

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

TABLE 2	
No OF POSITIONS	COPLANARITY (INCLUDING GP)
-020 THRU -060	.004 [0.10]
-080 & -100	.006 [0.15]

TABLE 3		
No OF POS	"D"	"E"
-020	.788 [20.00]	.728 [18.48]
-040	1.575 [40.01]	1.515 [38.48]
-060	2.363 [60.01]	2.303 [58.48]
-080	3.150 [80.01]	3.090 [78.49]
-100	3.938 [100.01]	3.878 [98.49]

QTH-XXX-XX-X-D-DP-XXX-X-XX

No OF POSITIONS
(PER ROW)
***SEE NOTE 11

LEAD STYLE
 -01: .1680[4.267]
 *02: .2861[7.264]
 *03: .4042[10.267]
 *04: .6001[15.243]
 *05: .7181[18.240]
 *06: .8361[21.237]
 *07: .9542[24.237]
 *08: 1.1511[29.238]
 *09: .5224[13.269]
 *10: .5618[14.270]

PLATING SPECIFICATION
 -F: 3µ" SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL (USE T-1GXX-XX-F) (SEE NOTE 7)
 -L: 10µ" SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL (USE T-1GXX-XX-L)
 -H: 30µ" GOLD IN CONTACT AREA, 3µ" GOLD ON TAIL (USE T-1GXX-XX-G)
 -C: 50µ" ELECTRO-POLISHED SELECTIVE IN CONTACT AREA, MATTE TIN ON TAIL (USE T-1GXX-XX-L)

ROW SPECIFICATION
 -D: DOUBLE (USE QTH-30-01-D-XX)
 No OF BANKS

* = RELEASED FOR ASO ONLY (APPLICATION SPECIFIC ORDER)
 ** = -02 LEAD STYLE NOT RELEASED FOR PRODUCTION

PACKAGING

BLANK: TRAY (SEE NOTES 14 & 15)
 -TR: TAPE & REEL (SEE NOTES 15 & 16)
 -FR: FULL REEL QTY TAPE & REEL (SEE NOTES 15 & 16)
 (-TR & -FR PACKAGING AVAILABLE FOR 60 POS MAX, 40 POS MAX FOR -GP OPTION) (N/A ON -05 THRU -08)

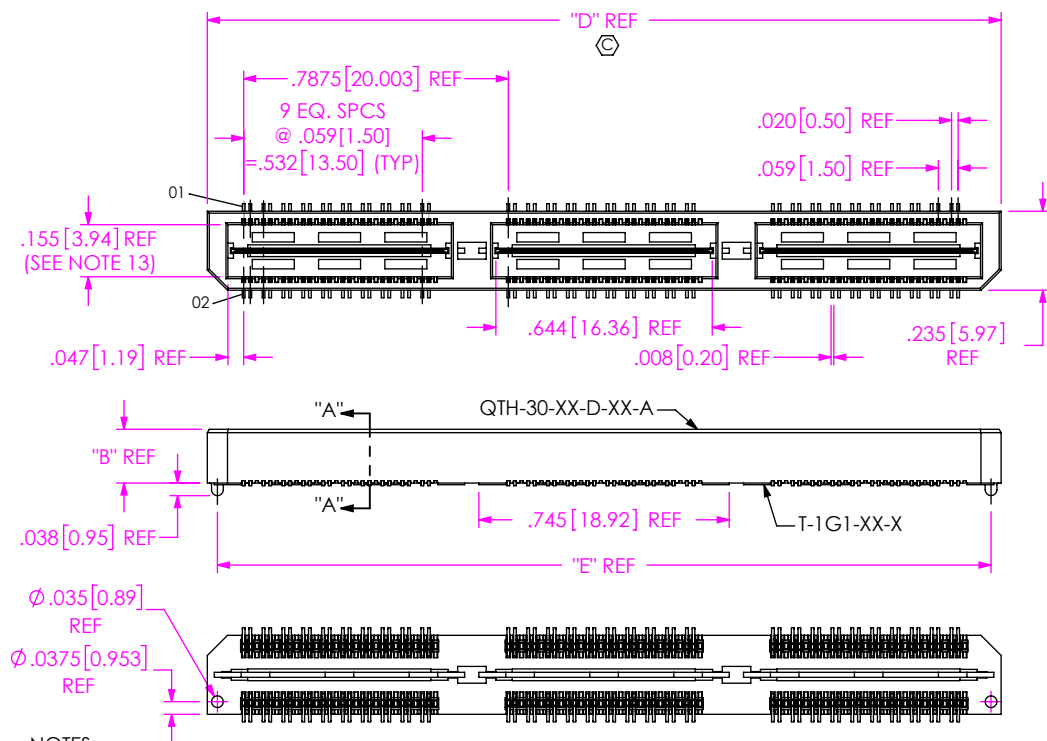
PICK & PLACE OPTION

-K: POLYIMIDE FILM (USE K-DOT-276-.375-.005) (AVAILABLE ON -01 THRU -04 & -09 AND -10 ONLY) (SEE FIG 4, SHT 2)

OPTION

-A: ALIGNMENT PINS (SEE FIGS 1 & 3, SHT 2)
 -LC: LOCKING CLIPS (USE LC-08-TM-01, SEE FIG 2) (SEE NOTE 12)
 ** -GP: GUIDE POSTS OPTION (AVAILABLE ON -01 & **02 ONLY) (USE QTH-30-XX-D-XX-GP) (SEE FIG 8, SHT 4)
 -RT1: RETENTION OPTION (SEE FIG 9, SHT 4) (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 OR -GP) (NOT AVAILABLE ON -080 & -100 POS)
 -L: LATCHING OPTION (SEE FIG 10, SHT 5) (ONLY AVAILABLE ON -01 LEAD STYLE) (USE QTH-30-01-D-XX-L) (NOT AVAILABLE WITH -LC, -GP, -FL, OR -RT1) (40 POS MAX)
 -FL: FRICTION LOCKS (SEE FIG 11, SHT 5) (NOT AVAILABLE WITH -GP)

DIFFERENTIAL PAIRS

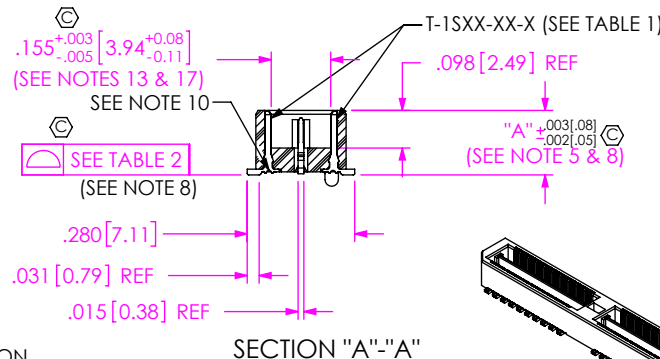


NOTES:

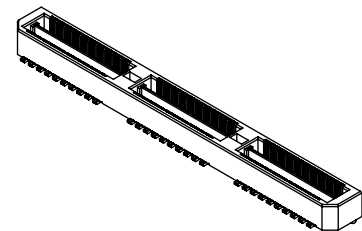
- ⊗ REPRESENTS A CRITICAL DIMENSION.
- MINIMUM PUSHOUT FORCE: 6 OZ FOR -01 & -02, 8 OZ FOR -03 THRU -09.
- MINIMUM GROUND PLANE RETENTION: 1 LB.
- PARTS TO BE MOLDED TO POSITION.
- MAXIMUM VARIANCE OF .002[0.05]. APPLIES TO SIGNAL OR GROUNDS INDEPENDENT OF THE GROUND OR SIGNAL PINS RESPECTIVELY.
- LEAD STYLES -03 THRU -08: TOP BODY (QTH) CANNOT HAVE -A OPTION.
- L PLATING CAN BE SUBSTITUTED FOR -F PLATING.
- G PLATED GROUND PLANE CAN BE SUBSTITUTED FOR -F PLATED GROUND PLANE.
- GROUND PLANE TO BE .001 ± .001 ABOVE SEATING PLANE (MAX CONTACT COPLANARITY).
- T-1R36 RETENTION TO BODY TO BE 1.0 LBF.
- CUT OFF BURR NOT TO EXCEED .003[0.08] 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.
- 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.
- PIN CAN EXTEND PAST WALL .003[0.08] MAX.
- TRAYS ARE STANDARD PACKAGING.
- ORDERS WILL BE PACKAGED ACCORDING TO THE SAMTEC PACKAGING EFFICIENCY STANDARDS (SPES) FOUND ON WWW.SAMTEC.COM.
- ATTACH LABEL -4x2 TO EACH REEL.
- ANY CHANGES SHOULD ALSO BE APPLIED TO QTH, QTE, QTS, BTH, BTE, AND BTS.

FIG 1

-A: ALIGNMENT PIN OPTION (QTH-060-01-X-D-A SHOWN) (FOR -01 & -02 LEAD STYLE ONLY)



SECTION "A"- "A"



UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.
 TOLERANCES ARE:
 DECIMALS ANGLES
 .XX: ±.01 [3]
 .XXX: ±.005 [13]
 .XXXX: ±.0020 [0.51]

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MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 1.75:1
 INSULATOR: LCP UL94V-0, COLOR: BLACK
 TERMINAL & GROUND PLANE: PHOS BRONZE

DESCRIPTION:
 .5mm DIFFERENTIAL PAIRS TERMINAL ASSEMBLY

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

BY: KEVIN B 09-14-2010 SHEET 1 OF 5



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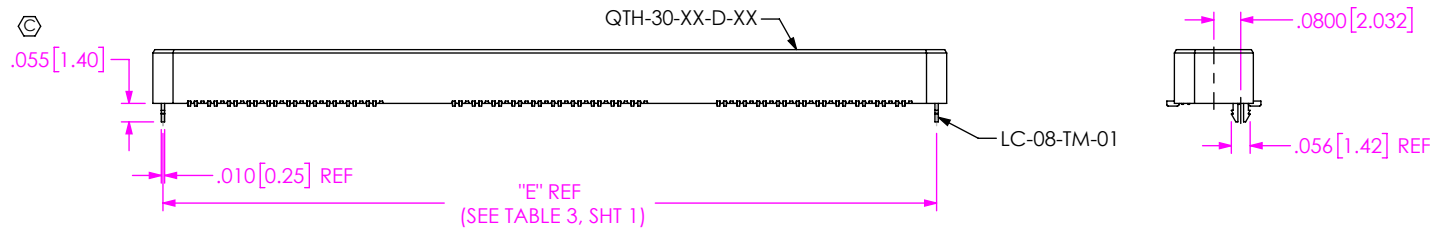


FIG 2
 -LC: LOCKING CLIP OPTION
 (QTH-060-01-X-D-LC SHOWN)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

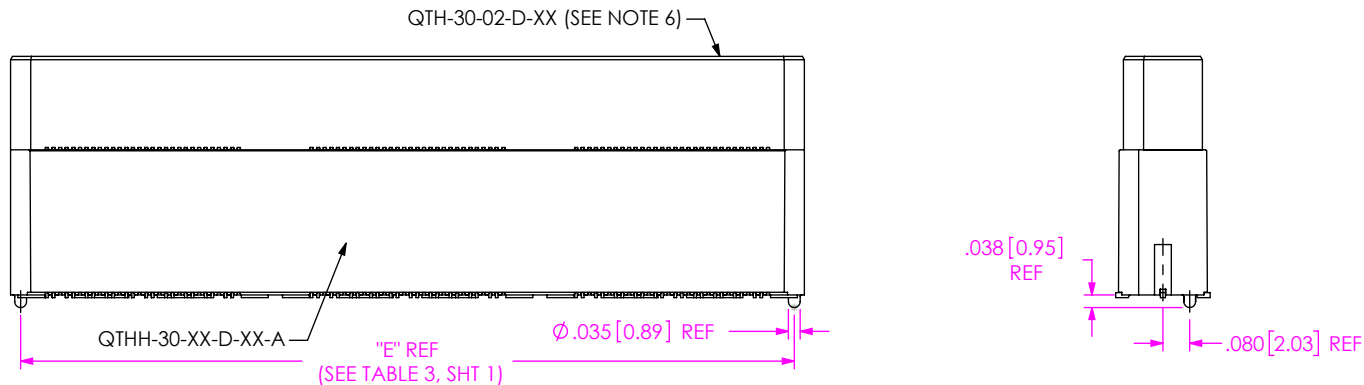


FIG 3
 -A: ALIGNMENT PIN OPTION
 (QTH-060-05-X-D-DP-A SHOWN)
 (FOR -03 THRU -08 LEAD STYLE ONLY)
 (SEE TABLE 4, SHT 3)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

No OF POS	TABLE 5							
	"R"				"S"			
	-A, -LC, -FL	-GP	-RT1	-L	-A, -LC, -FL	-GP	-RT1	-L
-020	.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]
-040	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]
-060	2.363 [60.01]	2.880 [73.15]	3.013 [76.53]	2.481 [63.00]	1.043 [26.50]	1.302 [33.07]	1.369 [34.76]	1.103 [28.00]
-080	3.150 [80.01]	3.668 [93.15]	N/A	N/A	1.437 [36.50]	1.696 [43.07]	N/A	N/A
-100	3.938 [100.01]	4.455 [113.16]	N/A	N/A	1.831 [46.50]	2.090 [53.07]	N/A	N/A

TABLE 6	
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]

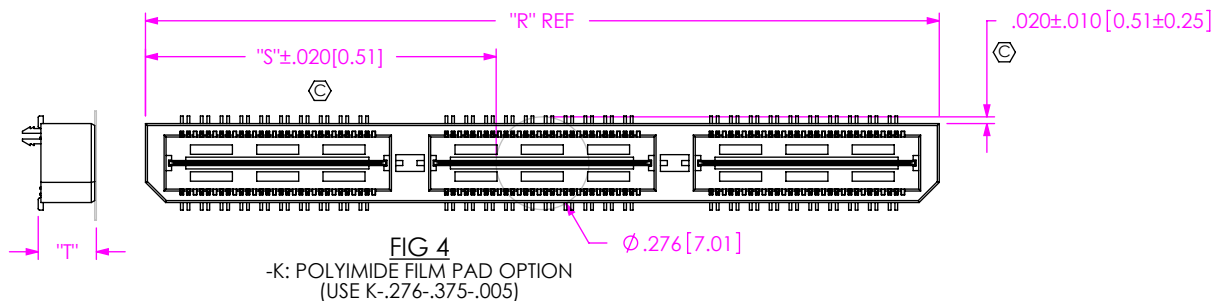


FIG 4
 -K: POLYIMIDE FILM PAD OPTION
 (USE K-276-.375-.005)

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 DWG. NO.
QTH-XXX-XX-X-D-DP-XXX-X-XX
 BY: KEVIN B 09-14-2010 SHEET 2 OF 5

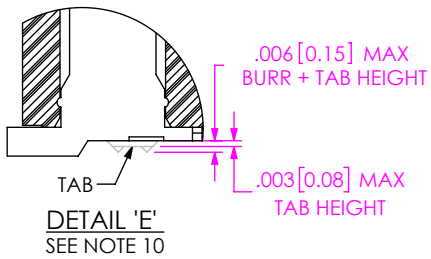


TABLE 4								
STYLE	SEE FIGURE	"C" OVERALL HEIGHT	GROUND PLANE	TERMINAL	TOP BODY (SEE NOTE 6)	BOTTOM SPACER BODY (-LC OR NONE)	BOTTOM SPACER BODY (-A)	MATED HEIGHT WITH QSH-01
-03	5	.4043 [10.269]	T-1G1-03-X	T-1S60-03-X	QTH-30-02-D-XX	QTHH-30-01-D-XX	QTHH-30-01-D-XX-A	.433 [11.00] REF
-04	5	.6001 [15.243]	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	6	.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	6	.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	7	.9542 [24.237]	T-1G1-01-X	T-1S61-21-X	QTH-30-02-D-XX	QTHH-30-04-D-XX	QTHH-30-04-D-XX-A	.984 [24.99] REF
-08	7	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	5	.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	5	.5618 [14.270]	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 [15.01] REF

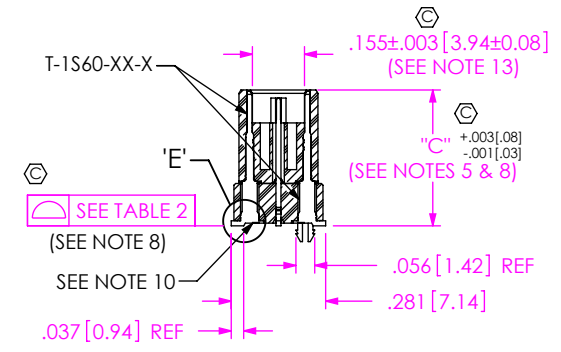
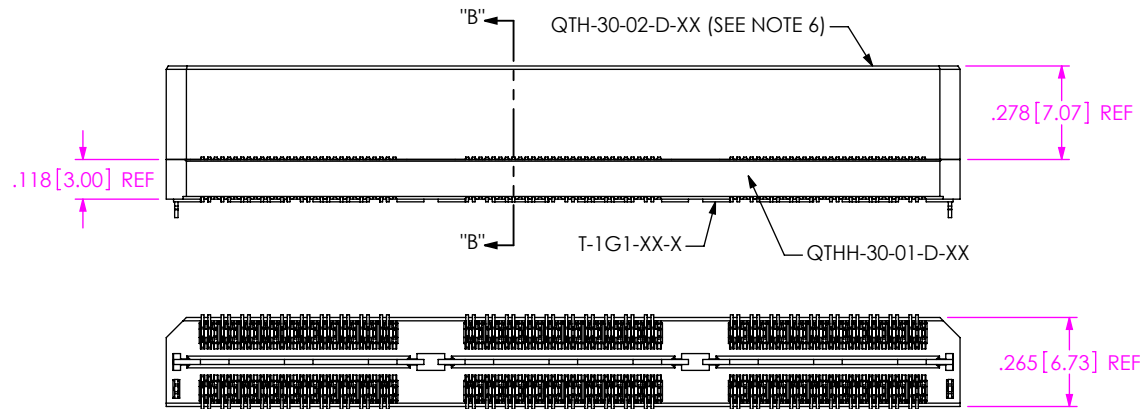
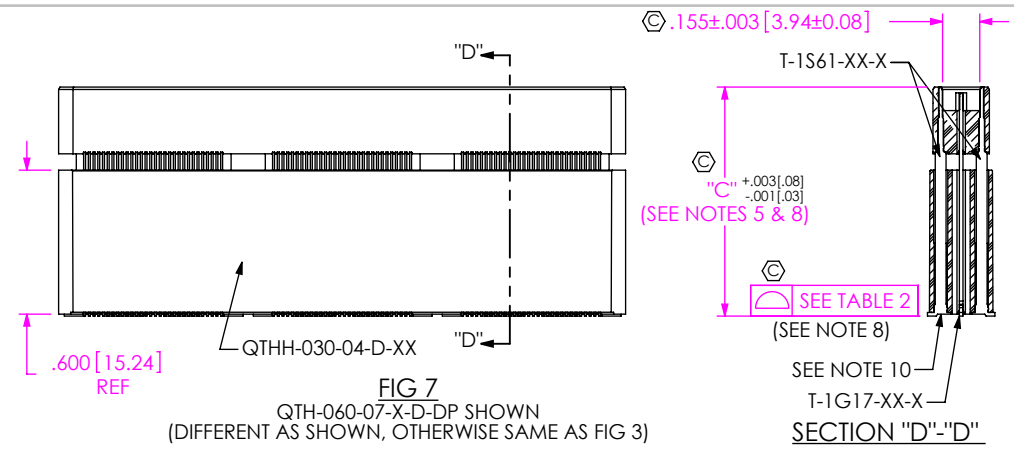
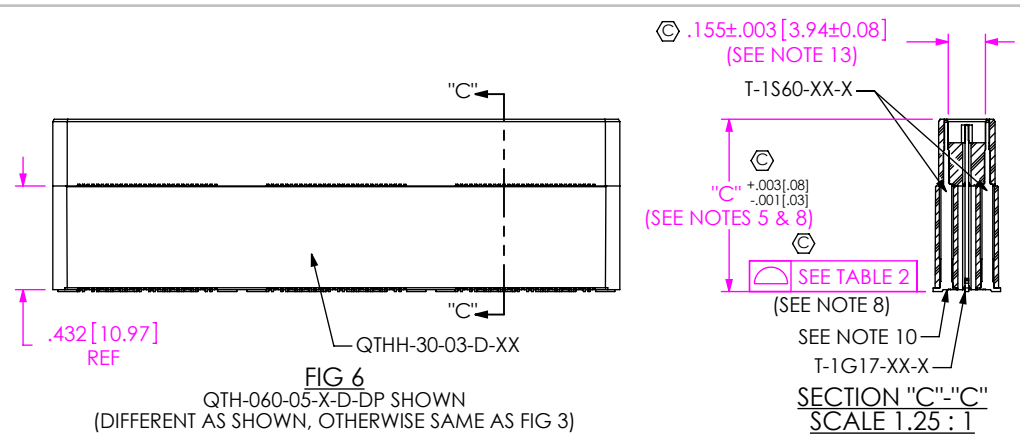


FIG 5 QTH-060-03-X-D-DP-LC SHOWN (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)



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QTH-XXX-XX-X-D-DP-XXX-X-XX

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TABLE 8		
No OF POS	"G"	"H"
-020	1.305 [33.15]	1.013 [25.73]
-040	2.093 [53.15]	1.801 [45.73]
-060	2.880 [73.15]	2.588 [65.74]
-080	3.668 [93.15]	3.376 [85.74]
-100	4.455 [113.16]	4.163 [105.74]

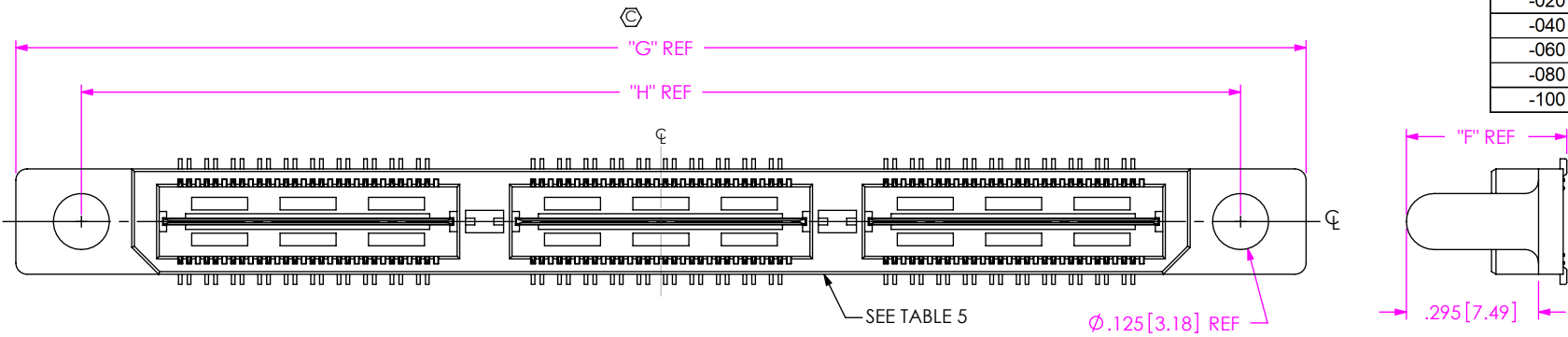


FIG 8
 -GP: GUIDE POST OPTION
 (QTH-060-01-X-D-DP-GP SHOWN)
 (FOR -01 & -02 LEAD STYLE ONLY)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

TABLE 7		
STYLE	"F"	BODY
-01	.3630[9.220]	QTH-30-01-D-XX-X-GP
*-02	.4811[12.220]	QTH-30-02-D-XX-X-GP

(* = NOT ENGINEERING APPROVED)

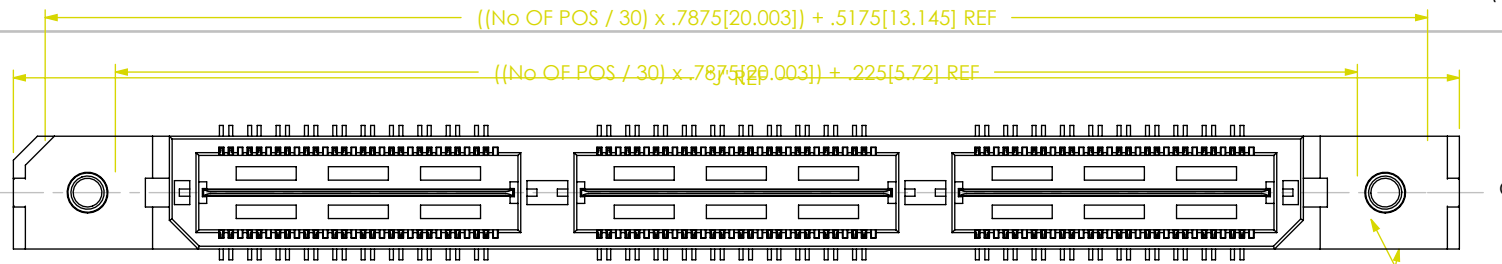
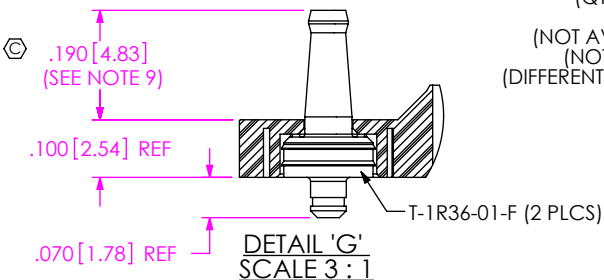
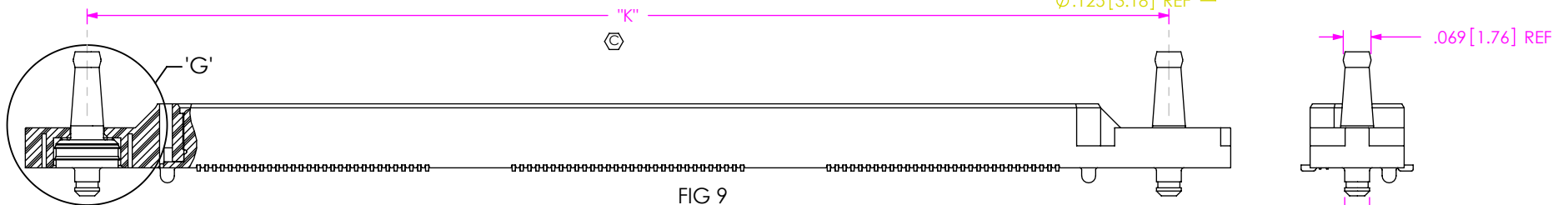


FIG 9
 -RT1: RETENTION OPTION
 (QTH-060-01-X-D-DP-A-RT1 SHOWN)
 (FOR -01 LEAD STYLE ONLY)
 (NOT AVAILABLE WITH -LC OR -GP OPTIONS)
 (NOT AVAILABLE ON -080 & -100 POS)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

TABLE 9		
No OF POS	"J"	"K"
-020	1.438 [36.53]	1.129 [28.68]
-040	2.226 [56.53]	1.917 [48.68]
-060	3.013 [76.53]	2.704 [68.68]
-080	N/A	N/A
-100	N/A	N/A



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

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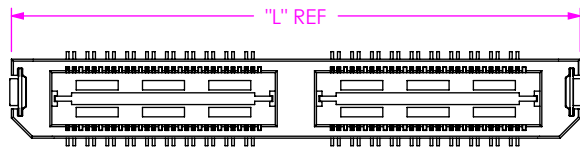


FIG 10
 -L: LATCHING OPTION
 (QTH-040-01-X-DP-L SHOWN)
 (AVAILABLE ON -01 LEAD STYLE ONLY)
 (NOT AVAILABLE WITH -LC, -GP, -FL, OR -RT1 OPTIONS)
 (40 POS MAX)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

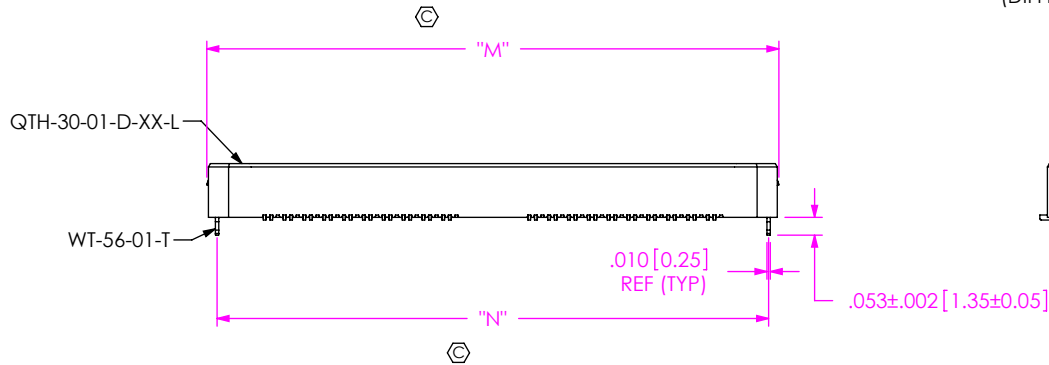
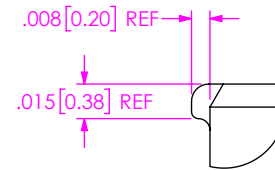
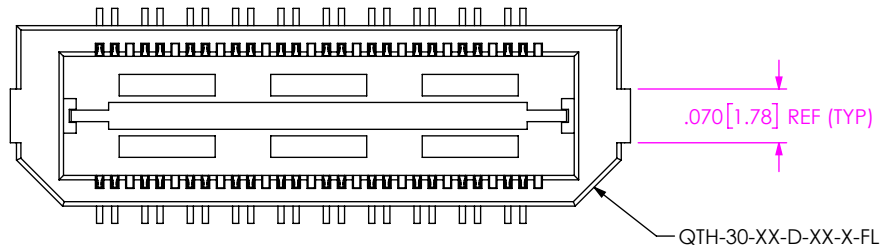


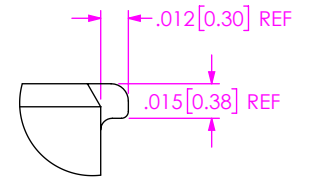
TABLE 10

No OF POS	"L"	"M"	"N"
-020	.906 [23.01]	.915 [23.24]	.854 [21.69]
-040	1.694 [43.01]	1.703 [43.24]	1.642 [41.69]
*-060	2.481 [63.02]	2.490 [63.25]	2.429 [61.70]
-080	N/A	N/A	N/A
-100	N/A	N/A	N/A

* = NOT RELEASED



DETAIL 'H'
 SCALE 12 : 1



DETAIL 'J'
 SCALE 12 : 1

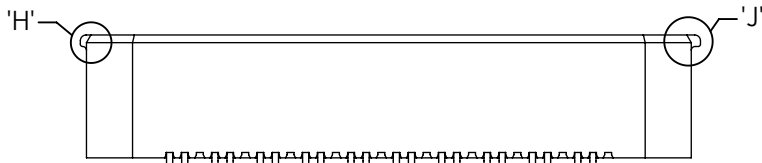


FIG 11
 -FL: FRICTION LOCKS
 (NOT AVAILABLE WITH -GP OPTION)
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

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