

◇ = ASO ONLY (APPLICATION SPECIFIC ORDER)

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

DO NOT SCALE FROM THIS PRINT

STYLE	"B"	"C"	BODY	GROUND PLANE	TERMINAL	MATED HEIGHT WITH QSE-DP-01
-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

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]

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

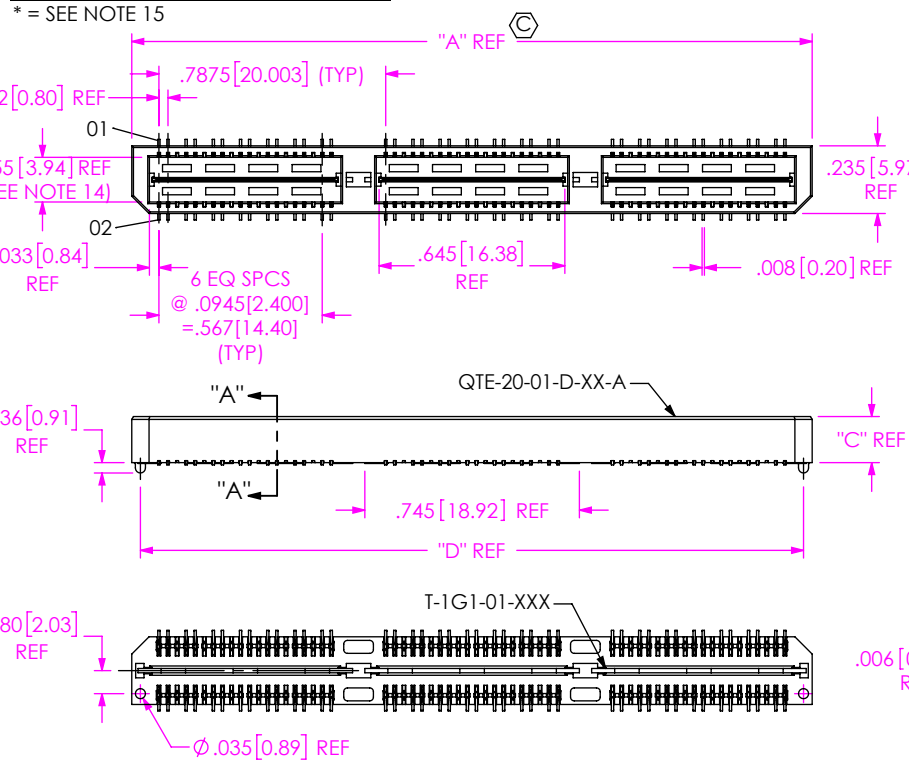


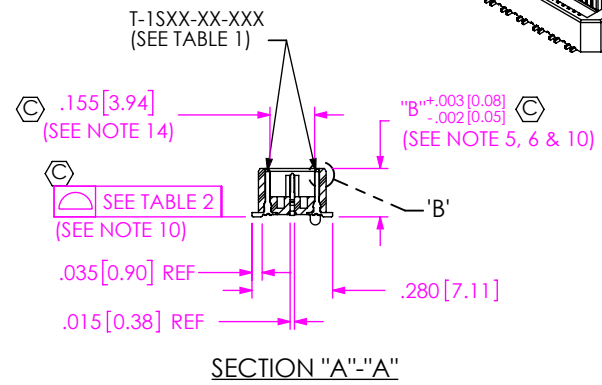
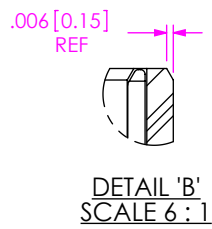
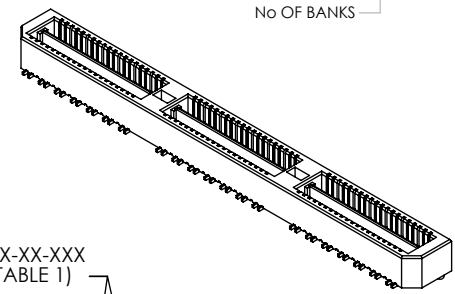
FIG 1
-A: ALIGNMENT PIN OPTION (QTE-042-01-XXX-D-DP-A SHOWN) (STYLE -01, -02 & -03 ONLY)

- 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: 1.151 [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)

- OPTION
-A: ALIGNMENT PINS
-LC: LOCKING CLIPS (SEE NOTE 13) (USE LC-08-TM-01) (SEE FIG 2, SHT 2)
-K: POLYIMIDE FILM (USE K-DOT-276-.375-.005) (SEE FIG 3, SHT 2) (N/A ON STYLES -07 & -08)
-GP: GUIDE POSTS (AVAILABLE ON -01 ONLY) (USE QTE-20-01-D-XX-X-GP) (SEE FIG 4, SHT 3)
-TR: TAPE & REEL (42 POS. MAX) (NOT AVAILABLE ON -05, -06, -07, -08 LEAD STYLES) (028 POS MAX FOR -GP OPTION)
-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



- 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. MAXIMUM VARIANCE OF .002 [0.05]
6. DIMENSION APPLIES TO TERMINALS AND GROUND PLANE.
7. DELETED.
8. DELETED.
9. -L PLATING CAN BE SUBSTITUTED FOR -F PLATING.
10. GROUND PLANE PRESS HEIGHT MUST BE .003 [0.08] LESS THAN THE MAX HEIGHT OR .001 [0.03] GREATER THAN THE MINIMUM HEIGHT OF THE TERMINALS.
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.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: DECIMALS: .XX: ±.01 [3] .XXX: ±.005 [13] .XXXX: ±.0020 [051]	PROPRIETARY NOTE 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.	samtec 520 PARK EAST BLVD. NEW ALBANY, IN 47150 PHONE: 812-944-6733 FAX: 812-948-5047 e-Mail: info@SAMTEC.com code 55322
MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 1.5:1	DESCRIPTION: .8mm DIFFERENTIAL PAIRS HS TERMINAL ASSEMBLY	
INSULATOR: LCP, UL94V-0; COLOR: BLACK TERMINAL: PHOS BRONZE GROUND PLANE: PHOS BRONZE	DWG. NO. QTE-XXX-XX-XXX-D-DP-XXX	
F:\DWG\MISC\MKTG\QTE-XXX-XX-XXX-D-DP-XXX-MKT.SLDDRW	BY: DEAN P 4/28/2000	SHEET 1 OF 5

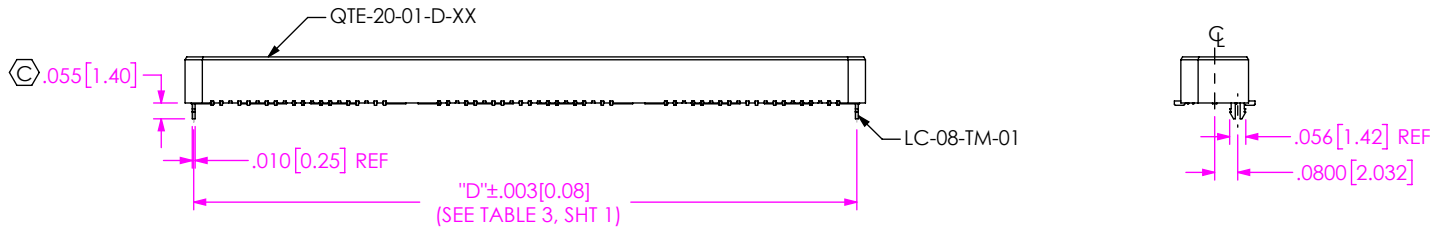


FIG 2
 -LC: LOCKING CLIP OPTION
 (QTS-042-01-XXX-D-DP-LC SHOWN)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

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]

* = SEE NOTE 15

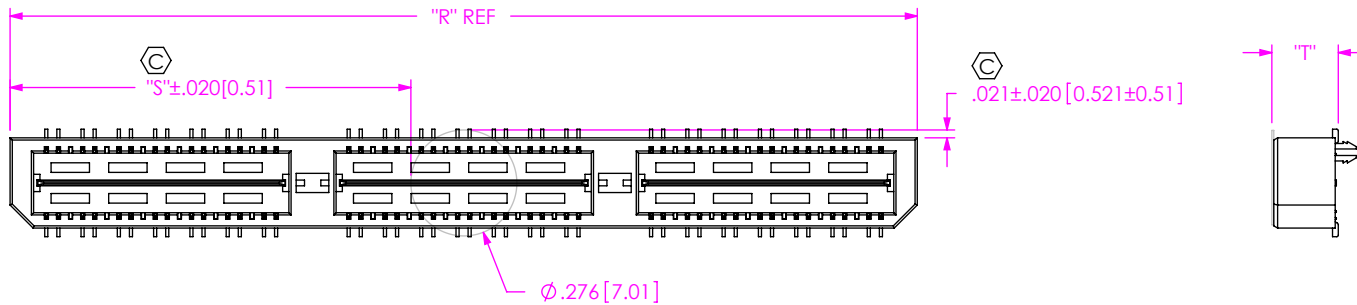


FIG 3
 -K: POLYIMIDE FILM PAD
 (USE K-DOT-.276-.375-.005)

<p>DO NOT SCALE DRAWING</p> <p>SHEET SCALE: 2:1</p>	<p>PROPRIETARY NOTE</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>samtec</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</p>	
<p>BY: DEAN P 4/28/2000</p>	<p>SHEET 2 OF 5</p>	

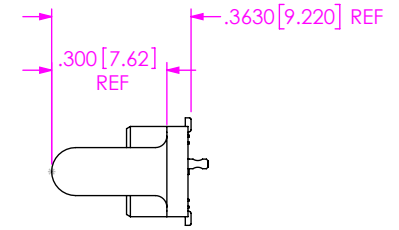
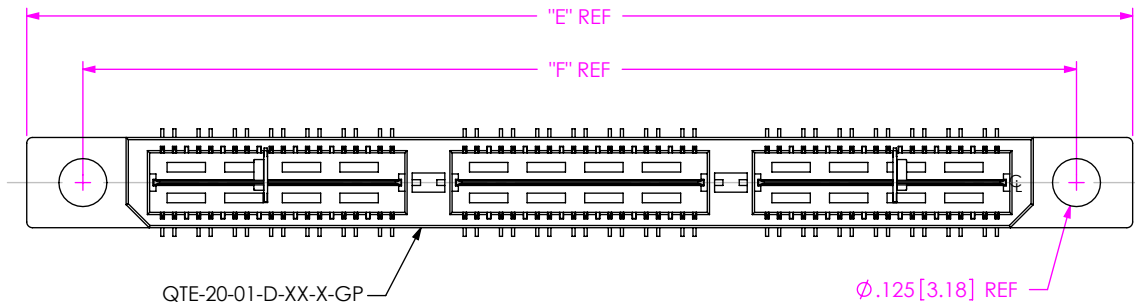


FIG 4
 -GP: GUIDE POST OPTION
 (QTE-042-01-XXX-D-DP-GP SHOWN)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
 (AVAILABLE ON STYLE -01 ONLY)

TABLE 6

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]
*-056	3.668 [93.15]	3.375 [85.73]
*-070	4.455 [113.16]	4.163 [105.73]

* = SEE NOTE 15

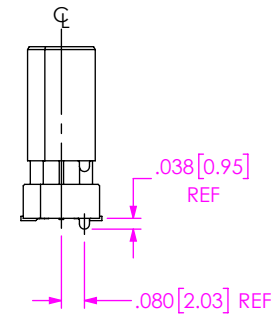
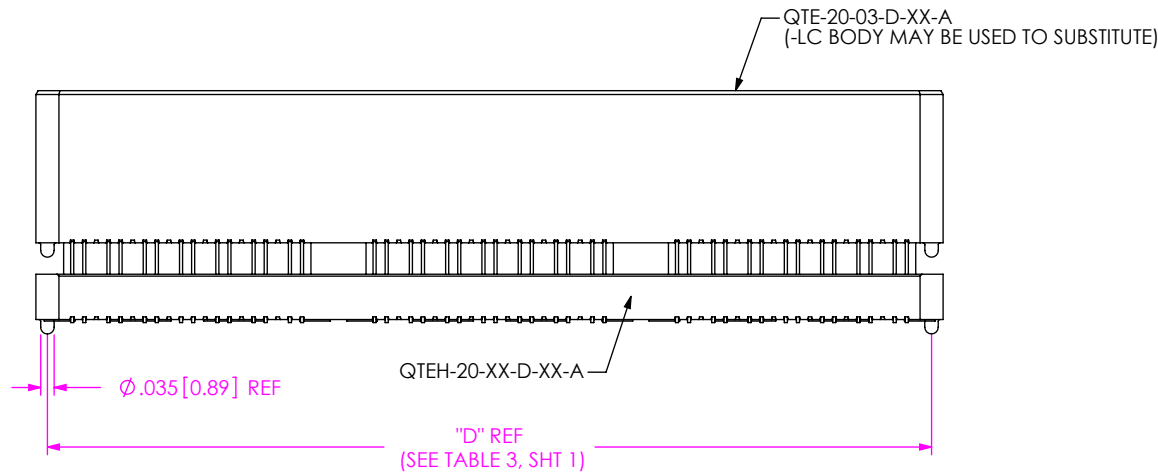


FIG 5
 (QTE-020-04-XXX-D-A SHOWN)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
 (STYLES -04, -05, -06, -07, -08, -09 & -10, SEE TABLE 7, SHT 4)

PROPRIETARY NOTE
 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.

samtec
 520 PARK EAST BLVD, NEW ALBANY, IN 47150
 PHONE: 812-944-6733 FAX: 812-948-5047
 e-Mail info@SAMTEC.com code 55322

DO NOT SCALE DRAWING

SHEET SCALE: 2:1

DESCRIPTION:
 .8mm DIFFERENTIAL PAIRS HS TERMINAL ASSEMBLY

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

BY: DEAN P 4/28/2000 SHEET 3 OF 5

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

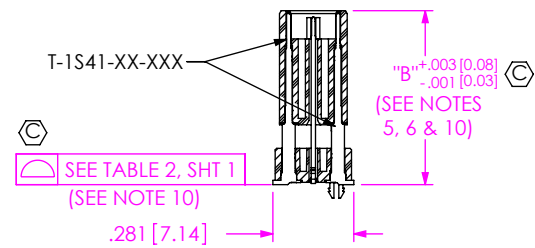
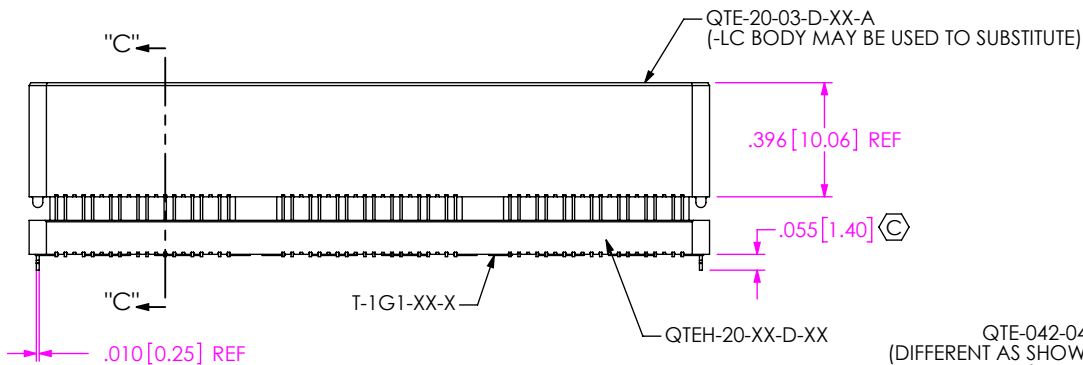
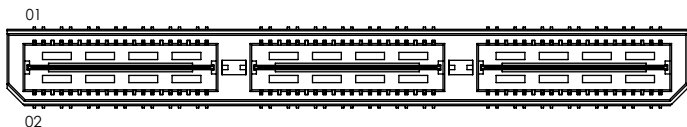


FIG 6
QTE-042-04-X-D-DP-LC SHOWN
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
(STYLES -04, -05 & -06)

SECTION "C"-"C"

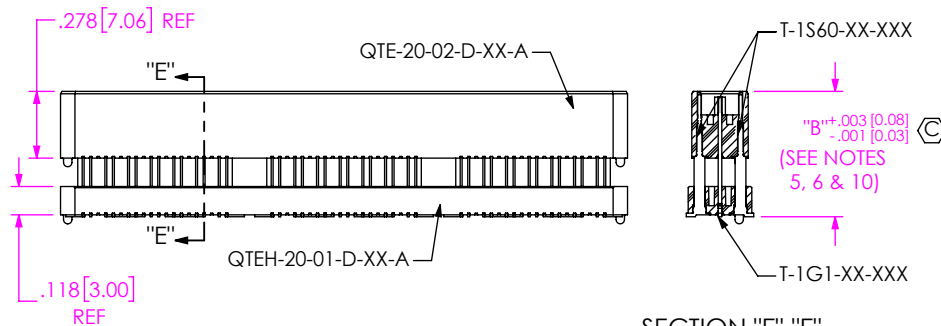
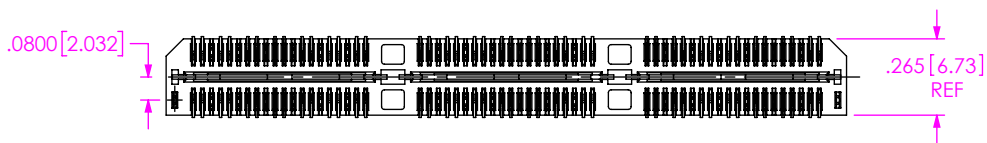


FIG 8
QTE-042-09-X-D-DP-A SHOWN
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 6)
(STYLES -09 & -10)

SECTION "E"-"E"
SCALE 1.25 : 1

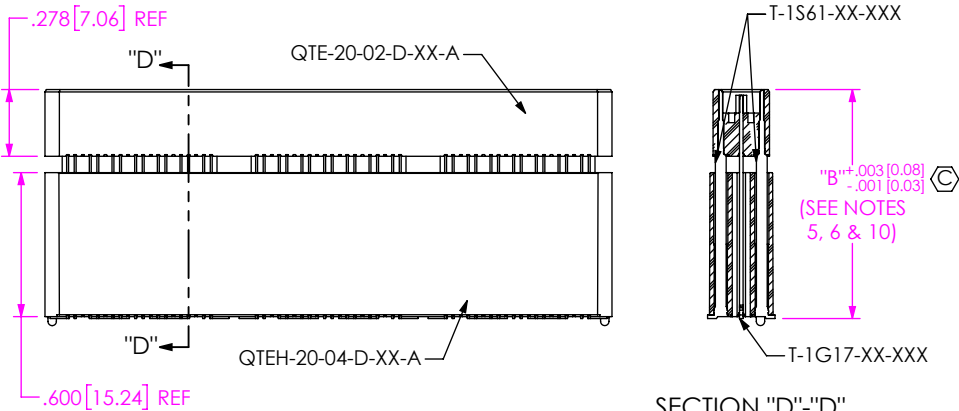


FIG 7
QTE-042-07-X-D-DP-A SHOWN
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 6)
(STYLES -07 & -08)

SECTION "D"-"D"
SCALE 1.25 : 1

F:\DWG\MISC\MKTG\QTE-XXX-XX-XXX-D-DP-XXX-MKT.SLDRW

PROPRIETARY NOTE
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.



520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail info@SAMTEC.com code 55322

DO NOT SCALE DRAWING

SHEET SCALE: 1.5:1

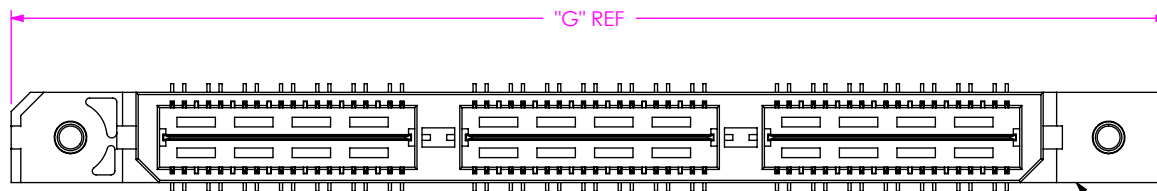
DESCRIPTION:
.8mm DIFFERENTIAL PAIRS HS TERMINAL ASSEMBLY

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

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

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

* = SEE NOTE 15



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

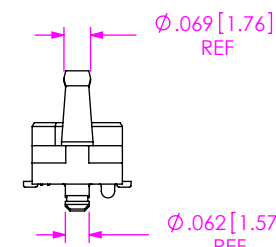
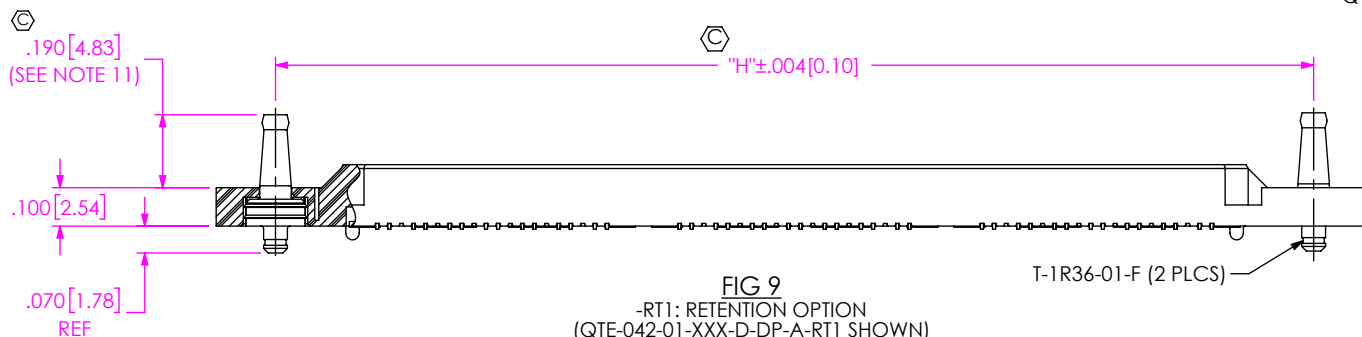


FIG 9
 -RT1: RETENTION OPTION
 (QTE-042-01-XXX-D-DP-A-RT1 SHOWN)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
 (ONLY AVAILABLE ON -01 LEAD STYLE) (MUST USE -A OPTION)
 (NOT AVAILABLE WITH -LC, -GP, OR -L OPTIONS)
 (NOT AVAILABLE ON *-056 & *-070 POSITIONS)
 * = SEE NOTES 12 & 15

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

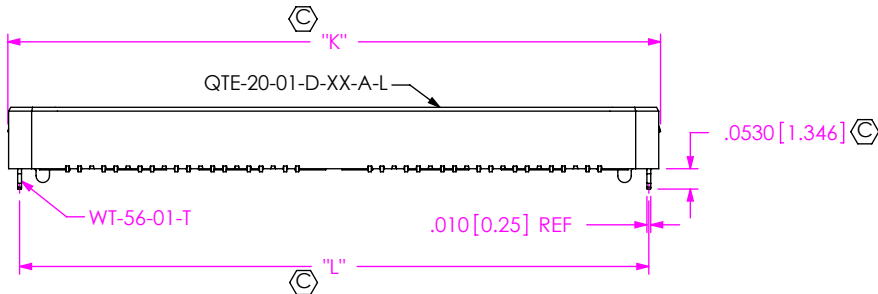
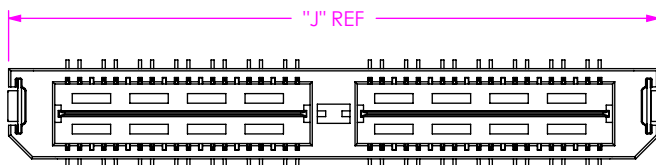
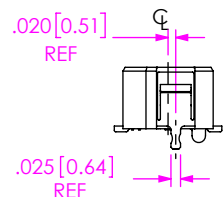


FIG 10
 -L: LATCHING OPTION
 (QTE-028-01-XXX-D-DP-A-L SHOWN)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
 (28 POS MAX) (MUST USE -A OPTION)
 (AVAILABLE ON -01 LEAD STYLE ONLY)
 (NOT AVAILABLE WITH -LC, -GP, OR -RT1)

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

* = SEE NOTE 15

CRITICAL DIMENSION INSPECTION INSTRUCTION TABLE	
ASSEMBLY OPERATION	IN PROCESS INSPECTION
FILL T-1SXX	C1, C2, C3, C4, C5, C11, C12
FILL GROUND PLANE T-1G1	C4
ADD -LC OPTION	C13
ADD -RT1 OPTION	C6, C7
ADD -L OPTION	C8, C9, C10
ADD -K OPTION	C14, C15



PROPRIETARY NOTE
 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.



520 PARK EAST BLVD, NEW ALBANY, IN 47150
 PHONE: 812-944-6733 FAX: 812-948-5047
 e-Mail info@SAMTEC.com code 5332

DO NOT SCALE DRAWING
 SHEET SCALE: 2:1

DESCRIPTION:
 .8mm DIFFERENTIAL PAIRS HS TERMINAL ASSEMBLY

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

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