

REVISION

G	JB	J SCHRECK
8/29/2007 ECN-79918		
SHEET 1, TABLE 2: CHG EACH QSE (-RT OPTION) PLATING STYLE FROM "H" TO "F". CHG EACH QTE (-RT OPTION) PLATING STYLE FROM "H" TO "F". SHEET 3, FIG 3: CHG CALL OUT FROM "QSE-XXX-01-H-D-A-RT1" TO "QSE-XXX-01-F-D-A-RT1...". CHG CALL OUT FROM "QTE-XXX-01-H-D-A-RT1" TO "QTE-XXX-01-F-D-A-RT1..."		
H	DS	J SMALLWOOD
2/5/2009 ECN-104855		
ADD NOTE 5; ADD LEAD FREE BLOCK; SHT 2, ADD SCREW DOWN APPLICATION VIEW; ADD FOOTPRINT VIEW		
J	DS	J SMALLWOOD
2/25/2009 ECN-106185		
TABLE 2: CHG RT1 OPTION TO H PLATING; SHT 3, FIG 3: CHG RT1 OPTION TO H PLATING		
K	EW	J SMALLWOOD
8/3/2009 ECN-114557		
SHT 2 PCB FOOTPRINT: CHG .158 TO .178		
L	DS	J SMALLWOOD
9/18/2009 ECN-117041		
ADD SHT 4 FOR PINOUT TABLE		
M	TC	H SIPES
7/28/2010 ECN-135903		
SHT 1, NOTE 3: CHG TO BE LAYER FOAM PACKAGING TO "LAYER PACKAGE IN PAWPAK WITH FOAM"		
N	RV	T SPINE
4/9/2011 ECN-152078		
TOP VIEW: CHG "DATE CODE" TO "DDDDYY"; SHEET 2 & 3: CHG "DATE CODE" TO "DDDDYY", ADD LABEL NOTE.		

No. OF POS	"C"	"D"	"E"	"F"	"G"	QSE-XXX-01-H-D-XXX	QTE-XXX-01-H-D-XXX	FLEX
-020	.768 +/- .010 [19.50 +/- 0.25]	1.0875[27.623]	1.3375[33.973]	1.1285[28.663]	1.1285[28.663]	QSE-020-01-H-D-A OR QSE-020-01-H-D-A-RT1 (FOR -RT1 OPTION)	QTE-020-01-H-D-A OR QTE-020-01-H-D-A-RT1 (FOR -RT1 OPTION)	3", FE-10235 (QTY: 1) 5", FE-10236 (QTY: 1) 10", FE-10237 (QTY: 1)
-040	1.556 +/- .010 [39.52 +/- 0.25]	1.8755[47.638]	2.1255[53.988]	1.916[48.872]	1.916[48.872]	QSE-040-01-H-D-A OR QSE-040-01-H-D-A-RT1 (FOR -RT1 OPTION)	QTE-040-01-H-D-A OR QTE-040-01-H-D-A-RT1 (FOR -RT1 OPTION)	3", FE-10235 (QTY: 2) 5", FE-10236 (QTY: 2) 10", FE-10237 (QTY: 2)
-060	2.344 +/- .010 [59.54 +/- 0.25]	2.6635[67.653]	2.9135[74.003]	2.7035[68.875]	2.7035[68.875]	QSE-060-01-H-D-A OR QSE-060-01-H-D-A-RT1 (FOR -RT1 OPTION)	QTE-060-01-H-D-A OR QTE-060-01-H-D-A-RT1 (FOR -RT1 OPTION)	3", FE-10235 (QTY: 3) 5", FE-10236 (QTY: 3) 10", FE-10237 (QTY: 3)

LENGTH	"A"	"B"
-3.00	3.00[76.2]	2.54[64.5]
-5.00	5.00[127.0]	4.54[115.3]
-10.00	10.00[254.0]	9.54[242.3]

PART NUMBER	FE NUMBER
HFEM2-020-T-03-00-SE	FE-10238
HFEM2-020-T-03-00-SE-MH	FE-10239
HFEM2-020-T-03-00-SE-RT1	FE-10383
HFEM2-040-T-03-00-SE	FE-10240
HFEM2-040-T-03-00-SE-MH	FE-10241
HFEM2-040-T-03-00-SE-RT1	FE-10384
HFEM2-060-T-03-00-SE	FE-10242
HFEM2-060-T-03-00-SE-MH	FE-10243
HFEM2-060-T-03-00-SE-RT1	FE-10385
HFEM2-020-T-05-00-SE	FE-10244
HFEM2-020-T-05-00-SE-MH	FE-10245
HFEM2-020-T-05-00-SE-RT1	FE-10386
HFEM2-040-T-05-00-SE	FE-10246
HFEM2-040-T-05-00-SE-MH	FE-10247
HFEM2-040-T-05-00-SE-RT1	FE-10387
HFEM2-060-T-05-00-SE	FE-10248
HFEM2-060-T-05-00-SE-MH	FE-10249
HFEM2-060-T-05-00-SE-RT1	FE-10388
HFEM2-020-T-10-00-SE	FE-10250
HFEM2-020-T-10-00-SE-MH	FE-10251
HFEM2-020-T-10-00-SE-RT1	FE-10389
HFEM2-040-T-10-00-SE	FE-10252
HFEM2-040-T-10-00-SE-MH	FE-10253
HFEM2-040-T-10-00-SE-RT1	FE-10390
HFEM2-060-T-10-00-SE	FE-10254
HFEM2-060-T-10-00-SE-MH	FE-10255
HFEM2-060-T-10-00-SE-RT1	FE-10391

HFEM2-XXX-T-XX.XX-SE-XXX

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

TRANSFER END
(MALE-FEMALE)

OPTION
-MH: MOUNTING HOLES (SEE FIG. 2, SHEET 2)
-RT1: RETENTION FEATURE (SEE FIG. 3, SHEET 3) (LEAVE BLANK FOR STANDARD)
-SE: SINGLE ENDED

LENGTH
-03.00: 3.00[76.2] INCHES
-05.00: 5.00[127.0] INCHES
-10.00: 10.00[254.0] INCHES

- NOTE:
- *=NOT TOOLED
 - 1. $\text{\textcircled{C}}$ REPRESENTS A CRITICAL DIMENSION.
 - 2. ALL DIMENSIONS TO BE SYMMETRICAL ABOUT CENTERLINE WITHIN $\pm .002[.05]$ UNLESS OTHERWISE STATED.
 - 3. LAYER PACKAGE IN PAWPAK WITH FOAM.
 - 4. ALL SIGNALS ROUTED PIN TO PIN, E.G. 1 TO 1, 2 TO 2, ETC.
 - 5. PARTS TO BE RoHS COMPLIANT

THIS PRODUCT MANUFACTURED WITH LEAD-FREE PROCESSING

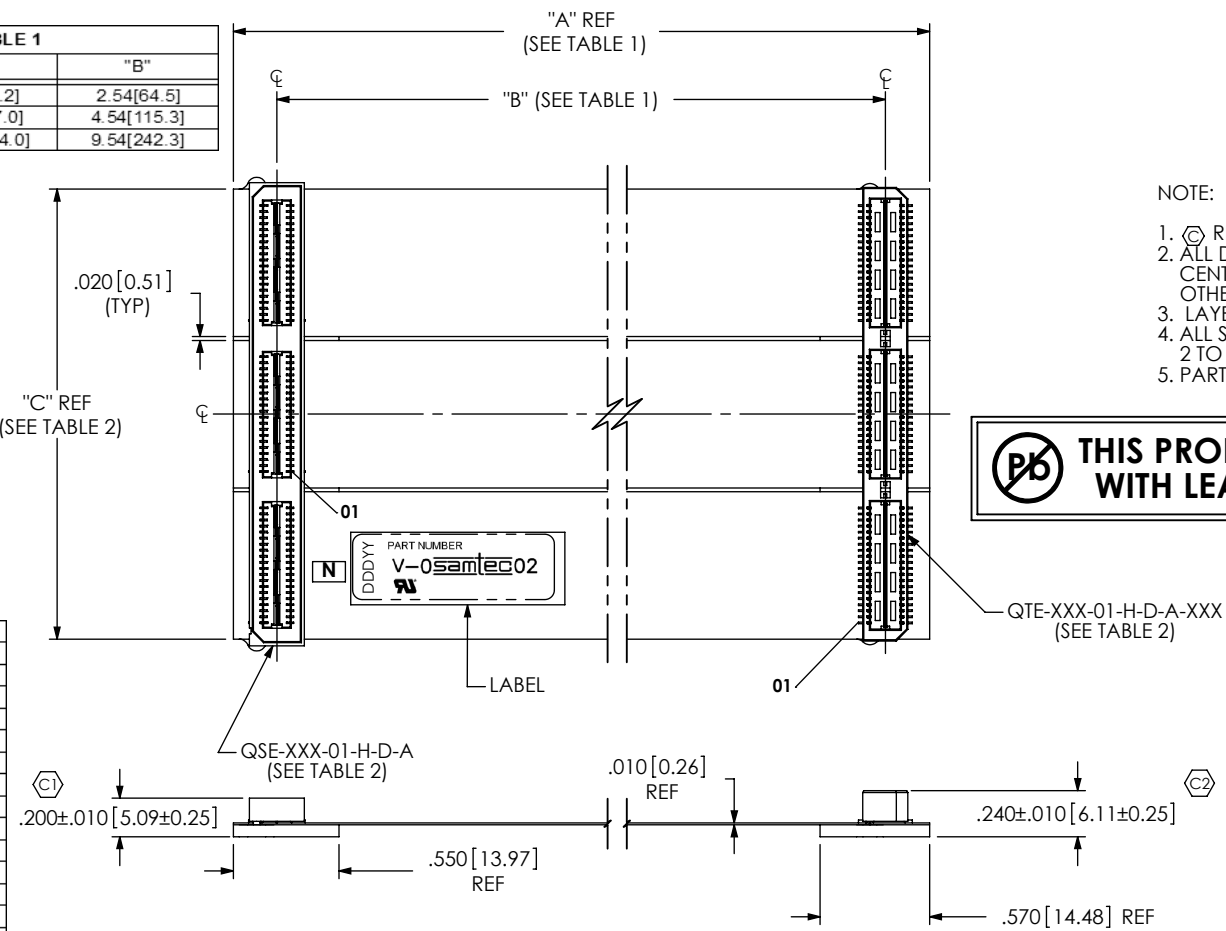
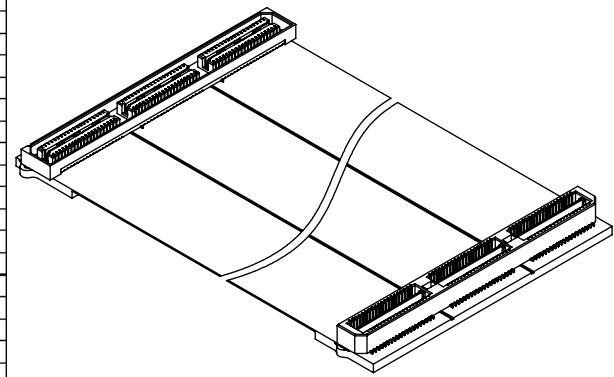


FIG 1
HFEM2-060-T-10.00-SE SHOWN



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

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CONNECTOR MATERIALS: INSULATORS: LCP CONTACTS, TERMINALS, & GROUND PLANES: PHOS BRONZE
FLEX MATERIALS: SEE CROSS SECTION DETAIL

DO NOT SCALE DRAWING SHEET SCALE: 1:1

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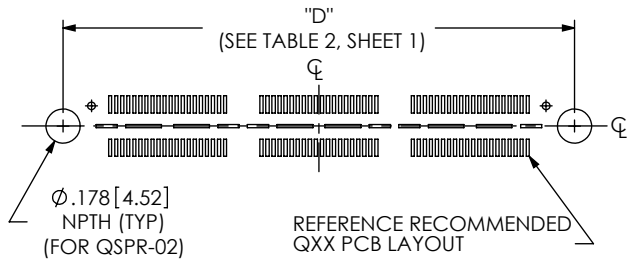
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code: 55322

DESCRIPTION:
HIGH SPEED FLEX 0.8mm ASSEMBLY

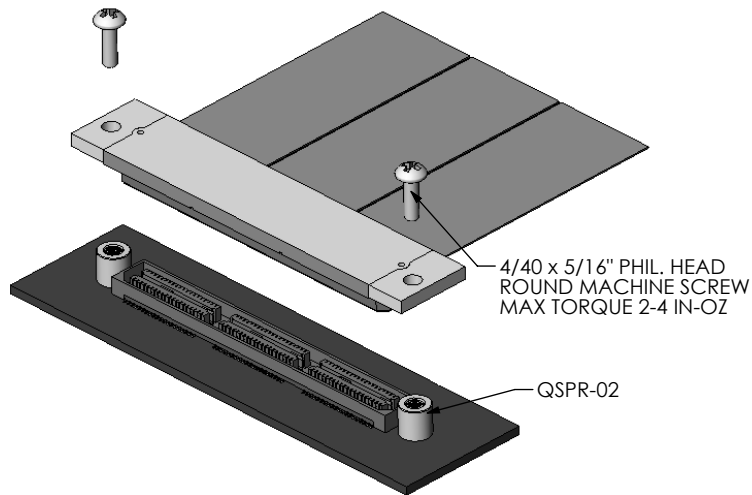
DWG. NO.
HFEM2-XXX-T-XX.XX-SE-XXX

BY: J CUMMINGS 12/27/2004 SHEET 1 OF 4

RECOMMENDED LAYOUT FOR -MH SCREW DOWN OPTIONS



SCREW DOWN APPLICATION VIEW



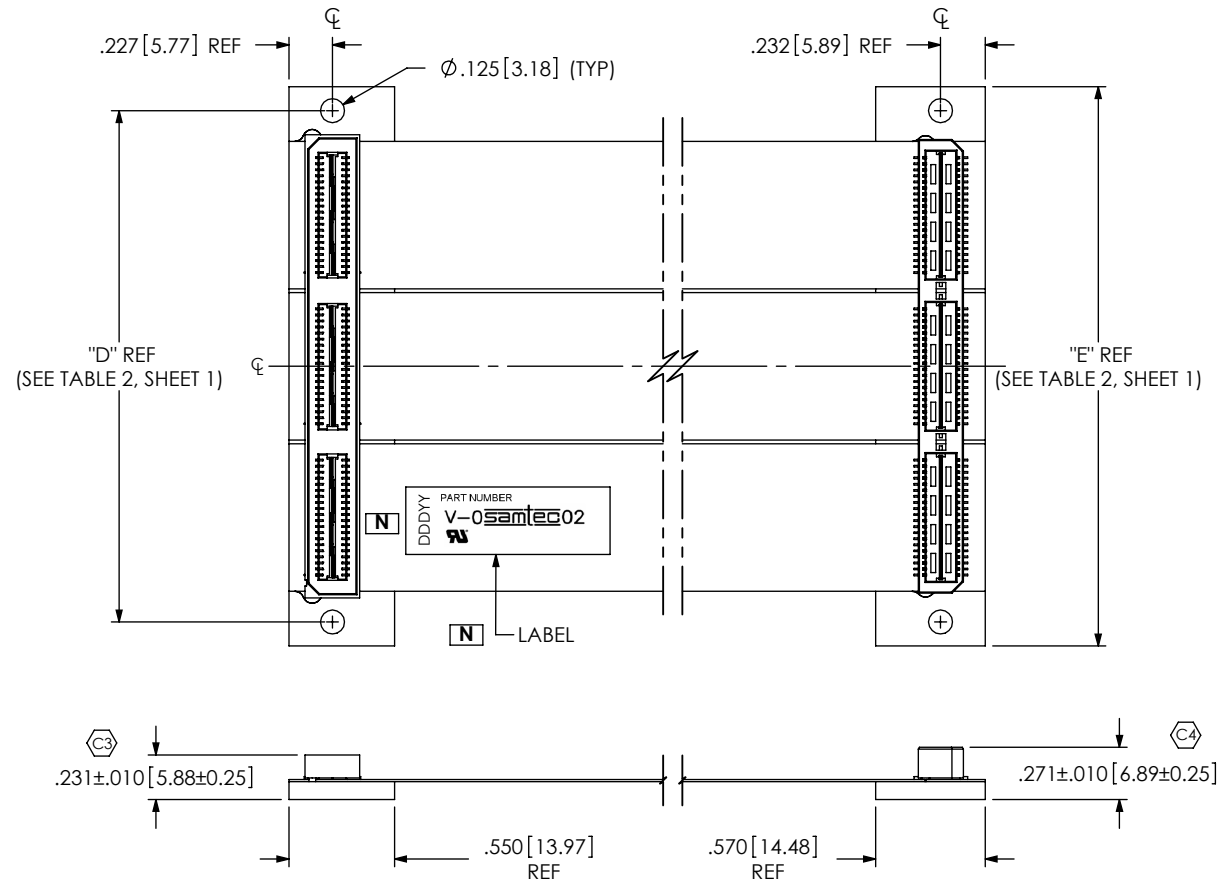
COVERFILM		.002[0.05] POLYIMIDE .001[0.03] ADHESIVE
COPPER CLAD		1/2 oz COPPER .001 [0.03] ADHESIVE .001 [0.03] POLYIMIDE .001 [0.03] ADHESIVE 1/2 oz COPPER
COVERFILM		.001 [0.03] ADHESIVE .002[0.05] POLYIMIDE
ADHESIVE		.001 [0.03] ADHESIVE
STIFFENER		STANDARD: .062[1.57] FR4 -MH OPTION: .093[2.36] FR4 -RT1 OPTION: .093[2.36] FR4

CROSS SECTION OF FLEX & STIFFENER

NOT TO SCALE

FIG. 2

-MH OPTION
(SAME AS FIG. 1, UNLESS OTHERWISE STATED)
HFEM2-060-T-10.00-SE-MH SHOWN



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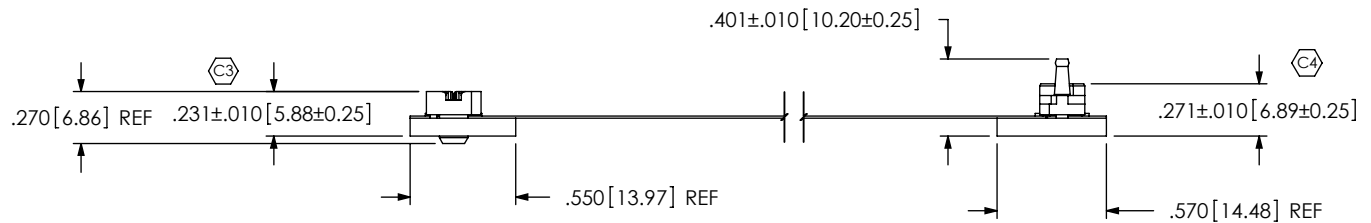
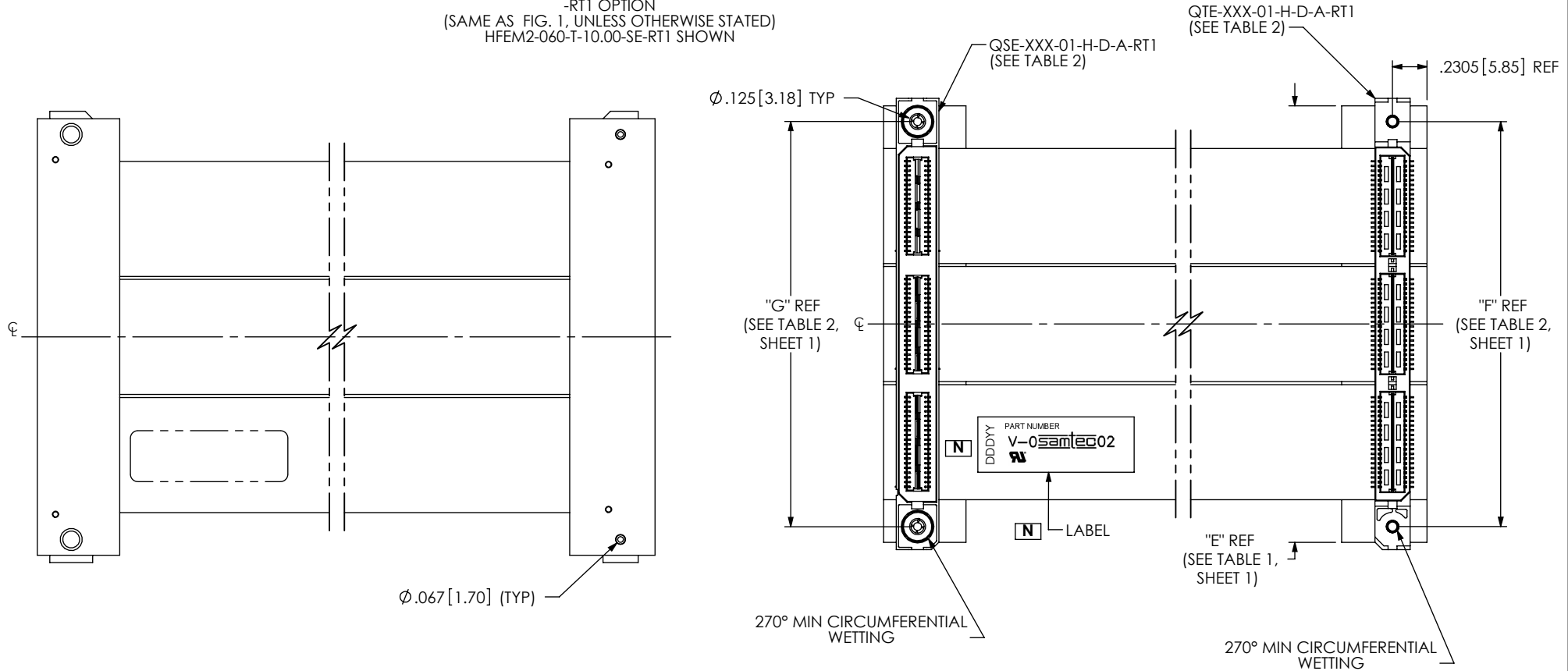
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PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code: 55322

DESCRIPTION:
HIGH SPEED FLEX 0.8mm ASSEMBLY

DWG. NO.
HFEM2-XXX-T-XX.XX-SE-XXX

BY: J CUMMINGS 12/27/2004 SHEET 2 OF 4

FIG. 3
 -RT1 OPTION
 (SAME AS FIG. 1, UNLESS OTHERWISE STATED)
 HFEM2-060-T-10.00-SE-RT1 SHOWN



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DESCRIPTION: HIGH SPEED FLEX 0.8mm ASSEMBLY	
DWG. NO. HFEM2-XXX-T-XX.XX-SE-XXX	
BY: J CUMMINGS 12/27/2004	SHEET 3 OF 4

HFEM2-SE

-20 Shown. -40 and -60 repeat same pattern.

J1 Pin	Signal	J2 Pin
1	S	1
2	S	2
3	S	3
4	S	4
5	S	5
6	S	6
7	S	7
8	S	8
9	S	9
10	S	10
11	S	11
12	S	12
13	S	13
14	S	14
15	S	15
16	S	16
17	S	17
18	S	18
19	S	19
20	S	20
21	S	21
22	S	22
23	S	23
24	S	24
25	S	25
26	S	26
27	S	27
28	S	28
29	S	29
30	S	30
31	S	31
32	S	32
33	S	33
34	S	34
35	S	35
36	S	36
37	S	37
38	S	38
39	S	39
40	S	40

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BY: J CUMMING	2/27/2004
SHEET 4 OF 4	