

PFC-HFHM-XXX-T-XX.XX-DP-XX A

PFC-HFHM-XXX-T-XX.XX-DP-XX

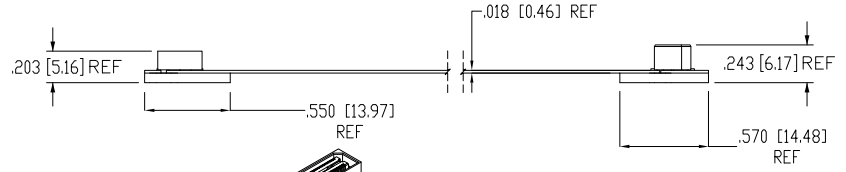
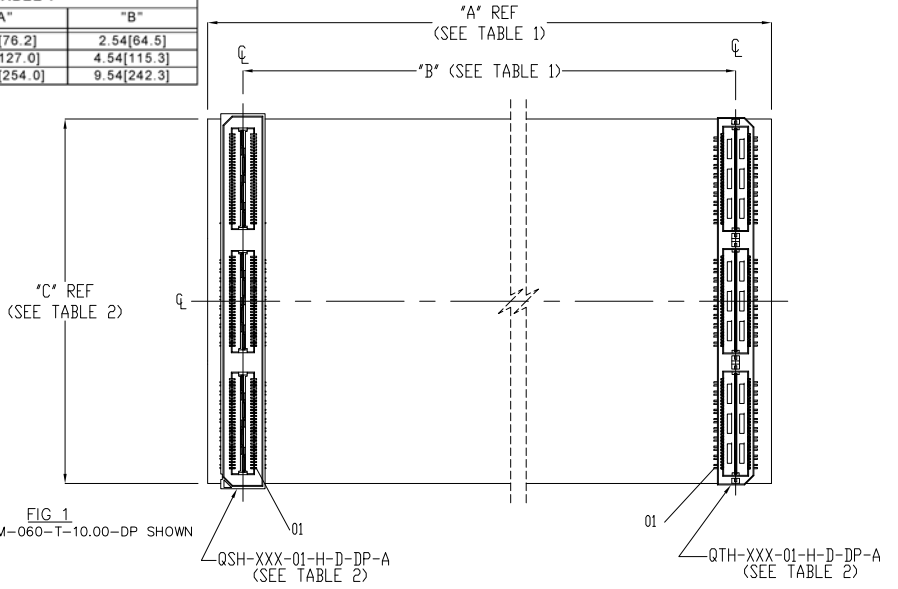
TABLE 2

No. OF POS	"C"	"D"	"E"	QSH-XXX-01-H-D-DP-A	QTH-XXX-01-H-D-DP-A
-020	.768 +/- .010 [19.50 +/- 0.25]	1.0875[27.623]	1.3375[33.973]	QSH-020-01-H-D-DP-A	QTH-020-01-H-D-DP-A
-040	1.556 +/- .010 [39.52 +/- 0.25]	1.8755[47.638]	2.1255[53.988]	QSH-040-01-H-D-DP-A	QTH-040-01-H-D-DP-A
-060	2.344 +/- .010 [59.54 +/- 0.25]	2.6635[67.653]	2.9135[74.003]	QSH-060-01-H-D-DP-A	QTH-060-01-H-D-DP-A

TABLE 1

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]

No OF POSITIONS ———— OPTION
 -020, -040, -060 (PER ROW) ———— -MH: MOUNTING HOLES (SEE FIG. 2, SHEET 2) (LEAVE BLANK FOR STANDARD)
 TRANSFER END (MALE-FEMALE) ———— -DP: DIFFERENTIAL PAIRS
 LENGTH ————
 -03.00: 3.00[76.2] INCHES
 -05.00: 5.00[127.0] INCHES
 -10.00: 10.00[254.0] INCHES



- FLEX NOTE:**
- Ⓢ REPRESENTS A CRITICAL DIMENSION
 - FABRICATION OF THIS FLEX SHALL BE IN CONFORMANCE WITH IPC-6013 CLASS 2
 - DIMENSIONS ARE IN INCHES
 - FLAME CLASS TO BE UL 94V-0 AND MUST MEET REQUIREMENTS OF UL796
 - SEE PFC GERBER PACKAGE FOR HOLE CHART AND PLATING SPECS.
 - SEE PFC GERBER PACKAGE FOR CONDUCTOR GEOMETRY
 - SEE PFC GERBER PACKAGE FOR STIFFENER TOOL-CHART GEOMETRY
 - COVERFILM/SOLDERMASK: MUST BE IN ACCORDANCE WITH IPC-6013 CLASS 2
 - FINISH: IMMERSION GOLD (ENIG) PER IPC-4552
 - FR4 Tg: MINIMUM GLASS TRANSITION TEMPERATURE (Tg) OF 170°C
 - BOW AND TWIST: MAXIMUM ALLOWABLE BOW AND TWIST TO BE IN ACCORDANCE WITH IPC 6013 CLASS 2
 - ROHS: ALL MATERIALS MUST BE COMPLIANT WITH THE EUROPEAN UNION ROHS DIRECTIVE, 2002/95/EC
 - LAYER STACK-UP FOR IMPEDANCE:
 LAYER 1-GROUND PLANE (HATCH)
 LAYER 2-100 OHMS SIGNAL (DP) TRACE WIDTH= 0.0056" SPACING=0.0067"
 LAYER 3-GROUND PLANE (HATCH)
 *CONTROLLED IMPEDANCE REQUIREMENT OF ±10%
 - CONDUCTORS: MINIMUM TRACE =0.005"
 - SILKSCREEN: WHITE NONCONDUCTIVE INK.
 - ELECTRICAL TEST: TESTED TO STANDARD PFC-WI-136
 100% ISOLATION AND CONTINUITY TEST REQUIRED FOR EVERY BOARD
 100% HI-POT TEST REQUIRED AT 250V
 MAXIMUM CONNECTOR TO CONNECTOR TO BE 10 OHMS
 MINIMUM PIN TO PIN ISOLATION TO BE 5.0 MEGA OHMS
 - PFC LOT CODE: CONTAIN PFC LOGO WITH UL MARKING AND WW-YY LHT#

- FLEX ASSEMBLY NOTE:**
- PARTS TO BE 100% ELECTRICALLY TESTED PER PFC-WI-136
 - PACKAGING: ALL ASSEMBLIES TO BE PACKAGED TO PFC-WI-164
 - ALL SIGNALS ROUTED PIN TO PIN (E.G. 1 TO 1, 2 TO 2, ETC)
 - PARTS TO BE RoHS COMPLIANT
 - SOLDER TYPE: NO CLEAN LEAD-FREE

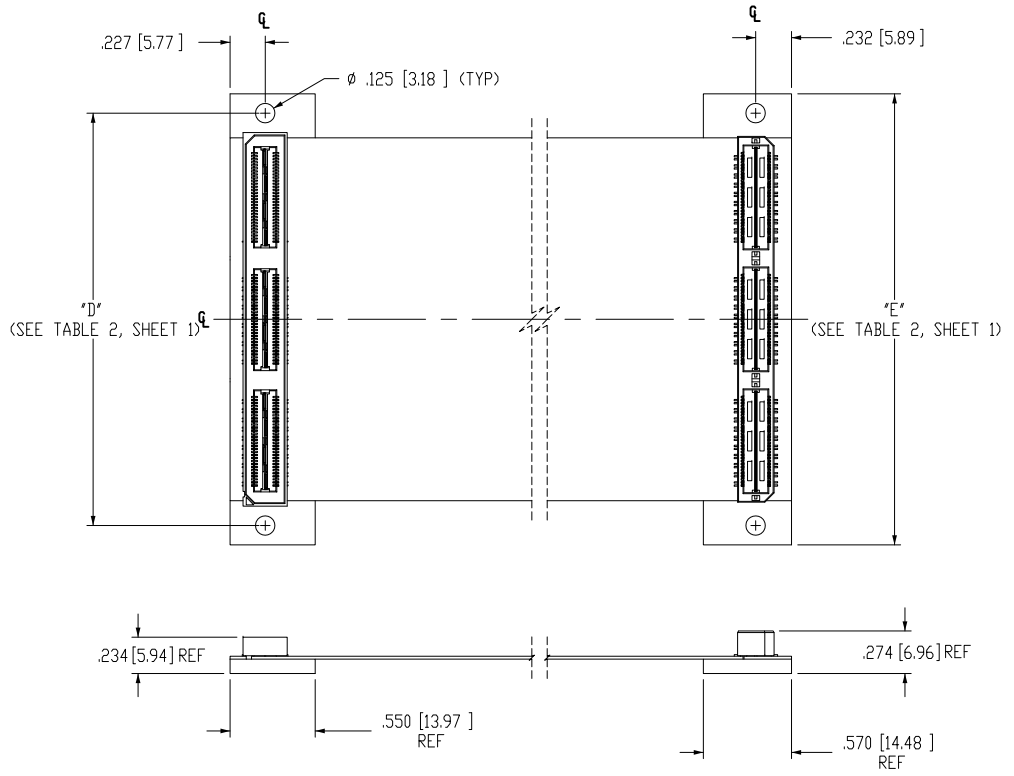
THIS PRODUCT MANUFACTURED WITH LEAD-FREE PROCESSING

TABLE 3 (FOR PFC FLEX MANUFACTURING REFERENCE)

PART NUMBER
PFC-HFHM-020-T-03.00-DP
PFC-HFHM-020-T-03.00-DP-MH
PFC-HFHM-040-T-03.00-DP
PFC-HFHM-040-T-03.00-DP-MH
PFC-HFHM-060-T-03.00-DP
PFC-HFHM-060-T-03.00-DP-MH
PFC-HFHM-020-T-05.00-DP
PFC-HFHM-020-T-05.00-DP-MH
PFC-HFHM-040-T-05.00-DP
PFC-HFHM-040-T-05.00-DP-MH
PFC-HFHM-060-T-05.00-DP
PFC-HFHM-060-T-05.00-DP-MH
PFC-HFHM-020-T-10.00-DP
PFC-HFHM-020-T-10.00-DP-MH
PFC-HFHM-040-T-10.00-DP
PFC-HFHM-040-T-10.00-DP-MH
PFC-HFHM-060-T-10.00-DP
PFC-HFHM-060-T-10.00-DP-MH

UNLESS OTHERWISE NOTED		PROPRIETARY NOTE	PFC FLEXIBLE CIRCUITS
DIMENSIONS ARE IN INCHES	TOLERANCES ARE:	THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO PFC 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 PFC FLEXIBLE CIRCUITS	
ONE PLACE DECIMALS ±.1	THREE PLACE DECIMALS ±.015	DO NOT SCALE DRAWING	DESCRIPTION: HIGH SPEED FLEX 0.50mm ASSEMBLY
TWO PLACE DECIMALS ±.02	FOUR PLACE DECIMALS ±.0050	CONNECTOR MATERIALS: INSULATORS: LCP CONTACTS, TERMINALS, & GROUND PLANES: PHOS BRONZE FLEX MATERIALS: SEE CROSS SECTION DETAIL	DWG. NO. PFC-HFEM-XXX-T-XX.XX-DP-XX
	ANGULAR ± 3.0 DEG	DO NOT SCALE DRAWING	REV. A
		SHEET SCALE: 1:1	BY: PFC 07/18/2013 SHEET 1 OF 3

FIG 2
 -MH OPTION
 (SAME AS FIG. 1, UNLESS OTHERWISE STATED)
 PFC-HFHM-060-T-10.00-DP-MH SHOWN



COVERFILM	[]	.001[0.03] POLYIMIDE .001[0.03] ADHESIVE
COPPER CLAD	[]	1 oz COPPER .004[0.10] POLYIMIDE
ADHESIVE	[]	.002[0.05] ADHESIVE
COPPER CLAD	[]	1 oz COPPER .001[0.03] ADHESIVE
	[]	.003[0.08] POLYIMIDE
	[]	.001[0.03] ADHESIVE 1 oz COPPER
COVERFILM	[]	.001[0.03] POLYIMIDE .001[0.03] ADHESIVE
ADHESIVE	[]	.002[0.05] ADHESIVE
STIFFENER	[]	STANDARD: .059[1.50] FR4 -MH OPTION: .093[2.36] FR4

CROSS SECTION OF FLEX & STIFFENER
 NOT TO SCALE

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DIMENSIONS ARE IN INCHES			DESCRIPTION: HIGH SPEED FLEX 0.50mm ASSEMBLY	
TOLERANCES ARE:			DWG. NO. PFC-HFEM-XXX-T-XX.XX-DP-XX REV. A	
ONE PLACE DECIMALS ±.1	THREE PLACE DECIMALS ±.015	BY: PFC 07/18/2013 SHEET 2 OF 3		
TWO PLACE DECIMALS ±.02	FOUR PLACE DECIMALS ±.0050			
	ANGULAR ± 3.0 DEG			
DO NOT SCALE DRAWING SHEET SCALE: 1:1				
CONNECTOR MATERIALS: INSULATORS: LCP CONTACTS, TERMINALS, & GROUND PLANES: PHOS BRONZE FLEX MATERIALS: SEE CROSS SECTION DETAIL				

HFHM-DP

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

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

UNLESS OTHERWISE NOTED		<p>PROPRIETARY NOTE</p> <p>THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO PFC 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 PFC FLEXIBLE CIRCUITS</p>	<p>PFC FLEXIBLE CIRCUITS</p> <p>11 CANADIAN ROAD UNIT 7 SCARBOROUGH ONTARIO PHONE: 416-750-8433 FAX: 416-750-0016 e-Mail: sales@pfcflex.com</p>	
DIMENSIONS ARE IN INCHES ONE PLACE DECIMALS ±.1 TWO PLACE DECIMALS ±.02	TOLERANCES ARE: THREE PLACE DECIMALS ±.015 FOUR PLACE DECIMALS ±.0050 ANGULAR ± 3.0 DEG		DESCRIPTION: HIGH SPEED FLEX 0.50mm ASSEMBLY	
CONNECTOR MATERIALS: INSULATORS: LCP CONTACTS, TERMINALS, & GROUND PLANES: PHOS BRONZE FLEX MATERIALS: SEE CROSS SECTION DETAIL		DO NOT SCALE DRAWING SHEET SCALE: 1:1	DWG. NO. PFC-HFEM-XXX-T-XX.XX-DP-XX	REV. A
		BY: PFC	07/18/2013	SHEET 3 OF 3

D

C

B

A

D

C

B

A