

TABLE 1							MATED HEIGHT WITH QSH-D1
STYLE	"A"	"B"	BODY (-LC)	BODY (-A)	GROUND PLANE	TERMINAL	
-01	.1680[4.267]	.1600[4.064]	QTH-30-01-D-XX	QTH-30-01-D-XX-A	T-1G1-01-X	T-1S39-01-X	.197[5.00] REF
-02	.2861[7.267]	.2781[7.064]	QTH-30-02-D-XX	QTH-30-02-D-XX-A	T-1G1-02-X	T-1S59-02-X	.315[8.00] REF

DO NOT SCALE FROM THIS PRINT

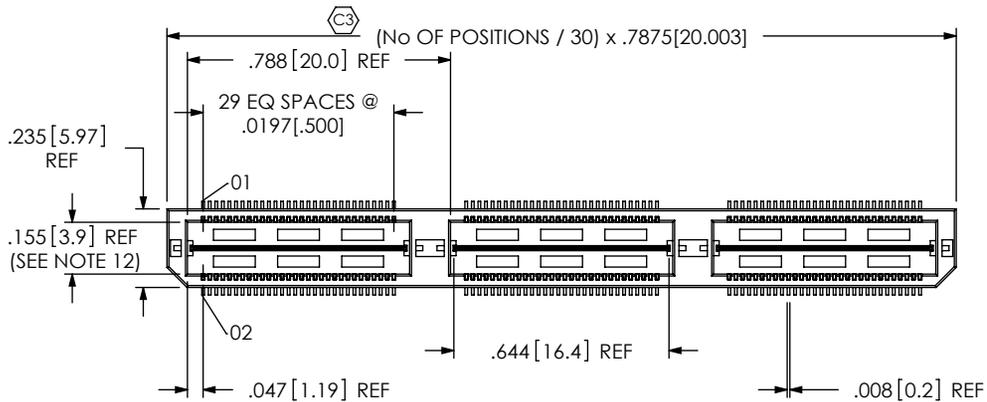


FIG 1
QTH-090-01-X-D-LC SHOWN

- QTH-XXX-XX-X-D-XXX**
- No OF POSITIONS
-030, -060, -090,
*120, *150
(PER ROW)
* (SEE NOTE 11)
- LEAD STYLE
-01: .1680[4.267]
-02: .2861[7.264]
-03: .4043[10.269]
-04: .6001[15.246]
-05: .7181[18.240]
-06: .8361[21.237]
-07: .9542[24.237]
-08: 1.1511[29.238]
-09: .5224[13.269]
-10: .5618[14.269]
□ = SEE TABLE 4
- PLATING SPECIFICATION
-F: FLASH SELECTIVE GOLD WITH MATTE TIN TAILS
(USE T-1SXX-XX-F & T-1GXX-XX-F)
(SEE NOTE 7)
-L: LIGHT SELECTIVE GOLD WITH MATTE TIN TAILS
(USE T-1SXX-XX-L & T-1GXX-XX-L)
-H: HEAVY GOLD WITH FLASH GOLD TAILS
(USE T-1SXX-XX-H & T-1GXX-XX-G)
-C: ELECTRO-POLISHED SELECTIVE
(USE T-1SXX-XX-C, T-1GXX-XX-L)
- ROW SPECIFICATION
-D: DOUBLE (USE QTH-30-XX-D-XX
& QTHH-30-XX-D-XX)
- OPTION
-LC: LOCKING CLIPS
(USE LC-08-TM-01)
-A: ALIGNMENT PINS
(USE QTH-30-XX-D-XX-A FOR -01 & -02)
(FOR -03 THRU -10 SEE TABLE 4)
-K: POLYIMIDE FILM (USE K-DOT-276-375-005)
(AVAILABLE ON -01 THRU -04, -09 & -10 ONLY)
(SEE FIG 2, SHEET 2)
-TR: TAPE & REEL (90 POS MAX)
(60 POS MAX W/ -GP OPTION)
(N/A ON -05 THRU -08)
-GP: GUIDE POSTS
(AVAILABLE ON -01 & -02 ONLY)
(USE QTH-30-XX-D-XX-X-GP)
(SEE FIG 7, SHEET 4)
-FL: FRICTION LOCKS (SEE FIG 8, SHEET 4)
(NOT AVAILABLE WITH -GP)
-RT1: RETENTION OPTION (SEE FIG 9, SHEET 5)
(ONLY AVAILABLE ON -01 LEAD STYLE)
(MUST USE -A OPTION)
(USE QTH-30-01-D-XX-A-RT1 & T-1R36-01-F)
(NOT AVAILABLE WITH -LC, -GP, OR -FL)
**L: LATCHING OPTION (SEE FIG 10, SHT 6)
(ONLY AVAILABLE ON -01 LEAD STYLE)
(USE **QTH-30-01-D-XX-L)
(NOT AVAILABLE WITH -LC, -GP, -FL, OR -RT1)
- **NOT TOOLED

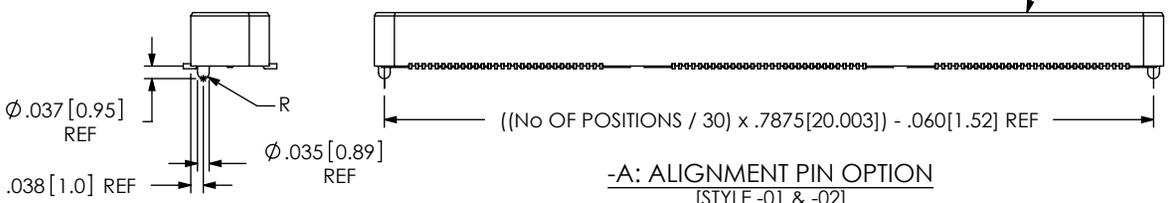
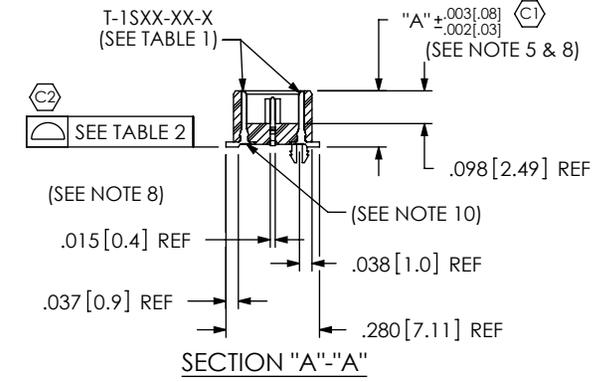
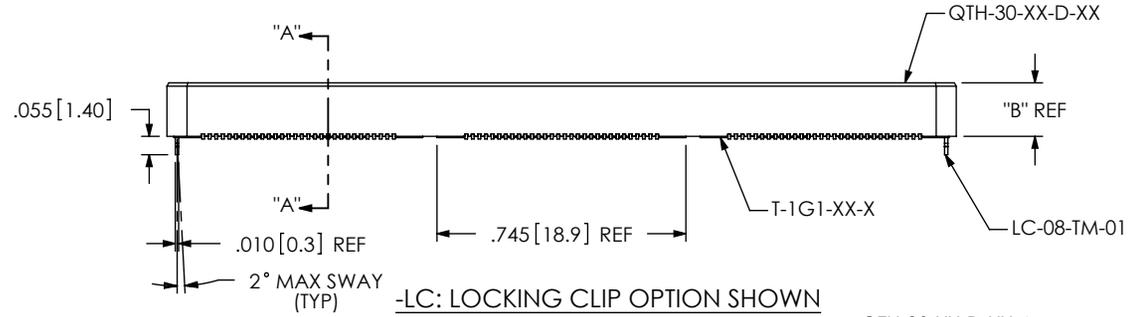
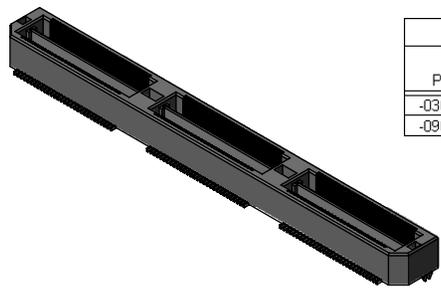


TABLE 2

No OF POSITIONS	COPLANARITY (INCLUDING GP)
-030 THRU -060	.004 [.10]
-090 THRU -150	.006 [.15]



- NOTES:
- ⊕ REPRESENTS A CRITICAL DIMENSION.
 - MINIMUM PUSHOUT FORCE: 6 OZ FOR -01 & -02, 8 OZ FOR -03 THRU -10.
 - MINIMUM GROUND PLANE RETENTION: 1 LB.
 - PARTS TO BE MOLDED TO POSITION.
 - MAXIMUM VARIANCE OF .002[.05]. APPLIES TO SIGNAL OR GROUNDS INDEPENDENT OF THE GROUND OR SIGNAL PINS RESPECTIVELY.
 - LEAD STYLES -03 THRU -10: TOP BODY (QTH) CANNOT HAVE -A OPTION.
 - L PLATING CAN BE SUBSTITUTED FOR -F PLATING.
 - GROUND PLANE PRESS HEIGHT MUST BE .003 [0.07] LESS THAN THE MAXIMUM HEIGHT OR .002[0.03] GREATER THAN THE MINIMUM HEIGHT OF SIGNAL PIN.
 - T-1R36 RETENTION TO BODY TO BE 1.0 LBF.
 - CUT OFF BURR NOT TO EXCEED .003 [0.07] IN ANY DIRECTION, BURR PLUS TAB HEIGHT NOT TO EXCEED .006 [0.15].
 - FOR NEW APPLICATIONS REQUIRING THESE POSITIONS, PLEASE CONTACT SAMTEC INTERCONNECT PROCESSING GROUP.
 - MINIMUM ROW TO ROW IS .152, PIN CAN EXTEND PAST WALL .003 MAX.

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

PROPRIETARY NOTE
THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO SAMTEC, INC. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF SAMTEC, INC.

MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 1:0.571
INSULATOR: LCP, COLOR: BLACK, FLAMMABILITY RATING: UL94V0
TERMINAL & GROUND PLANE: PHOS BRONZE

F:\DWG\MISC\MKTG\QTH-XXX-XX-X-D-XXX-MKT.SLDDRW

samtec

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

DESCRIPTION:
.5mm DOUBLE ROW HS TERMINAL ASSEMBLY

DWG. NO. QTH-XXX-XX-X-D-XXX

BY: DEAN P 09-14-2010 SHEET 1 OF 6

NOTE: "R" = (No OF POSITIONS / 30) x .7875[20.003]
 WITH -RT1 OPTION: "R" = ((No OF POSITIONS / 30) x .7875[20.003] + .6505[16.522] REF
 WITH -GP OPTION: "R" = ((No OF POSITIONS / 30) x .7875[20.003] + .5175[13.145] REF
 "S" = (("R" - .276[7.01]) / 2) ±.020[.51]

TABLE 3	
STYLE	"T"
-01	.173[4.39]
-02	.291[7.39]
-03	.409[10.39]
-04	.605[15.37]
-09	.527[13.39]
-10	.566[14.39]

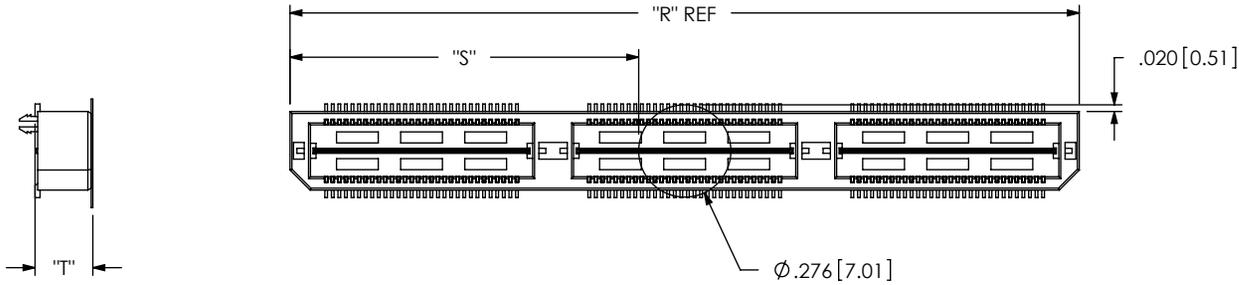


FIG 2

-K: POLYIMIDE FILM PAD OPTION
 [USE K-DOT-.276-.375-.005]

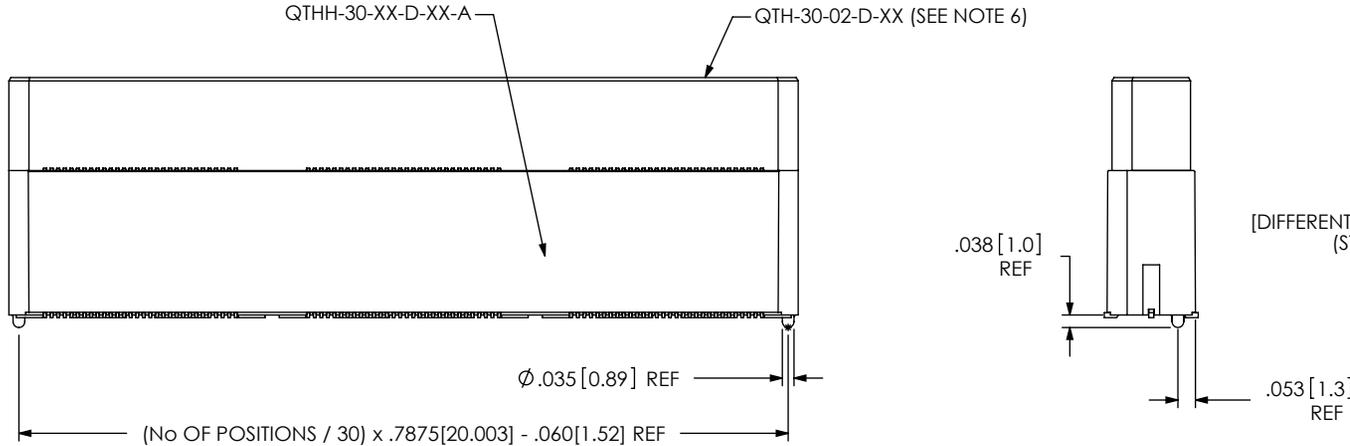


FIG 3

-A: ALIGNMENT PIN OPTION
 (QTH-090-05-X-D-A SHOWN)
 [DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1]
 (STYLES -03 THRU -09, SEE TABLE 4)

PROPRIETARY NOTE
 THIS DOCUMENT CONTAINS INFORMATION
 CONFIDENTIAL AND PROPRIETARY TO
 SAMTEC, INC. AND SHALL NOT BE REPRODUCED
 OR TRANSFERRED TO OTHER DOCUMENTS OR
 DISCLOSED TO OTHERS OR USED FOR ANY
 PURPOSE OTHER THAN THAT WHICH IT WAS
 OBTAINED WITHOUT THE EXPRESSED 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: 1:75:1

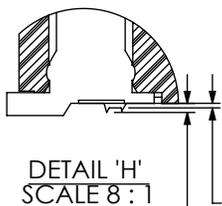
DESCRIPTION:
 .5mm DOUBLE ROW HS TERMINAL ASSEMBLY

DWG. NO. QTH-XXX-XX-X-D-XXX

BY: DEAN P 09-14-2010 SHEET 2 OF 6

TABLE 4

STYLE	SEE FIGURE	"C" OVERALL HEIGHT	GROUND PLANE	TERMINAL	TOP BODY (SEE NOTE 6)	BOTTOM SPACER BODY (-LC OR NONE)	BOTTOM SPACER BODY (-A)	MATED HEIGHT WITH QSH-01
-03	4	.4043 [10.269]	T-1G1-03-X	T-1S60-03-X	QTH-30-02-D-XX	QTHH-30-01-D-XX	QTHH-30-01-D-XX-A	.433 [11.00] REF
-04	4	.6001 [15.246]	T-1G1-04-X	T-1S60-04-X	QTH-30-02-D-XX	QTHH-30-01-D-XX	QTHH-30-01-D-XX-A	.630 [16.00] REF
-05	5	.7181 [18.240]	T-1G1-05-X	T-1S60-05-X	QTH-30-02-D-XX	QTHH-30-03-D-XX	QTHH-30-03-D-XX-A	.748 [19.00] REF
-06	5	.8361 [21.237]	T-1G1-06-X	T-1S60-06-X	QTH-30-02-D-XX	QTHH-30-03-D-XX	QTHH-30-03-D-XX-A	.866 [22.00] REF
-07	6	.9542 [24.237]	T-1G17-01-X	T-1S61-21-X	QTH-30-02-D-XX	QTHH-30-04-D-XX	QTHH-30-04-D-XX-A	.984 [25.00] REF
-08	6	1.1511 [29.238]	T-1G17-02-X	T-1S61-22-X	QTH-30-02-D-XX	QTHH-30-04-D-XX	QTHH-30-04-D-XX-A	1.181 [30.00] REF
-09	4	.5224 [13.269]	T-1G1-09-X	T-1S60-09-X	QTH-30-02-D-XX	QTHH-30-01-D-XX	QTHH-30-01-D-XX-A	.551 [14.00] REF
-10	4	.5618 [14.269]	T-1G1-10-X	T-1S60-10-X	QTH-30-02-D-XX	QTHH-30-01-D-XX	QTHH-30-01-D-XX-A	.591 [15.00] REF



.003 [0.08] MAX TAB HEIGHT
.006 [0.15] MAX BURR + TAB HEIGHT

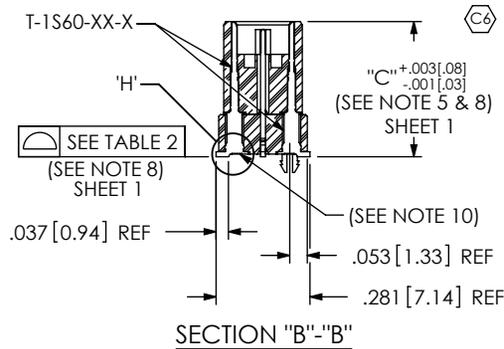
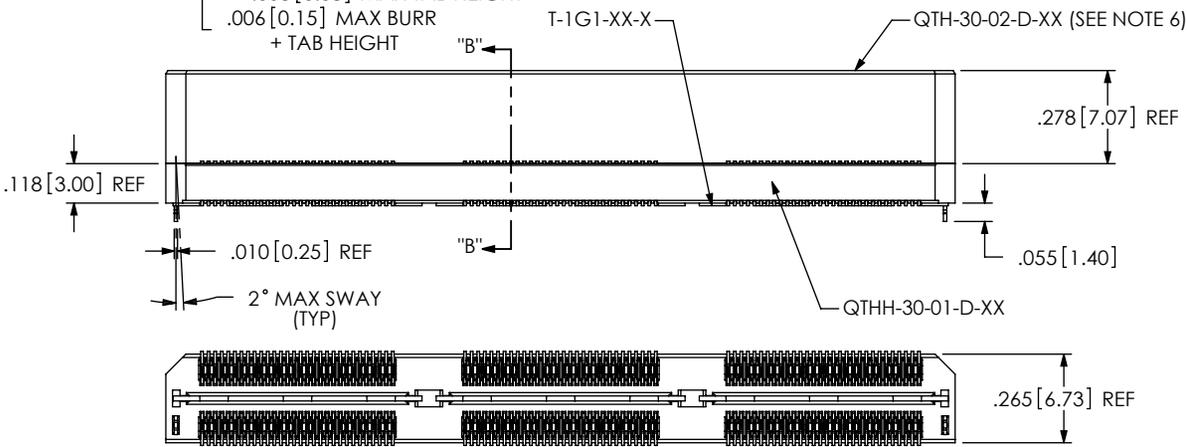


FIG 4
(QTH-090-03-X-D-LC SHOWN)
[DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1]

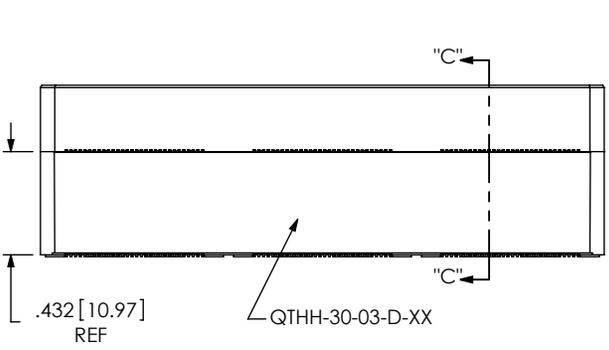
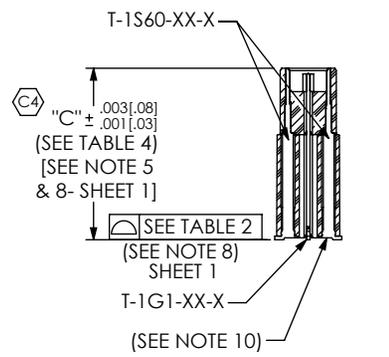


FIG 5
(QTH-090-05-X-D SHOWN)
[DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 3]



SECTION "C"-"C"
SCALE 1.25:1

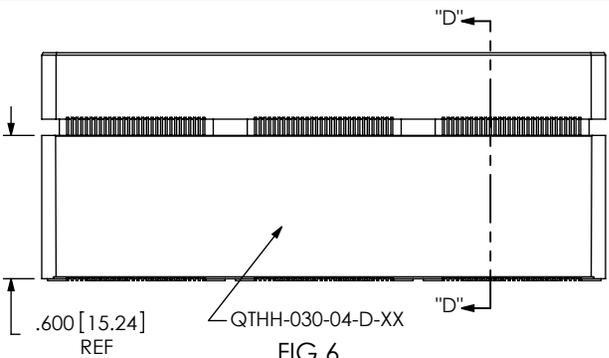
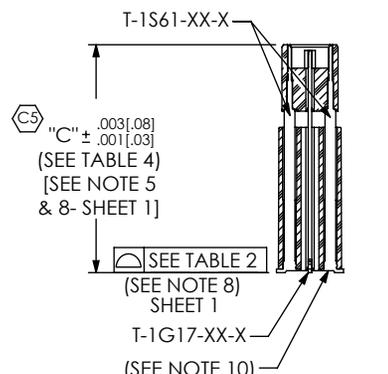


FIG 6
(QTH-090-07-X-D SHOWN)
[DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 3]



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

PROPRIETARY NOTE
THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO SAMTEC, INC. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF SAMTEC, INC.

DO NOT SCALE DRAWING
SHEET SCALE: 1:0.571429



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

DESCRIPTION:
.5mm DOUBLE ROW HS TERMINAL ASSEMBLY

DWG. NO. QTH-XXX-XX-X-D-XXX

BY: DEAN P 09-14-2010 SHEET 3 OF 6

FIG 7

(QTH-090-01-X-D-GP SHOWN)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
 (AVAILABLE ON -01 & -02 ONLY)

TABLE 5		
STYLE	"D"	BODY
-01	.363[9.22]	QTH-30-01-D-XX-X-GP
-02	.481[12.22]	QTH-30-02-D-XX-X-GP

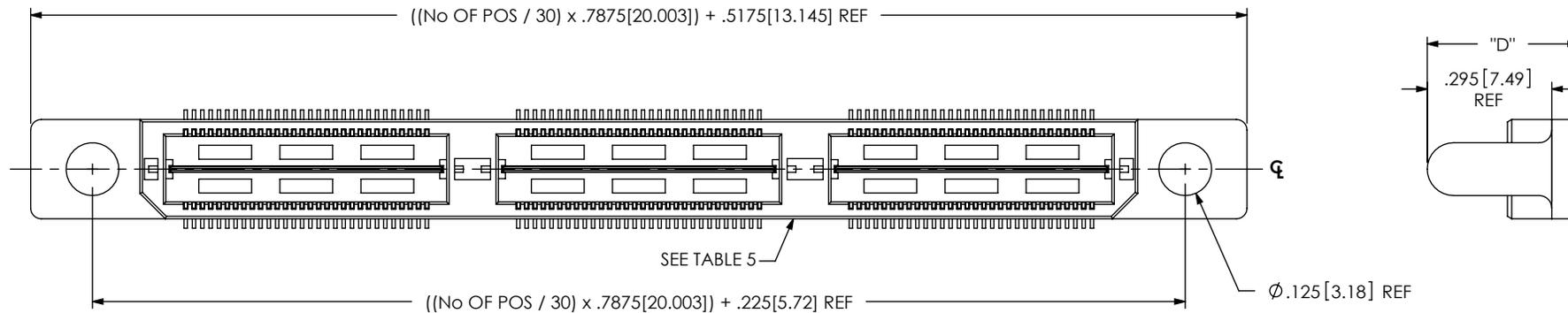
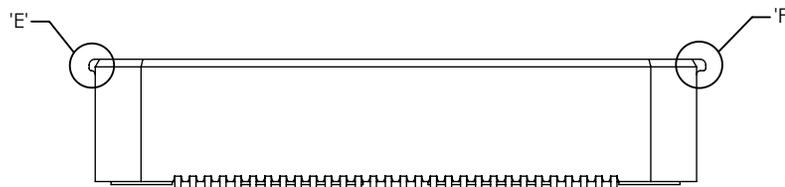
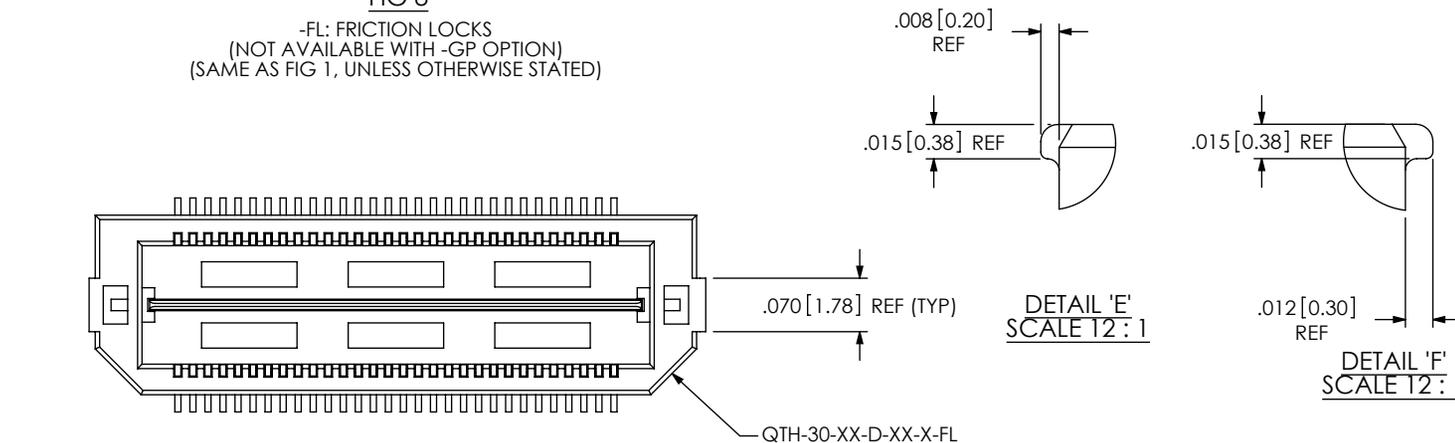


FIG 8

-FL: FRICTION LOCKS
 (NOT AVAILABLE WITH -GP OPTION)
 (SAME AS FIG 1, UNLESS OTHERWISE STATED)



PROPRIETARY NOTE
 THIS DOCUMENT CONTAINS INFORMATION
 CONFIDENTIAL AND PROPRIETARY TO
 SAMTEC, INC. AND SHALL NOT BE REPRODUCED
 OR TRANSFERRED TO OTHER DOCUMENTS OR
 DISCLOSED TO OTHERS OR USED FOR ANY
 PURPOSE OTHER THAN THAT WHICH IT WAS
 OBTAINED WITHOUT THE EXPRESSED WRITTEN
 CONSENT OF SAMTEC, INC.

DO NOT SCALE DRAWING
 SHEET SCALE: 2.5:1



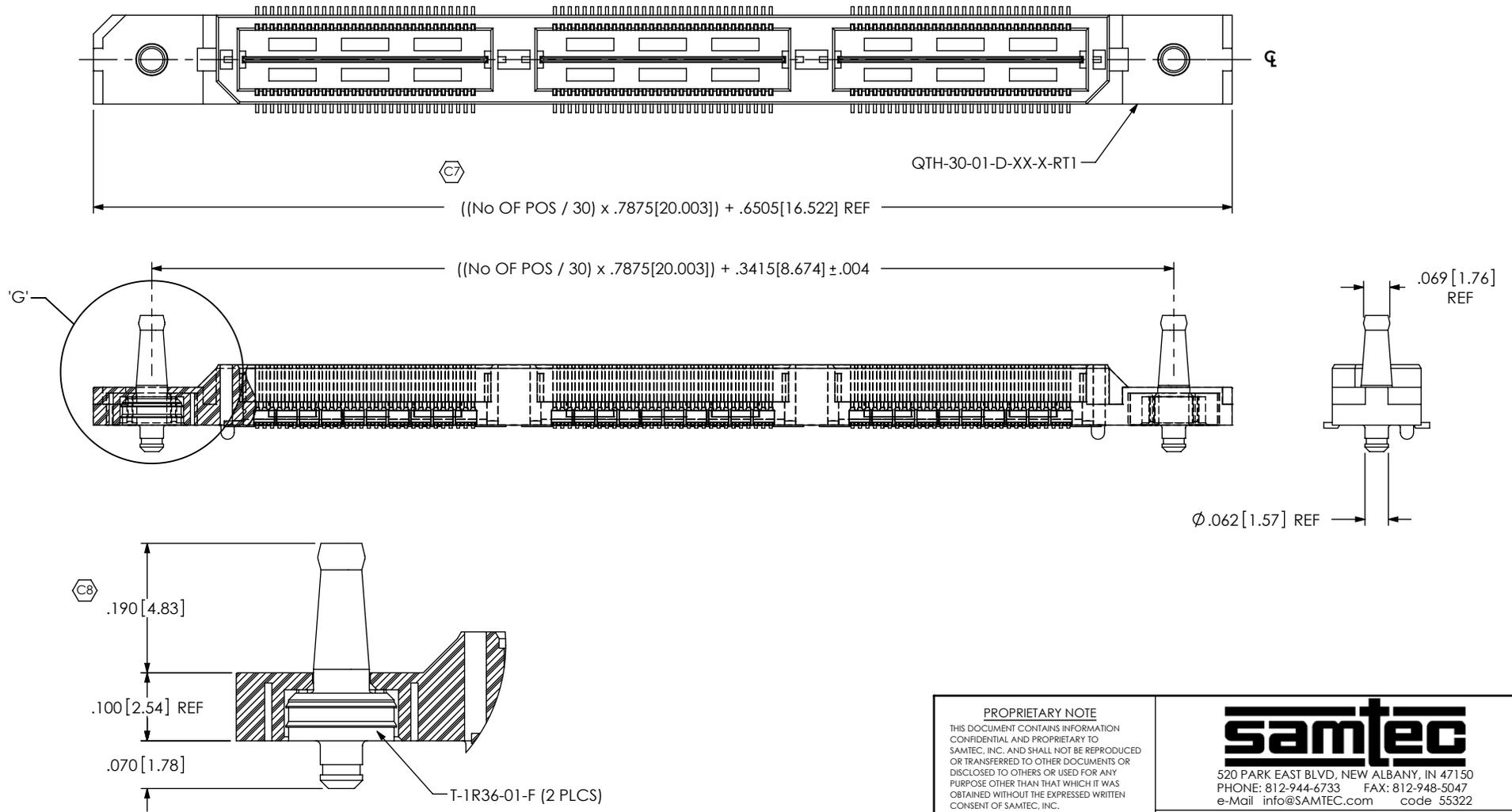
520 PARK EAST BLVD, NEW ALBANY, IN 47150
 PHONE: 812-944-6733 FAX: 812-948-5047
 e-Mail: info@SAMTEC.com code 55322

DESCRIPTION:
 .5mm DOUBLE ROW HS TERMINAL ASSEMBLY

DWG. NO. QTH-XXX-XX-X-D-XXX

BY: DEAN P 09-14-2010 SHEET 4 OF 6

FIG 9
 (QTH-090-01-X-D-A-RT1 SHOWN)
 [NOT AVAILABLE WITH -LC, -GP, OR -FL OPTIONS]
 (AVAILABLE ON -01 ONLY)



DETAIL 'G'
 SCALE 4.5: 1

PROPRIETARY NOTE
 THIS DOCUMENT CONTAINS INFORMATION
 CONFIDENTIAL AND PROPRIETARY TO
 SAMTEC, INC. AND SHALL NOT BE REPRODUCED
 OR TRANSFERRED TO OTHER DOCUMENTS OR
 DISCLOSED TO OTHERS OR USED FOR ANY
 PURPOSE OTHER THAN THAT WHICH IT WAS
 OBTAINED WITHOUT THE EXPRESSED WRITTEN
 CONSENT OF SAMTEC, INC.

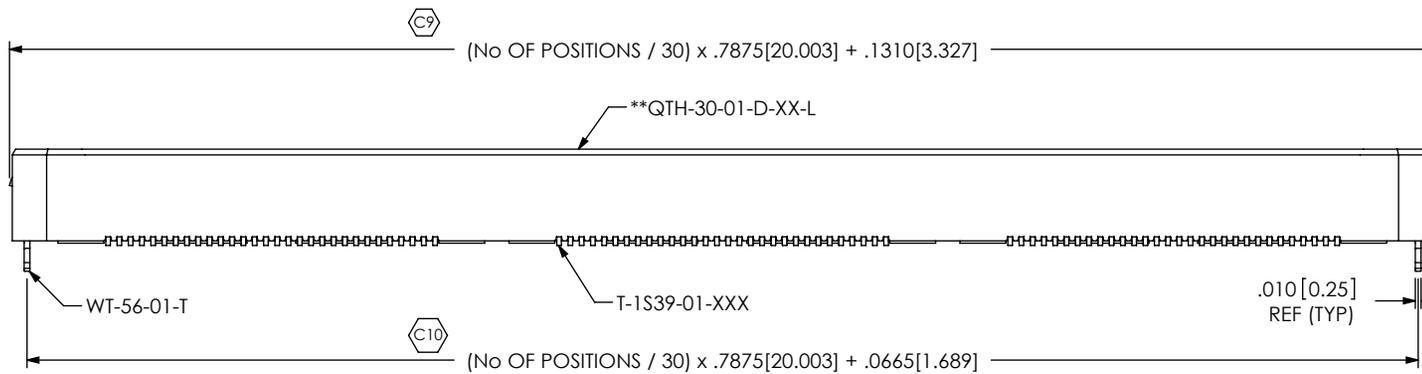
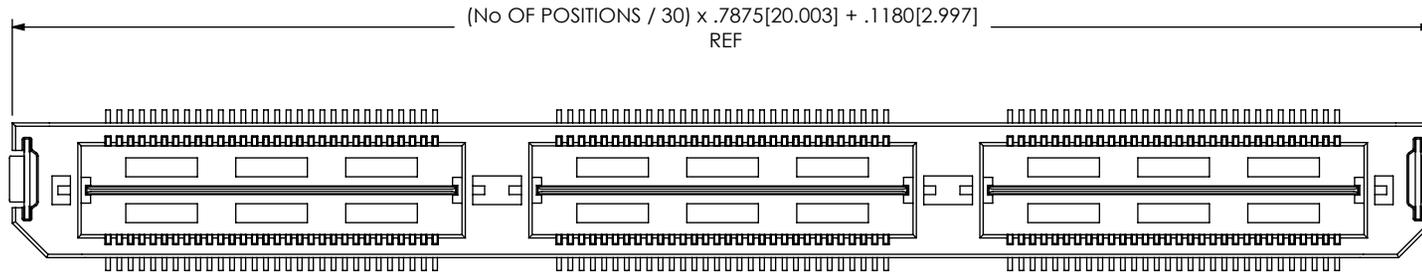
DO NOT SCALE DRAWING
 SHEET SCALE: 2.5:1

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

DESCRIPTION:
 .5mm DOUBLE ROW HS TERMINAL ASSEMBLY

DWG. NO. QTH-XXX-XX-X-D-XXX

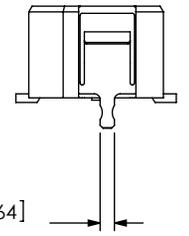
FIG 10
 **L: LATCHING OPTION
 (QTH-090-01-X-D-L SHOWN)
 (AVAILABLE ON -01 LEAD STYLE ONLY)
 (NOT AVAILABLE WITH -LC, -GP, -FL, OR -RT1 OPTIONS)
 (SAME AS FIG 1 UNLESS OTHERWISE STATED)
 **NOT TOOLED



.010 [0.25]
REF (TYP)

C11
.053±.002 [1.35±0.05]

.025 [0.64]
REF



PROPRIETARY NOTE
 THIS DOCUMENT CONTAINS INFORMATION
 CONFIDENTIAL AND PROPRIETARY TO
 SAMTEC, INC. AND SHALL NOT BE REPRODUCED
 OR TRANSFERRED TO OTHER DOCUMENTS OR
 DISCLOSED TO OTHERS OR USED FOR ANY
 PURPOSE OTHER THAN THAT WHICH IT WAS
 OBTAINED WITHOUT THE EXPRESSED WRITTEN
 CONSENT OF SAMTEC, INC.

DO NOT SCALE DRAWING
 SHEET SCALE: 2:1

samtec

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

DESCRIPTION:
 .5mm DOUBLE ROW HS TERMINAL ASSEMBLY
 DWG. NO. QTH-XXX-XX-X-D-XXX

BY: DEAN P 09-14-2010 SHEET 6 OF 6