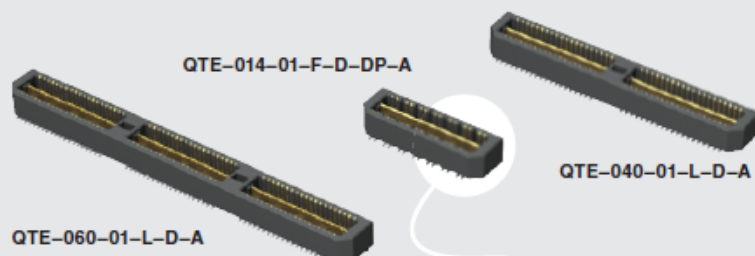


THE VITAL COMPONENT

(0.80 mm) .0315"



QTE SERIES

HIGH SPEED GROUND PLANE HEADER

SPECIFICATIONS

For complete specifications and recommended PCB layouts see www.samtec.com/QTE

Insulator Material:

Liquid Crystal Polymer

Terminal Material:

Phosphor Bronze

Plating: Au or Sn over 50µ" (1.27 µm) Ni

Current Rating:

Contact:

2 A per pin

(1 pin powered per row)

Ground Plane:

23 A per ground plane

(1 ground plane powered)

Operating Temp Range:

-55°C to +125°C

Voltage Rating:

225 VAC mated with QSE

& 5 mm Stack Height

Max Cycles: 100

RoHS Compliant: Yes

Processing:

Lead-Free Solderable: Yes

SMT Lead Coplanarity:

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

Board Stacking:

For applications requiring more than two connectors per board contact ipg@samtec.com

Board Mates:

QSE

Cable Mates:

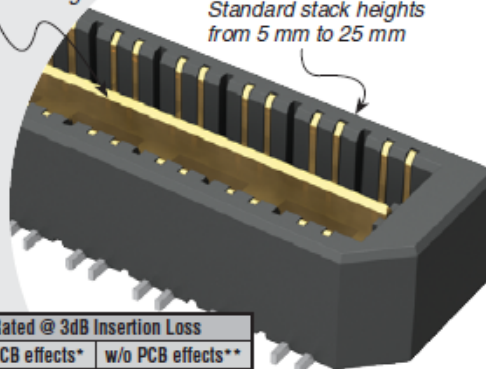
EQCD, EQDP, EQRF

(See Also Available note)



Integral metal plane
for power or ground

Standard stack heights
from 5 mm to 25 mm



QTE/QSE 5 mm Stack Height	Type	Rated @ 3dB Insertion Loss	
		with PCB effects*	w/o PCB effects**
Single-Ended Signaling	-D	9 GHz / 18 Gbps	9 GHz / 18 Gbps
Differential Pair Signaling	-D	8 GHz / 16 Gbps	14 GHz / 28 Gbps
Differential Pair Signaling	-DP	8.5 GHz / 17 Gbps	13.5 GHz / 27 Gbps

*Performance data includes effects of a non-optimized PCB.

**Test board losses de-embedded from performance data.

Performance data for other stack heights and complete test data available at www.samtec.com/QTE or contact sig@samtec.com

Protocols
Supported

100 GbE
XAUI
PCI Express®
SATA
MGT (Rocket I/O)
InfiniBand™

Download app notes at:
www.samtec.com/appnote
Contact SIG @ samtec.com
for questions on protocols

Final InCh
CERTIFIED

28+
Gbps

RECOGNITIONS

For complete scope of recognitions see www.samtec.com/quality



ALSO AVAILABLE (MOQ Required)

- 15 mm, 22 mm and 30 mm stack height (Caution: Some automatic placement/inspection machines may have component height restrictions. Please consult machinery specifications.)
 - 30µ" (0.76 µm) Gold (Specify -H plating for Data Rate cable mating applications.)
 - Edge Mount
 - 56 (-DP), 80, 100 positions per row
 - Guide Posts, Screw Down & Friction Lock
 - Retention Option
- Contact Samtec.

QTE	PINS PER ROW NO. OF PAIRS	LEAD STYLE	PLATING OPTION	TYPE	A	OTHER OPTION																								
-020, -040, -060 (40 total pins per bank = -D)	-014, -028, -042 (14 pairs per bank = -D-DP)	Specify LEAD STYLE from chart	-F = Gold Flash on Signal Pins and Ground Plane, Matte Tin on tails	-D = Single-Ended	-K = (7.00 mm) .275" DIA Polyimide Film Pick & Place Pad	-TR = Tape & Reel Packaging (N/A on -05 & -07 lead style)																								
			-L = 10µ" (0.25 µm) Gold on Signal Pins and Ground Plane, Matte Tin on tails	-D-DP = Differential Pair (-01 only)	-L = Latching Option (N/A on -042 & -060 positions)																									
			-C* = Electro-Polished Selective 50µ" (1.27 µm) min Au over 150µ" (3.81 µm) Ni on Signal Pins in contact area, 10µ" (0.25 µm) min Au over 50µ" (1.27 µm) Ni on Ground Plane in contact area, Matte Tin over 50µ" (1.27 µm) min Ni on all solder tails																											
-D-DP = (No. of Positions per Row/14) x (20.00) .7875 -D = (No. of Positions per Row/20) x (20.00) .7875 (20.00) .7875 (5.97) .235 (7.11) .280 (0.80) .0315 (0.20) .008		<table border="1"> <thead> <tr> <th>QTE LEAD STYLE</th> <th>A</th> <th>HEIGHT WITH QSE*</th> </tr> </thead> <tbody> <tr> <td>-01</td> <td>(4.27) .168</td> <td>(5.00) .197</td> </tr> <tr> <td>-02</td> <td>(7.26) .286</td> <td>(8.00) .315</td> </tr> <tr> <td>-03</td> <td>(10.27) .404</td> <td>(11.00) .433</td> </tr> <tr> <td>-04</td> <td>(15.25) .600</td> <td>(16.00) .630</td> </tr> <tr> <td>-05</td> <td>(18.26) .718</td> <td>(19.00) .748</td> </tr> <tr> <td>-07</td> <td>(24.24) .954</td> <td>(25.00) .984</td> </tr> <tr> <td>-09</td> <td>(13.26) .522</td> <td>(14.00) .551</td> </tr> </tbody> </table>					QTE LEAD STYLE	A	HEIGHT 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
QTE LEAD STYLE	A	HEIGHT 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																												
A (0.76) .030 (0.89) .035 DIA		*Note: -C Plating passes 10 year MFG testing Note: Some lengths, styles and options are non-standard, non-returnable.																												

OTHER SOLUTIONS

- Board Spacing Standoffs.
See SO Series

the vital component

Due to technical progress, all designs, specifications and components are subject to change without notice.

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]

* = SEE NOTE 15

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

* = SEE NOTE 15

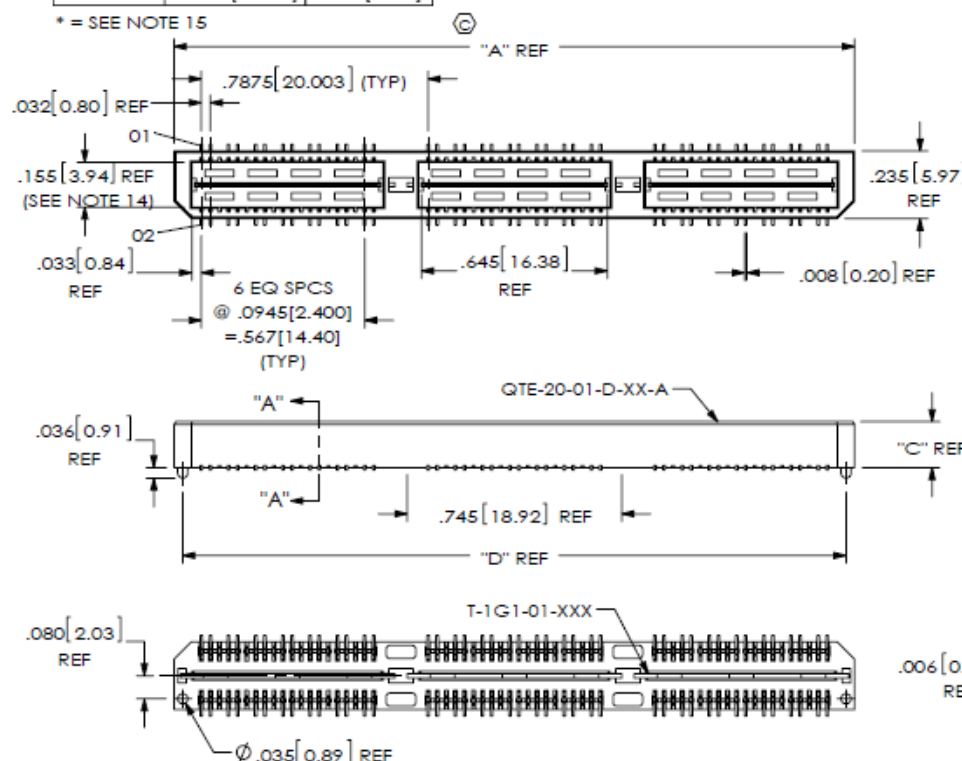


FIG 1

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

DETAIL 'B'
SCALE 6:1

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 [10.23] (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: .560 [14.239] (SEE FIG 4, SHT 3)

PLATING SPECIFICATION

-F: 3μ FLASH GOLD IN CONTACT AREA,
MATTE TIN ON TAIL
(USE T-15XX-XX-F, T-1G1-XX-F) (SEE NOTE 9)
-L: 10μ LIGHT GOLD IN CONTACT AREA,
MATTE TIN ON TAIL
(USE T-15XX-XX-L, T-1G1-XX-L)
-H: 30μ HEAVY GOLD IN CONTACT AREA,
3μ GOLD ON TAIL
(USE T-15XX-XX-H, T-1G1-XX-G)
-C: 50μ ELECTRO-POLISHED SELECTIVE IN
CONTACT AREA, MATTE TIN ON TAIL
(USE T-15XX-XX-C, T-1G1-XX-L)
-STL: 30μ HEAVY SELECTIVE GOLD IN
CONTACT AREA, TIN LEAD ON TAIL
(USE T-15XX-XX-STL, T-1G1-XX-STL)
-FTL: 3μ FLASH SELECTIVE GOLD IN
CONTACT AREA, TIN LEAD ON TAIL
(USE T-15XX-XX-FTL, T-1G1-XX-FTL)

OPTION

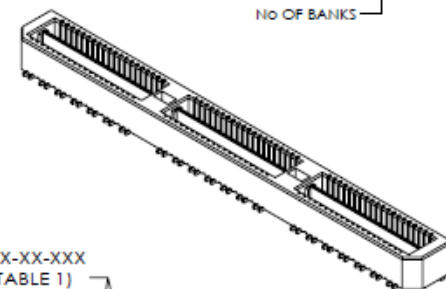
-A: ALIGNMENT PINS
-LC: LOCKING CLIPS (SEE NOTE 13)
(USE LC-08-TM-01)
(SEE FIG 2, SHT 2)
-K: POLYIMIDE FILM
(USE K-DOT-276-.375-.005)
(SEE FIG 3, SHT 2)
N/A ON STYLES -07 & -08
-GP: GUIDE POSTS
(AVAILABLE ON -01 ONLY)
(USE QTE-20-01-D-XX-X-GP)
(SEE FIG 4, SHT 3)
-TR: TAPE & REEL (42 POS. MAX)
(NOT AVAILABLE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



SECTION "A"-A

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 ANGLES
XX: ±.01 [3]
XXX: ±.005 [13]
XXXX: ±.0020 [51]

PROPRIETARY NOTE
THIS DOCUMENT CONTAINS INFORMATION
CONFIDENTIAL AND PROPRIETARY TO
SAMTEC, INC. AND SHALL NOT BE REPRODUCED
OR TRANSMITTED 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.

samtec
the vital component

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
BY: DEAN P 4/28/2000 SHEET 1 OF 5

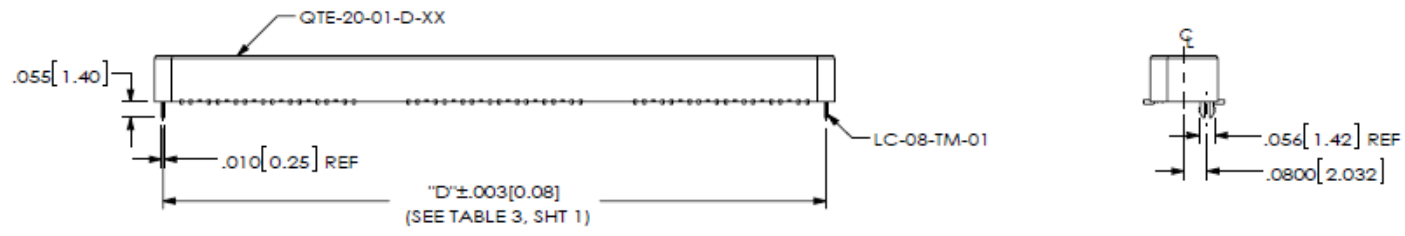


FIG 2
-LC: LOCKING CLIP OPTION
(QTS-042-01-XXX-D-DP-LC SHOWN)
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

TABLE 4								
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

* = SEE NOTE 15

TABLE 5	
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]

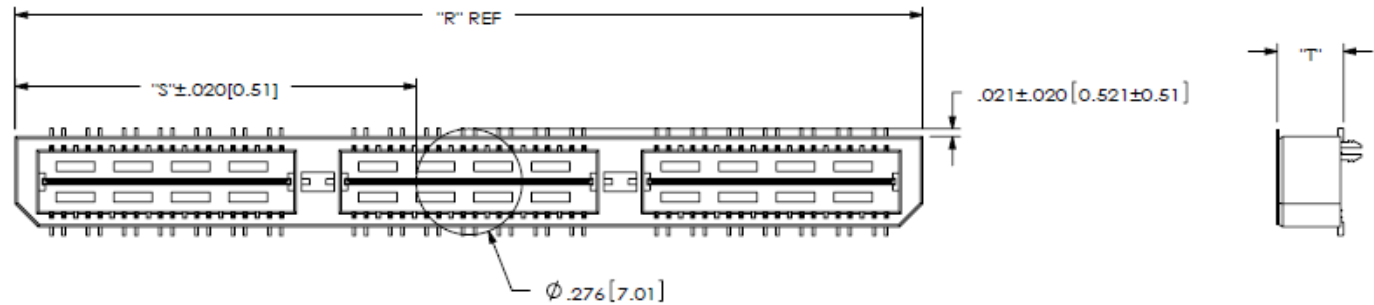


FIG 3
-K: POLYIMIDE FILM PAD
(USE K-DOT-.276-.375-.005)

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

the vital component

DESCRIPTION:
.8mm DIFFERENTIAL PAIRS HS TERMINAL ASSEMBLY

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

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

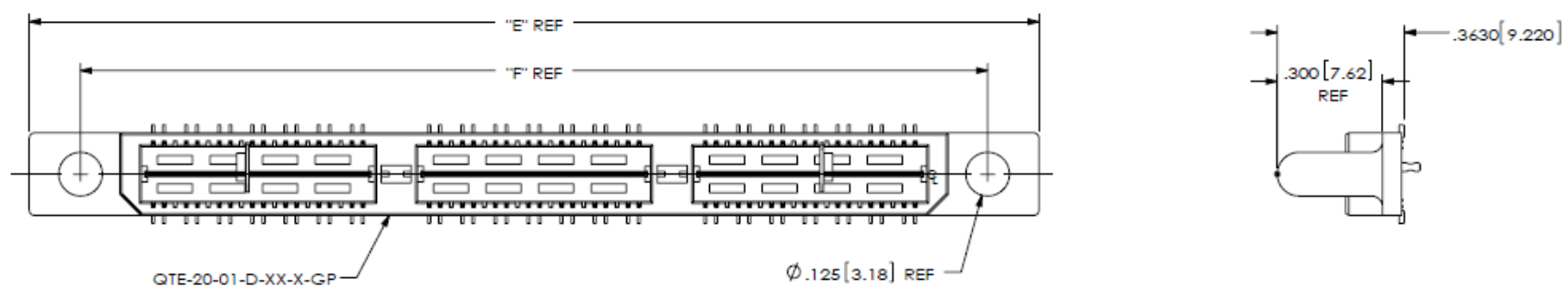


FIG 4
-GP: GUIDE POST OPTION
(QTE-042-01-XXX-D-DP-GP SHOWN)
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
(AVAILABLE ON STYLE -01 ONLY)

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

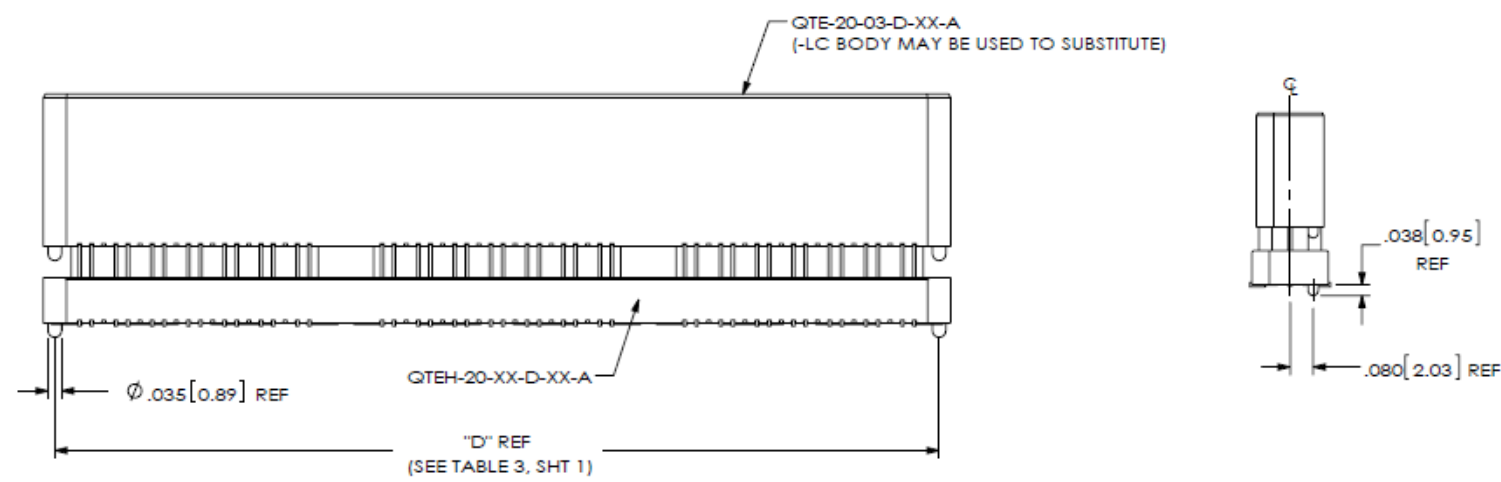


FIG 5
(QTE-020-04-XXX-D-A SHOWN)
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
(STYLES -04, -05, -06, -07, -08, -09 & -10, SEE TABLE 7, SHT 4)

PROPRIETARY NOTE THIS DOCUMENT CONTAINS 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	 the vital component	
	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

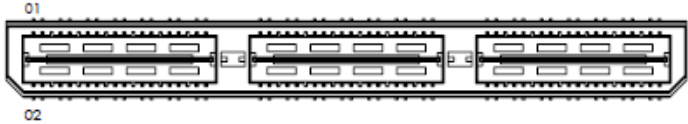


TABLE 7						MATED HEIGHT WITH QSE-DP-01
STYLE	"B"	GROUND PLANE	TERMINAL	FILLER BODY	SPACER BODY	
-04	.600[15.24]	T-1G1-04-XXX	T-1S41-04-XXX	QTE-20-03-D-XX	QTEH-20-01-D-XX-X	.630 [16.00] REF
-05	.718[18.237]	T-1G1-05-XXX	T-1S41-05-XXX	QTE-20-03-D-XX	QTEH-20-01-D-XX-X	.748 [19.00] REF
-06	.835[21.209]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

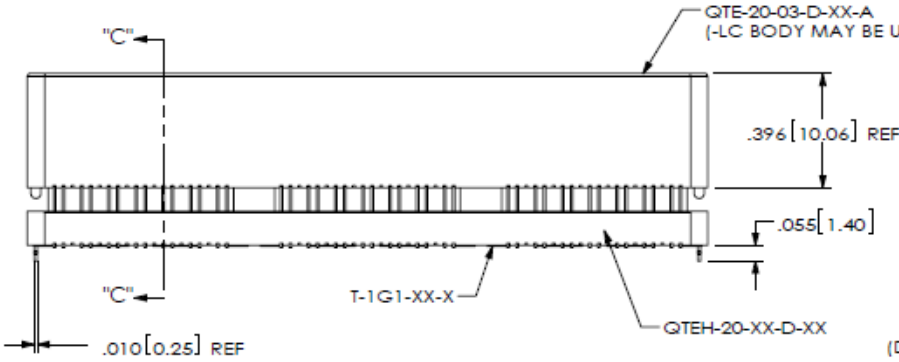
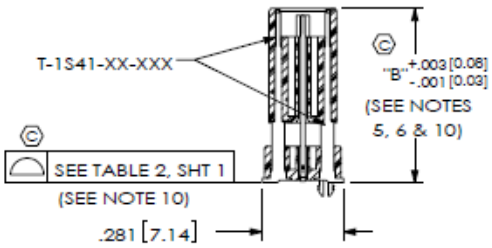


FIG 6
QTE-042-04-X-D-DP-LC SHOWN
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)
(STYLES -04, -05 & -06)



SECTION "C"-"C"

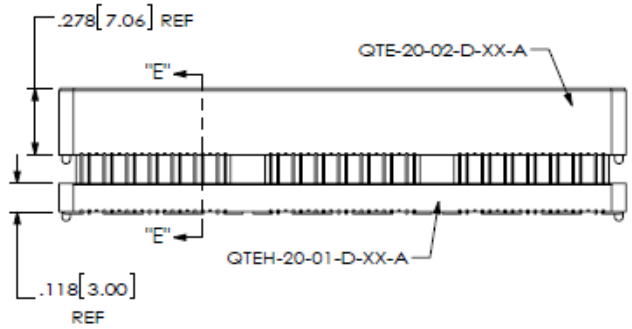
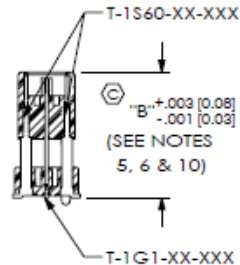


FIG 8
QTE-042-09-X-D-DP-A SHOWN
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 6)
(STYLES -09 & -10)



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

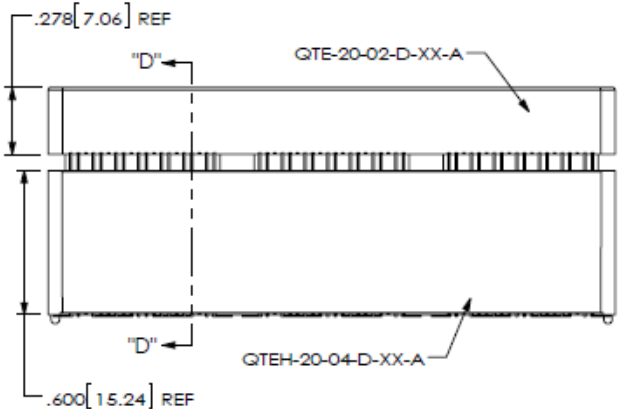
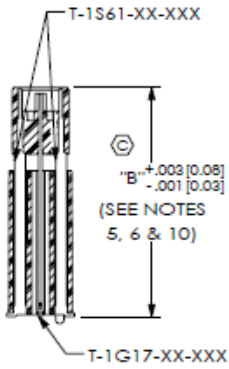


FIG 7
QTE-042-07-X-D-DP-A SHOWN
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 6)
(STYLES -07 & -08)



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

F:\DWO\MISC\Mktg\QTE-XXX-XX-XXX-D-DP-XXX-MKT.SLDORW

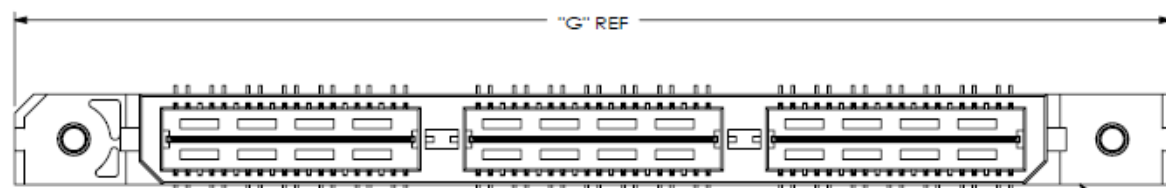
PROPRIETARY NOTE
THIS DOCUMENT CONTAINS INFORMATION
CONFIDENTIAL AND PROPRIETARY TO
SAMTEC, INC. AND SHALL NOT BE REPRODUCED
OR TRANSFERRED TO OTHER DOCUMENTS OR
DISCLOSED TO OTHERS OR USED FOR ANY
PURPOSE OTHER THAN THAT WHICH IT WAS
OBTAINED WITHOUT THE EXPRESSED WRITTEN
CONSENT OF SAMTEC, INC.

DO NOT SCALE DRAWING

SHEET SCALE: 1.5:1



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



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

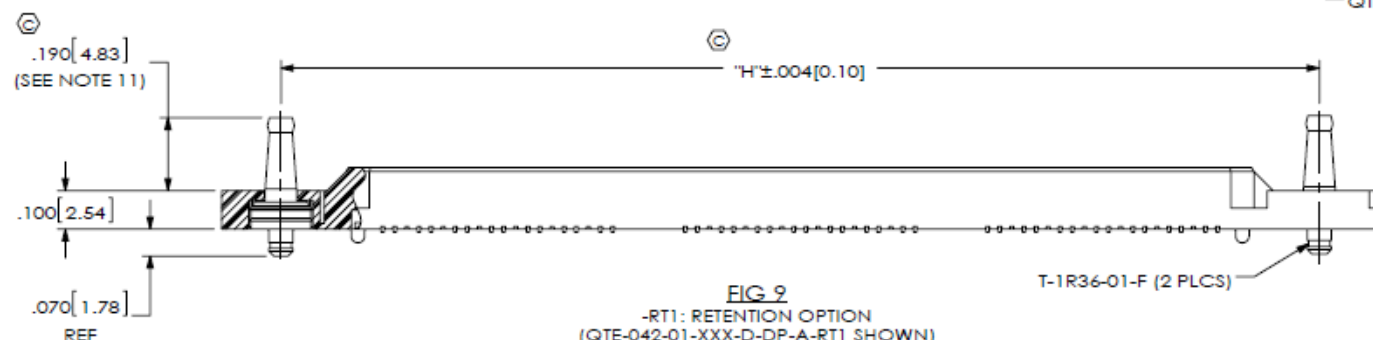


FIG 9

-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

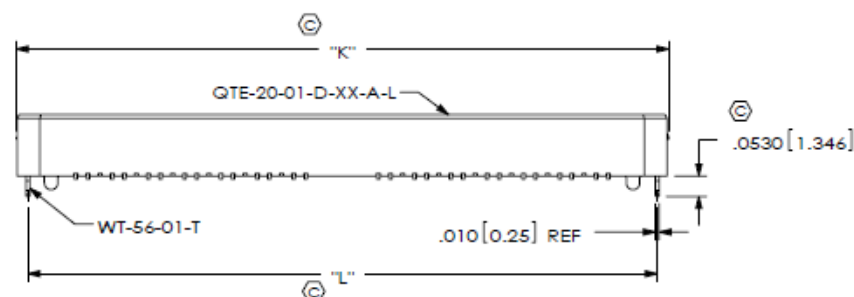
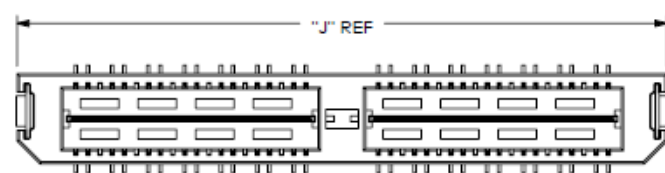
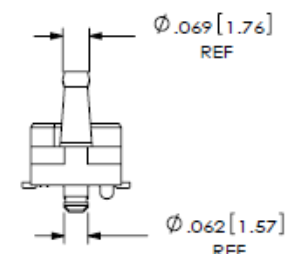


FIG 10

-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)

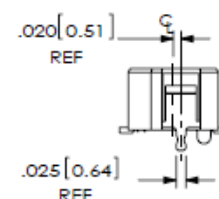


TABLE 9

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
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 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.

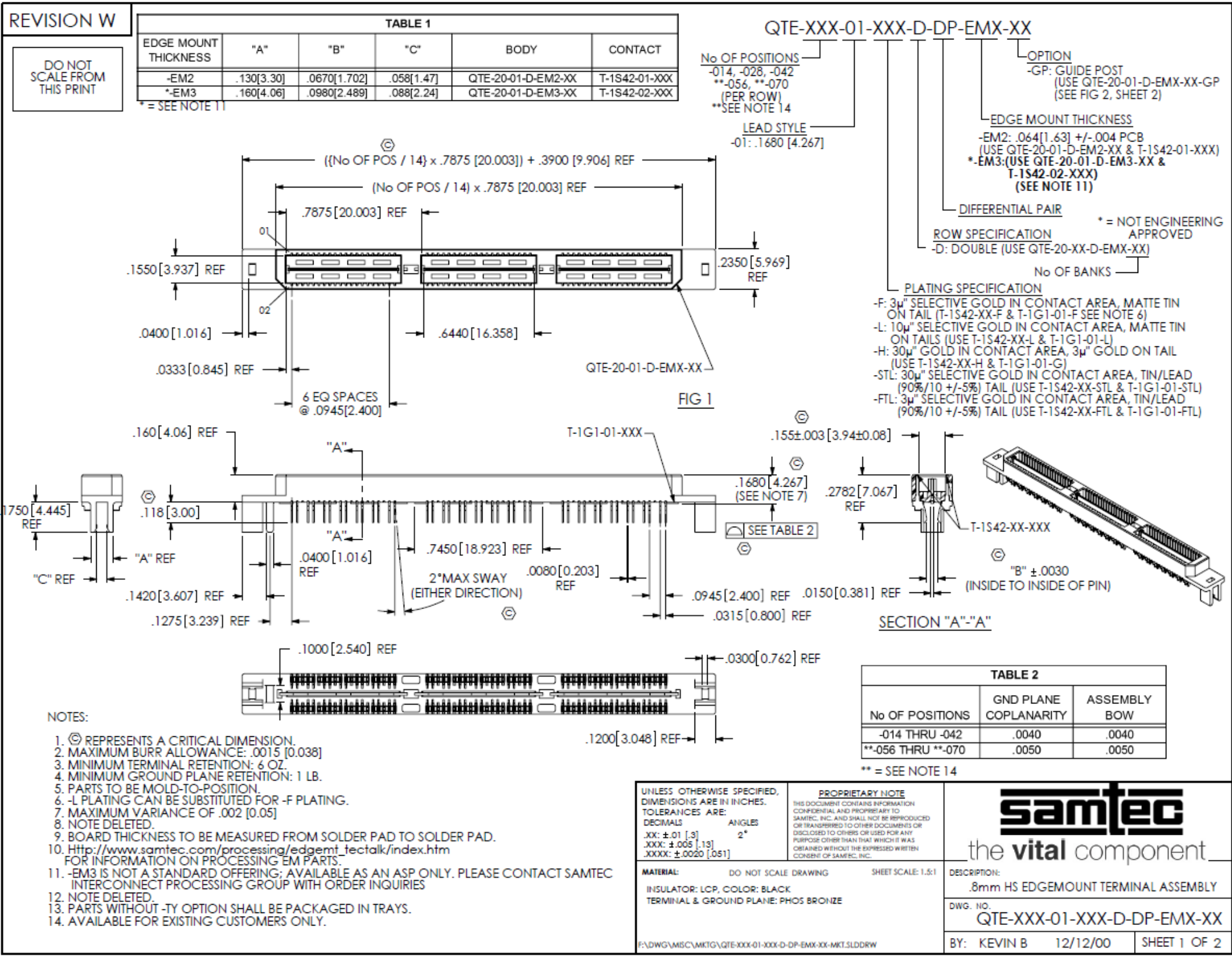
DO NOT SCALE DRAWING

SHEET SCALE: 2:1

samtec
the vital component

DESCRIPTION:
.8mm DIFFERENTIAL PAIRS HS TERMINAL ASSEMBLYDWG. NO.
QTE-XXX-XX-XXX-D-DP-XXX

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



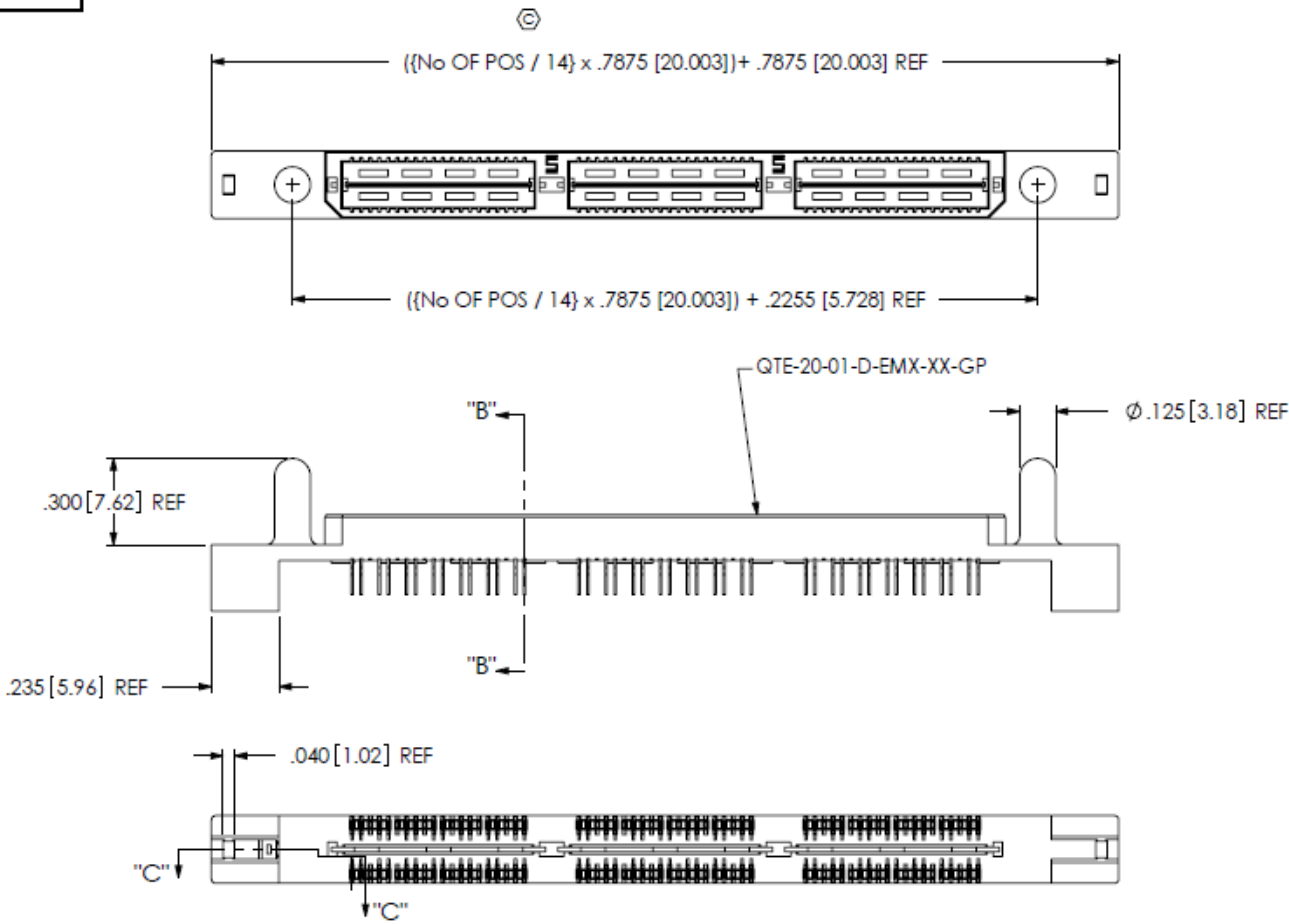
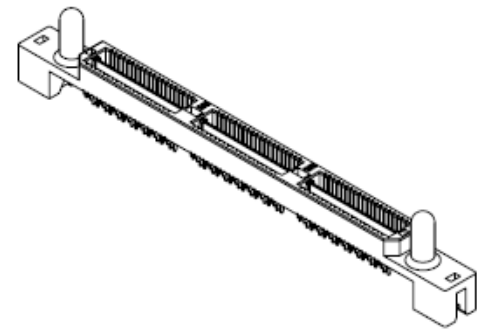
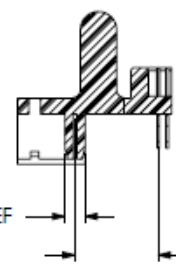


FIG 2
-GP OPTION SHOWN
(SAME AS FIG 1, UNLESS OTHERWISE STATED)



SECTION "B"-"B"



SECTION "C"-"C"

F:\DWG\MISC\MKTG\QTE-XXX-01-XXX-D-DP-EMX-XX-MKT.SLDRW

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: 1.5:1



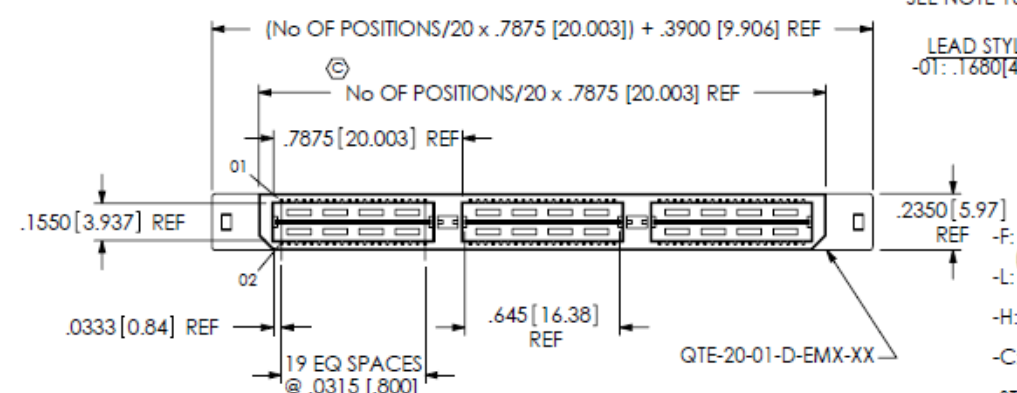
DESCRIPTION:
.8mm HS EDMOUNT TERMINAL ASSEMBLY

DWG. NO.
QTE-XXX-01-XXX-D-DP-EMX-XX

BY: KEVIN B 12/12/00 SHEET 2 OF 2

TABLE 2					
EDGE MOUNT THICKNESS	"A"	"B"	"C"	BODY	CONTACT
-EM2	.130[3.30]	.0670[1.702]	.058[1.47]	QTE-20-01-D-EM2-XX	T-1S42-01-XXX
*-EM3	.160[4.06]	.0980[2.489]	.088[2.24]	QTE-20-01-D-EM3-XX	T-1S42-02-XXX

* = SEE NOTE 13



QTE-XXX-01-XXX-D-EMX-XX

No OF POSITIONS
-020, -040, -060,
**-080, **-100
(PER ROW)

**SEE NOTE 16

LEAD STYLE
-01: .1680 [4.267]

OPTION
-GP: GUIDE POST
(USE QTE-20-01-D-EMX-XX-GP,
SEE FIG 2, SHEET 2)
-TY: TRAY PACKAGING

EDGE MOUNT THICKNESS
-EM2: .064 [1.63] +/- .004 PCB
(USE QTE-20-01-D-EM2-XX & T-1S42-01-X)
-EM3:
(USE QTE-20-01-D-EM3-XX & T-1S42-02-X)
(SEE NOTE 13)

ROW SPECIFICATION
-D: DOUBLE (USE QTE-20-XX-D-EMX-XX)

PLATING SPECIFICATION

No OF BANKS
-F: 3μ" SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAILS
(USE T-1S42-XX-F & T-1G1-01-F) (SEE NOTE 11)
-L: 10μ" SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAILS
(USE T-1S42-XX-L & T-1G1-01-L)
-H: 30μ" GOLD IN CONTACT AREA, 3μ" GOLD ON TAIL
(USE T-1S42-XX-H & T-1G1-01-G)
-C: 50μ" GOLD IN CONTACT AREA, 3μ" GOLD ON TAIL
(USE T-1S42-XX-C & T-1G1-01-L)
-STL: 30μ" SELECTIVE GOLD IN CONTACT AREA, TIN/LEAD (90%/10 +/-5%) TAIL
(USE T-1S42-XX-STL & T-1G1-01-STL)
-FTL: 3μ" SELECTIVE GOLD IN CONTACT AREA, TIN/LEAD (90%/10 +/-5%) TAIL
(USE T-1S42-XX-FTL & T-1G1-01-FTL)

DO NOT
SCALE FROM
THIS PRINT

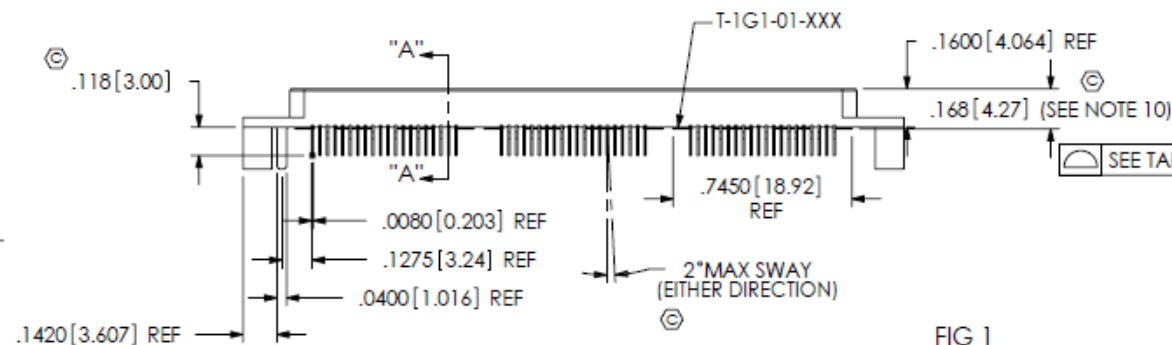
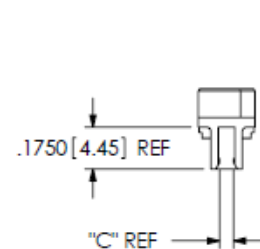
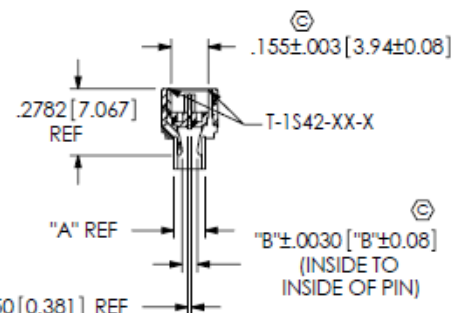


FIG 1
QTE-060-01-XXX-D-EM2 SHOWN



SECTION "A"- "A"

NOTES:

1. © REPRESENTS A CRITICAL DIMENSION.
2. NOTE DELETED.
3. MAXIMUM BURR ALLOWANCE: .0015 [0.03]
4. MINIMUM TERMINAL RETENTION: 6 OZ.
5. MINIMUM GROUND PLANE RETENTION: 1 LB.
6. PARTS TO BE MOLD-TO-POSITION.
7. NOTE DELETED.
8. NOTE DELETED.
9. NOTE DELETED.
10. MAXIMUM VARIANCE: .002 [0.05].
11. -L PLATING CAN BE SUBSTITUTED FOR -F PLATING.
12. SEE http://www.samtec.com/processing/edgemt_tectalk/index.htm FOR INFORMATION ON PROCESSING EDGE MOUNT PARTS TO BOARDS.
13. -EM3 IS NOT A STANDARD OFFERING; AVAILABLE AS AN ASP ONLY. PLEASE CONTACT SAMTEC INTERCONNECT PROCESSING GROUP WITH ORDER INQUIRIES
14. NOTE DELETED.
15. PARTS WITHOUT -TY OPTION SHALL BE PACKAGED IN TRAYS.
16. AVAILABLE FOR EXISTING CUSTOMERS ONLY.

TABLE 1		
No OF POSITIONS	GND PLANE COPLANARITY	ASSEMBLY BOW
-020 THRU -060	.004 [0.10]	.004 [0.10]
**080 THRU -100	.005 [1.27]	.005 [1.27]

** = SEE NOTE 16

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

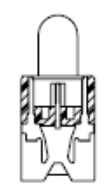
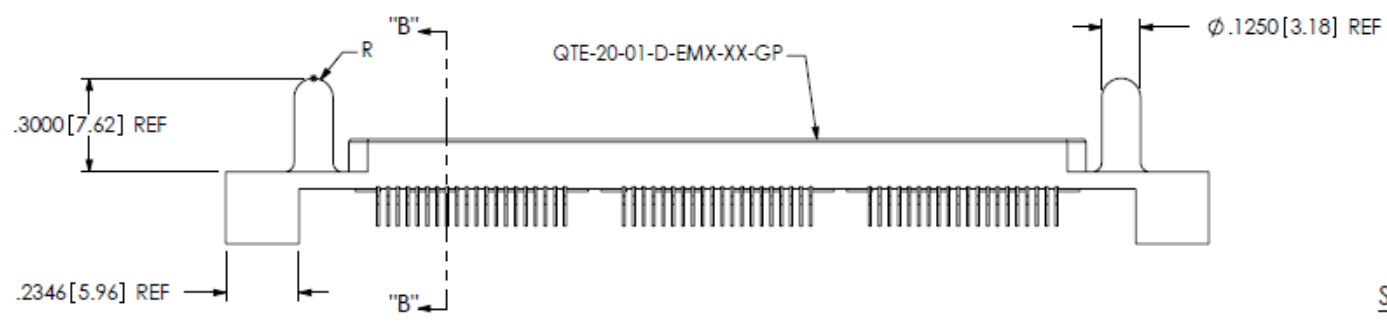
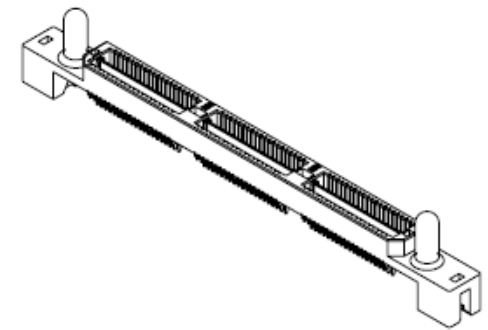
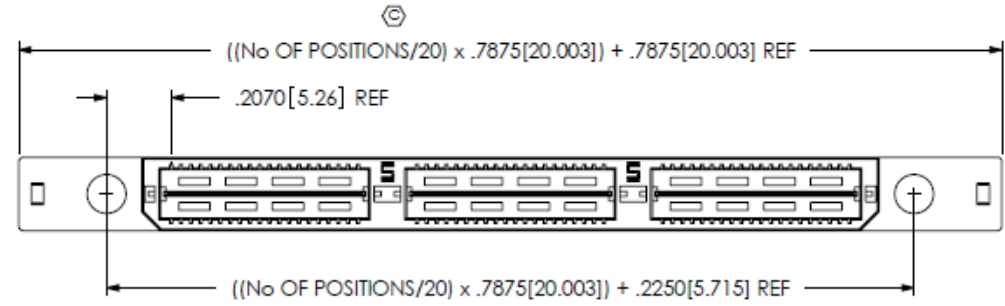
PROPRIETARY NOTE
THIS DOCUMENT CONTAINS INFORMATION
CONFIDENTIAL AND PROPRIETARY TO
SAMTEC, INC. AND SHALL NOT BE REPRODUCED
OR TRANSMITTED TO OTHER DOCUMENTS OR
DISCLOSED TO OTHERS OR USED FOR ANY
PURPOSE OTHER THAN THAT WHICH IT WAS
OBTAINED WITHOUT THE EXPRESSED WRITTEN
CONSENT OF SAMTEC, INC.

MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 1:0.8
INSULATOR: LCP COLOR: BLACK
TERMINAL & GROUND PLANE: PHOS BRONZE

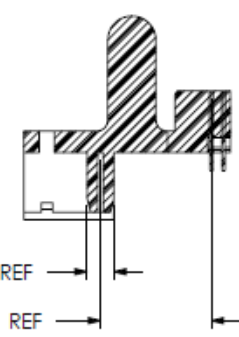
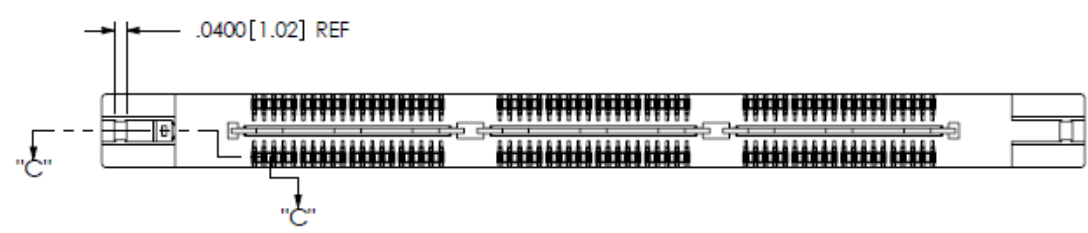
DESCRIPTION:
.8mm EDGEMOUNT HS TERMINAL ASSEMBLY
DWG. NO.
QTE-XXX-01-XXX-D-EMX-XX
BY: DEAN P 9/2/1999 SHEET 1 OF 2

samtec

the vital component



SECTION "B"-"B"



.0700[1.78] REF
.2887[7.33] REF

SECTION "C"-"C"
SCALE 2:1

FIG 2
-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: 1.625:1	 the vital component	
	DESCRIPTION: .8mm EDGEMOUNT HS TERMINAL ASSEMBLY	
	DWG. NO. QTE-XXX-01-XXX-D-EMX-XX	
	BY: DEAN P	9/2/1999