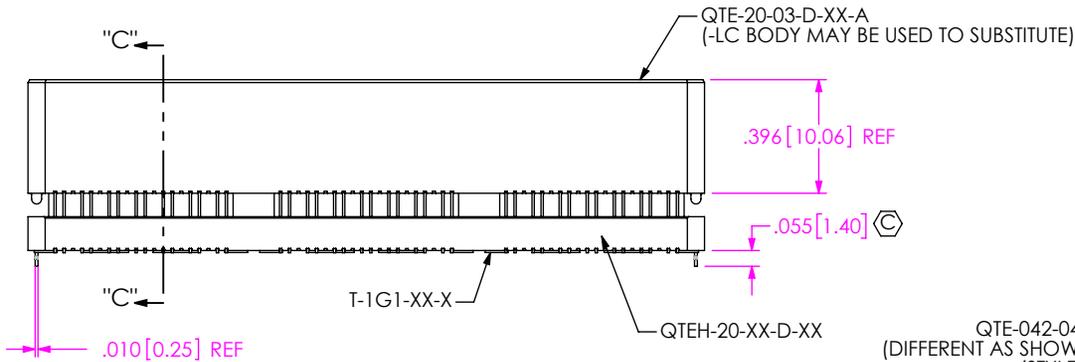


FIG 6  
QTE-042-04-X-D-DP-LC SHOWN  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)  
(STYLES -04, -05 & -06)

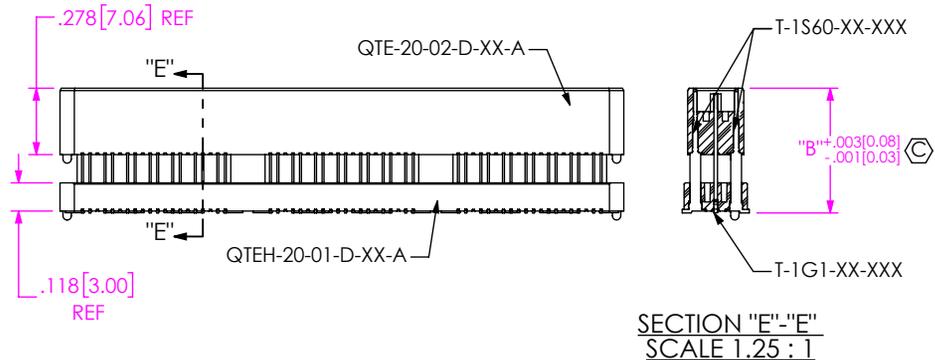
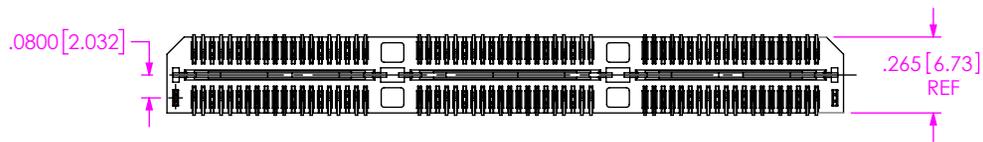


FIG 8  
QTE-042-09-X-D-DP-A SHOWN  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 6)  
(STYLES -09 & -10)

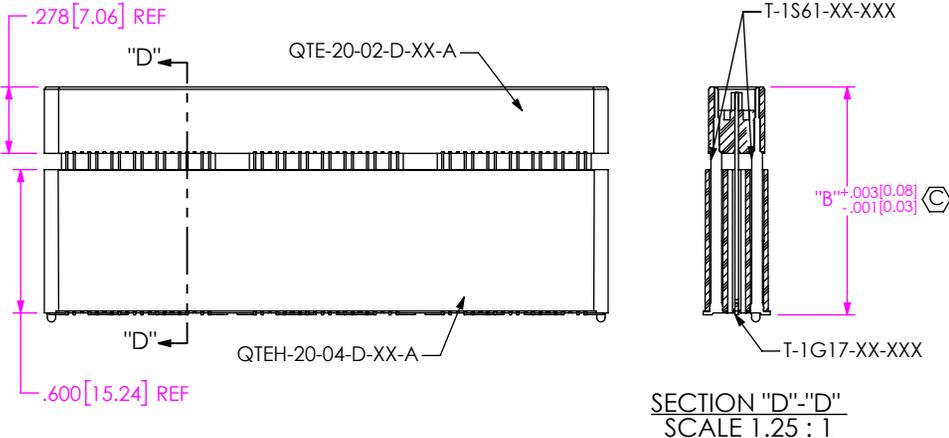
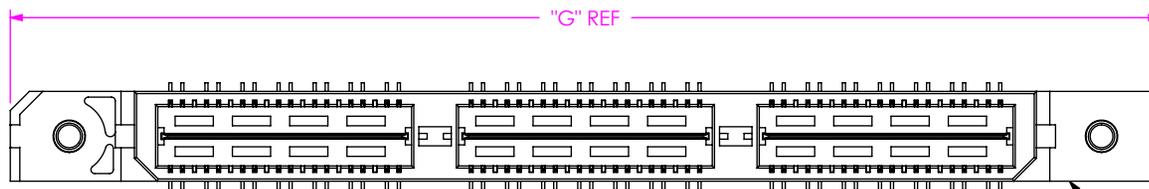


FIG 7  
QTE-042-07-X-D-DP-A SHOWN  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 6)  
(STYLES -07 & -08)

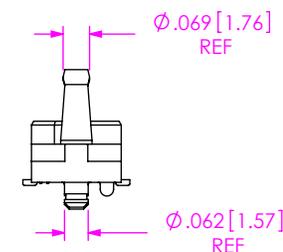
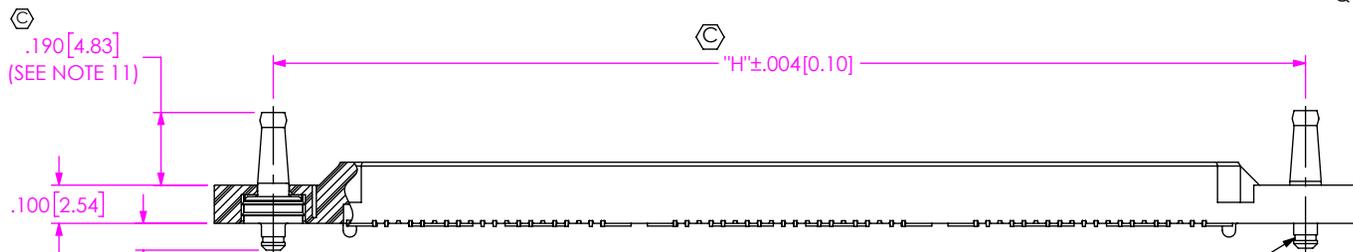
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	<p>DO NOT SCALE DRAWING</p> <p>SHEET SCALE: 1.5:1</p>	<p>DESCRIPTION: .8mm DIFFERENTIAL PAIRS HS TERMINAL ASSEMBLY</p> <p>DWG. NO. QTE-XXX-XX-XXX-D-DP-XXX-X-XX</p> <p>BY: DEAN P 4/28/2000 SHEET 4 OF 5</p>

TABLE 8		
POS	"G"	"H"
-014	1.438 [36.53]	1.129 [28.68]
-028	2.226 [56.53]	1.917 [48.68]
-042	3.013 [76.53]	2.704 [68.68]
-056	N/A	N/A
-070	N/A	N/A

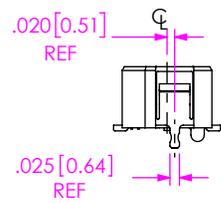
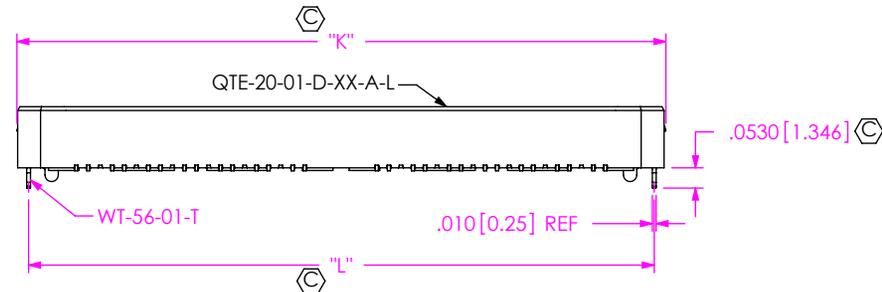
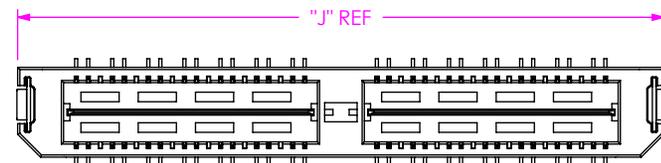


QTE-20-01-D-XX-A-RT1



T-1R36-01-F (2 PLCS)

**FIG 9**  
 -RT1: RETENTION OPTION  
 (QTE-042-01-XXX-D-DP-A-RT1 SHOWN)  
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)  
 (ONLY AVAILABLE ON -01 LEAD STYLE) (MUST USE -A OPTION)  
 (NOT AVAILABLE WITH -LC, -GP, OR -L OPTIONS)  
 (NOT AVAILABLE ON -056 & -070 POSITIONS)



**FIG 10**  
 -L: LATCHING OPTION  
 (QTE-028-01-XXX-D-DP-A-L SHOWN)  
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)  
 (28 POS MAX) (MUST USE -A OPTION)  
 (AVAILABLE ON -01 LEAD STYLE ONLY)  
 (NOT AVAILABLE WITH -LC, -GP, OR -RT1)

TABLE 9			
POS	"J"	"K"	"L"
-014	.906 [23.00]	.915 [23.24]	.854 [21.69]
-028	1.693 [43.00]	1.703 [43.24]	1.642 [41.69]
-042	N/A	N/A	N/A
-056	N/A	N/A	N/A
-070	N/A	N/A	N/A

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DO NOT SCALE DRAWING  
 SHEET SCALE: 2:1

DESCRIPTION:  
 .8mm DIFFERENTIAL PAIRS HS TERMINAL ASSEMBLY  
 DWG. NO.  
**QTE-XXX-XX-XXX-D-DP-XXX-X-XX**  
 BY: DEAN P 4/28/2000 SHEET 5 OF 5