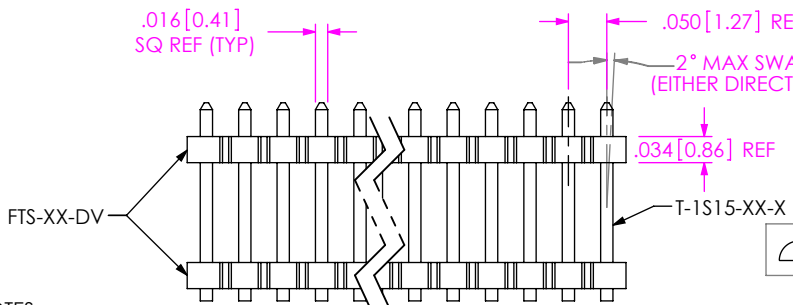
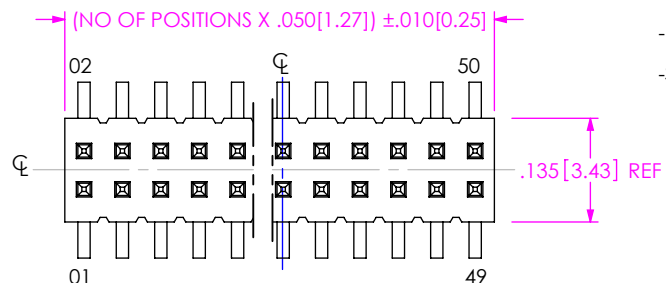


DO NOT SCALE FROM THIS PRINT

TABLE 4		
LEAD STYLE	"F" RANGE	TERMINAL PIN
-03	.150-.214	T-1S15-04-X
-03	.215-.400	T-1S15-19-X
-05	.401-.525	T-1S15-20-X
-05	.526-.675	T-1S15-21-X

TABLE 2				
LEAD STYLE	OPTIONS	OVERALL HEIGHT	PACKAGING TUBE	PLUG
-03	-A-P	.150 - .650	PT-FW005-D-03-P	TP-03
-03	NONE, A	.150 - .225	PT-FW005-D-03-P	TP-03
-03	NONE, A	.226 - .309	PT-FW005-D-03-P	TP-03
-03	NONE, A	.310 - .400	PT-FW005-D-03-P	TP-03
-05	NONE, A	.310 - .800	PT-FW006-D-05-P	TP-03
-05	-A-P	.310 - .650	PT-FW006-D-05-P	TP-03
-05	-A-P	.651 - .800	PT-FW006-D-05-P	TP-03
-03, -05	-ES, -EP, -ES-A, -ES-A-P, -ES-P, -EPA, -EP-P, -EP-A-P	ALL	PT-1-24-01-71	TP-03

PACKAGING NOTE:  
TUBE POSITIONS 5-50, LAYER PACKAGE ALL OTHERS



- NOTES:
- ⊕ REPRESENTS A CRITICAL DIMENSION.
  - MINIMUM PUSHOUT FORCE SHALL BE 1 LB.
  - GOLD AREA TO APPEAR ON POST.
  - TAILS TO BE SHEARED TO DIMENSION SHOWN. (FOR HAND TOOLING ONLY)
  - TO BE VALID ALL PART NUMBERS MUST MEET THE FOLLOWING PARAMETERS:  
THE BOARD SPACE RANGE, POST HEIGHT MIN. AND BOARD + POST COMBINATION FOR EACH STYLE.
  - MAXIMUM BURR: .003[0.08] ON CUT TAIL.
  - MAXIMUM CUT FLASH TO BE .010[0.25] ON CRITICAL AREAS AS SHOWN.
  - AVAILABLE ONLY W/BOARD SPACE .215[5.46] TOP .610[15.49].
  - PARTS TO BE ASSEMBLED WITH ALIGNMENT HOLES (IN BODY) FACING THE TAILS
  - LOWER BODY MAY BE BLACK OR WHITE.
  - FOR FTS-XX-DV, FILL BODY SO THAT THE LEAD IN OF THE CORE IS ON THE TAIL SIDE.
  - MAXIMUM HEIGHT VARIATION BETWEEN ROWS: .005[0.13].
  - FOR ADDED MECHANICAL STABILITY, SAMTEC RECOMMENDS MECHANICAL BOARD SPACERS BE USED IN APPLICATIONS WITH GOLD OR SELECTIVE GOLD PLATED CONNECTORS. CONTACT IPG@SAMTEC.COM FOR MORE INFORMATION.
  - NOTE DELETED.
  - TUBES 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.

FW-XX-XX-XX-D-XXX-XXX-XX-X-XX

POSITION SPEC  
No. OF POS PER ROW  
-02 THRU -50

LEAD STYLE  
-03: USE T-1S15-XX-X  
-05: USE T-1S15-XX-X  
(SEE TABLE 1)

PLATING

- G: 10μ" GOLD IN CONTACT AREA, 3μ" GOLD ON TAIL
- F: 3μ" SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL
- L: 10μ" SELECTIVE GOLD IN CONTACT AREA, MATTE TIN TAIL
- H: 30μ" GOLD IN CONTACT AREA, 3μ" GOLD ON TAIL
- LM: 10μ" SELECTIVE GOLD IN CONTACT AREA, MATTE TIN TAIL
- FM: 3μ" SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL
- S: 30μ" SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL

DOUBLE ROW  
(SEE TABLE 1 FOR BODY STYLE)

BOARD SPACE OPTION

(SEE NOTE 5)(SEE TABLE 1)  
-03 LEAD STYLE (.085[2.16] MIN - .335[8.51] MAX)  
-05 LEAD STYLE (.248[6.30] MIN - .610[15.49] MAX)  
MAX = "A" - POST (SEE TABLE 1)

PACKAGING

BLANK: TUBES (SEE NOTE 15)  
-TR: TAPE & REEL (SEE NOTES 16 & 17)  
-FR: FULL REEL QTY TAPE & REEL (SEE NOTES 16 & 17)  
-TR & -FR PACKAGING AVAILABLE FOR .740[18.80] MAX OVERALL HEIGHT  
MAX OVERALL HEIGHT = POST + BOARDSPACE + PAD + ALIGNMENT PIN = .740[18.80]

PICK & PLACE OPTION

-P: PICK & PLACE PAD (USE PPP-25) (USE PPP-25-NT WITH -TR & -FR ONLY) (SEE FIG 3, SHT 2) (5 POS MIN)

OPTION

- ES: END SHROUDS (SEE FIG 5, SHT 2) (9 POS PER ROW MIN)(MAX POST: .075[1.91] (SEE NOTE 8))
- EP: GUIDE POST (FIG 6, SHT 3)(SEE NOTE 8) (9 POS PER ROW MIN)(MAX POST: .075[1.91] (USE ONLY WHEN MATING WITH CLP))
- A: ALIGNMENT PIN (MOLDED OR STAKED, SAMTEC'S DISCRETION ON WHICH) (SEE FIG. 7 & 8 SHT 3)(SEE NOTE 8) (STAKED: 6 POS MIN)(MOLDED: 3 POS MIN)

POST HEIGHT (SEE NOTE 5)

.065[1.65] MIN  
POST + BOARD SPACE = "F" =  
-03: .150-.400 [3.81-10.16]  
\*.401-.675 [10.19-17.15]  
-05: \*150-.400 [3.81-10.16]  
.401-.675 [10.19-17.15]  
\* = FOR EXISTING CUSTOMERS ONLY

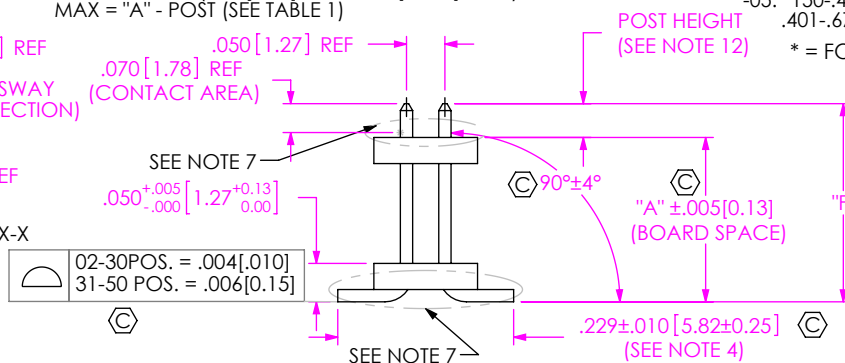


FIG 1

LEAD STYLE	"A" RANGE	"C" RANGE (SEE SHEET 2, FIG 5 & 6)	"D" RANGE (SEE SHEET 2, FIG 5 & 6)	BODY STYLE		FIG
				UPPER BODY	LOWER BODY	
-03	.085 - .214 [2.18 - 5.44]	N/A	N/A	FTS-XXDV	FTS-XXDV	1
-03	.215 - .335 [5.48 - 8.51]	.293 - .423 REF [7.45 - 10.75]	.413 - .543 REF [10.50 - 13.79]	FTSH-XX-D	*FTSH-XX-D	4 (SEE SHEET 2)
-05	.248 - .610 [6.30 - 15.49]	.326 - .698 REF [8.28 - 17.73]	.446 - .818 REF [11.32 - 20.78]	FTSH-XX-D	FTSH-XX-D	4 (SEE SHEET 2)

\* FOR BKT MACHINE, USE FW-XX-D

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.

TOLERANCES ARE:

DECIMALS ANGLES  
.XX: ±.01[0.3]  
.XXX: ±.005[0.13]  
.XXXX: ±.0020[0.051]

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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 53322

MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 4:1  
BODY: LCP, UL 94 VO, COLOR: FTS-50-DV & FTSH-50-D: BLACK  
FW-50-D: NATURAL

TERMINAL: PHOS BRONZE

MAX FLASH ALLOWED: .002[0.05]  
MAX GATE VESTIGE: .002[0.05]

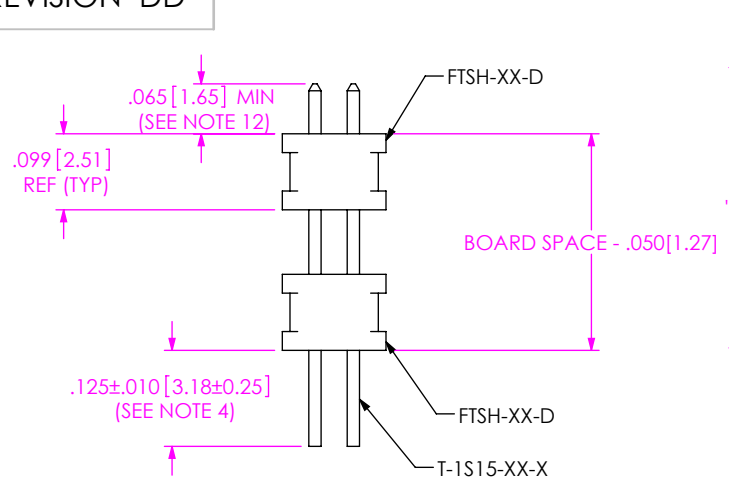
F:\DWG\MISC\MKTG\FW-XX-XX-XX-D-XXX-XXX-XX-X-XX-MKT.SLDDRW

DESCRIPTION: .050 x .050 SURFACE MOUNT BOARD SPACERS

DWG. NO.

FW-XX-XX-XX-D-XXX-XXX-XX-X-XX

BY: BRATCHER 11-03-1994 SHEET 1 OF 4



NOTE: SHEAR TAILS TO DIM SHOWN.

IN-PROCESS 1

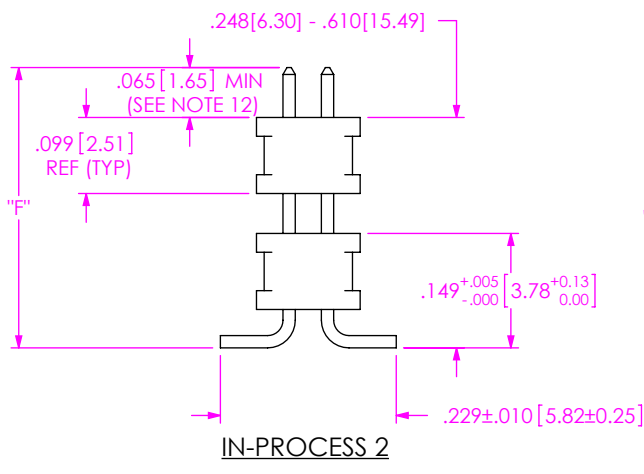
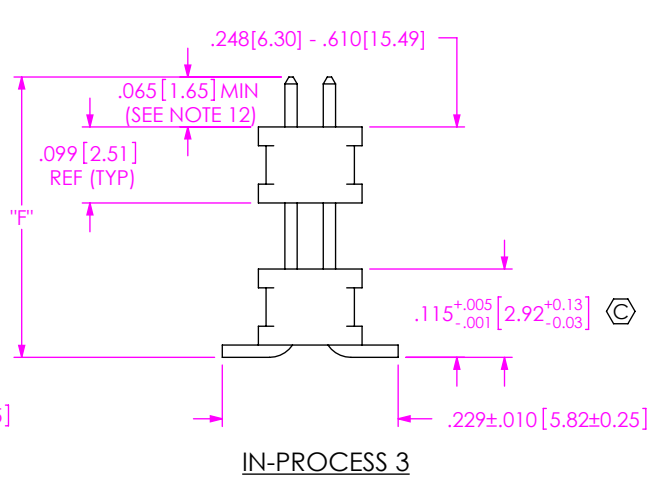


FIG 4

DIFFERENT AS SHOWN, OTHERWISE THE SAME AS FIG 1



IN-PROCESS 3

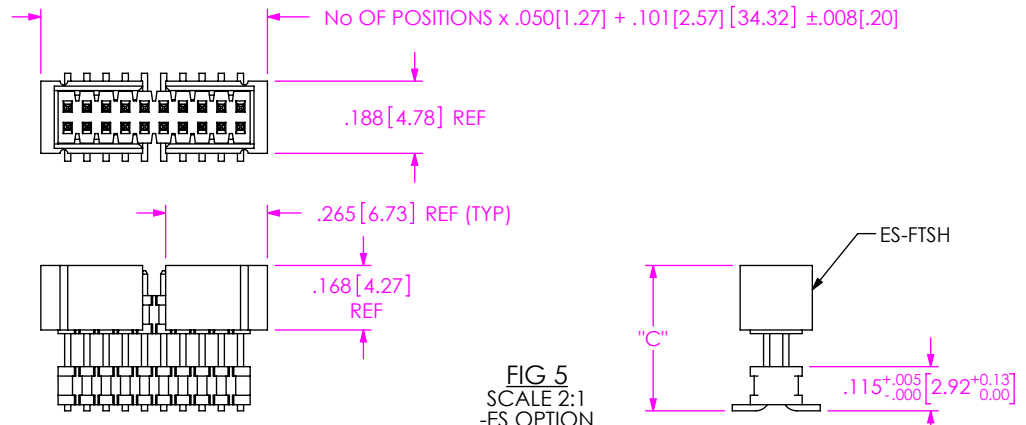


FIG 5  
SCALE 2:1  
-ES OPTION

DIFFERENT AS SHOWN, OTHERWISE THE SAME AS FIG 1  
9 POSITION MINIMUM (SEE NOTE 8)

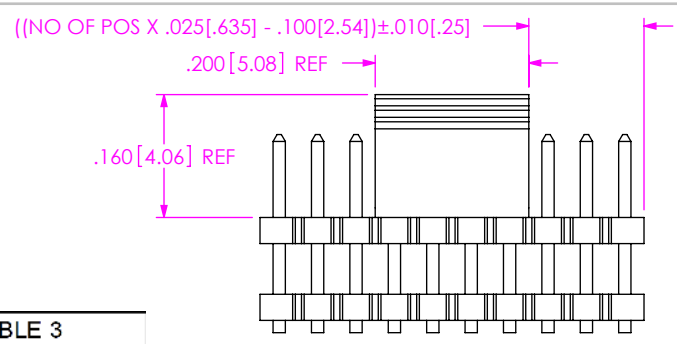
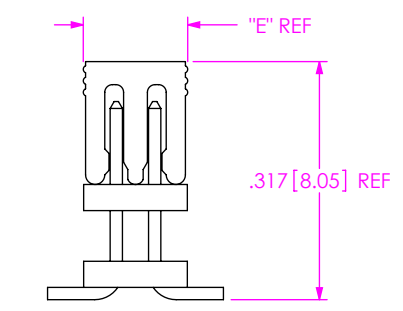


FIG 3  
(PICK AND PLACE PAD)  
(5 POSITION MINIMUM)



SHOWN WITH LEAD STYLE -03

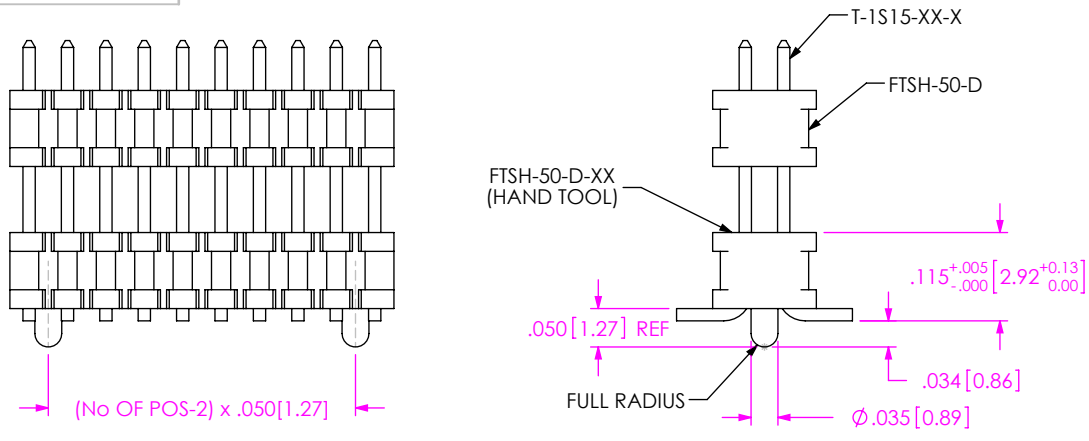
TABLE 3	
PART No.	"E"
PPP-25	.130 [3.30]
PPP-25-NT	.230 [5.84]

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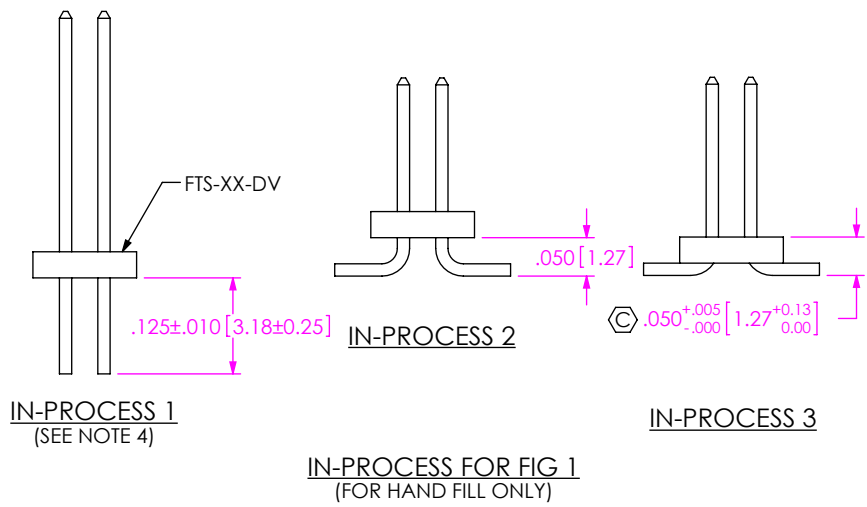
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SHEET SCALE: 4:1



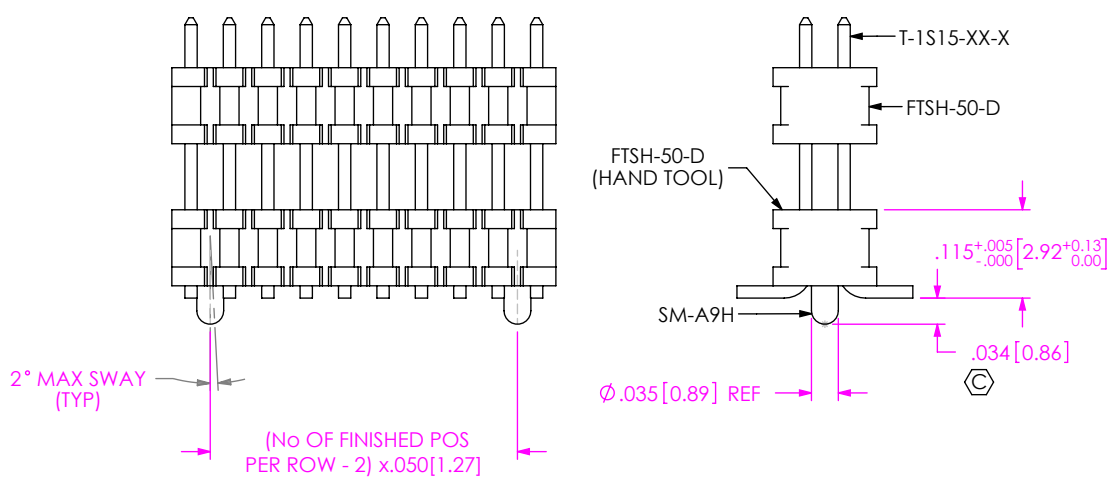
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.050 x .050 SURFACE MOUNT BOARD SPACERS  
DWG. NO.  
**FW-XX-XX-XX-D-XXX-XXX-XX-X-XX**  
BY: BRATCHER 11-03-1994 SHEET 2 OF 4



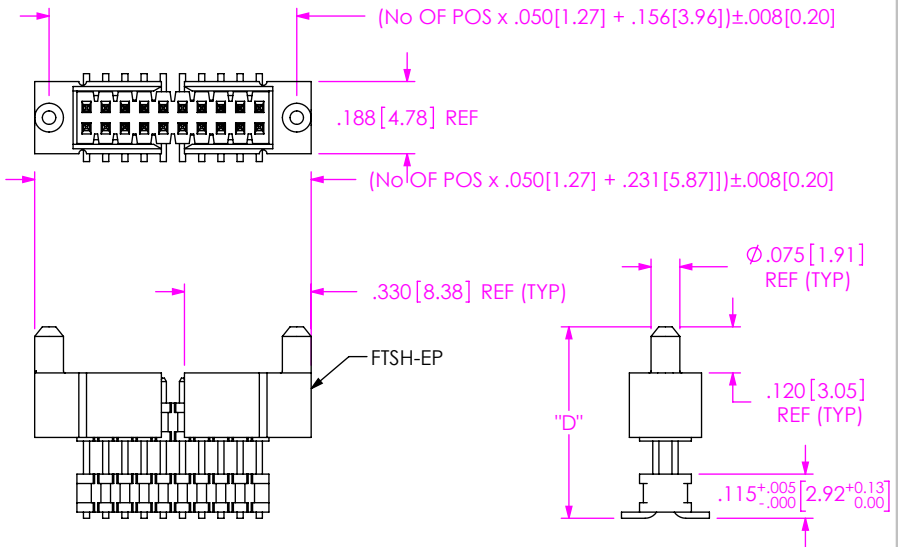
**FIG 7**  
-A OPTION (MOLDED)  
MOLD 3 POSITION MIN  
DIFFERENT AS SHOWN OTHERWISE SAME AS FIG 1



**IN-PROCESS FOR FIG 1**  
(FOR HAND FILL ONLY)



**FIG 8**  
-A OPTION (STAKED)  
6 POSITION MIN  
DIFFERENT AS SHOWN OTHERWISE SAME AS FIG 1

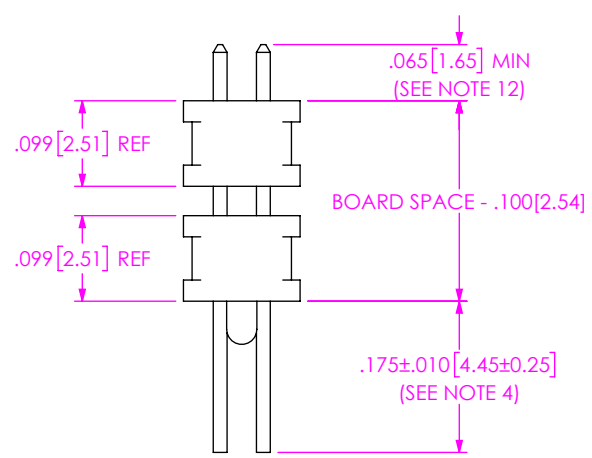


**FIG 6**  
-EP OPTION  
USE ONLY WHEN MATING TO CLP  
(9 POSITION MIN)  
(SEE NOTE 8)  
DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1

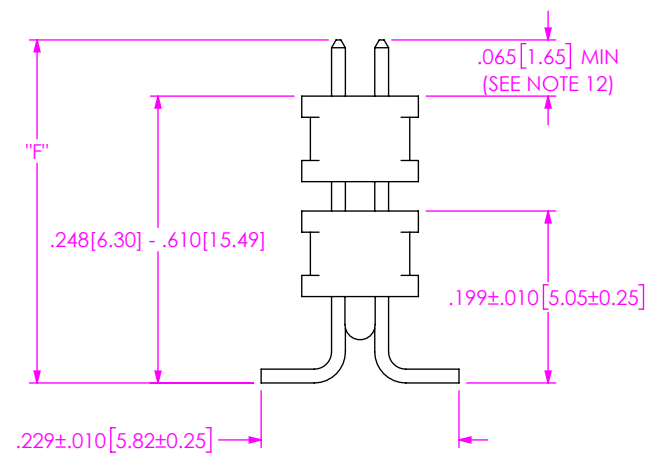
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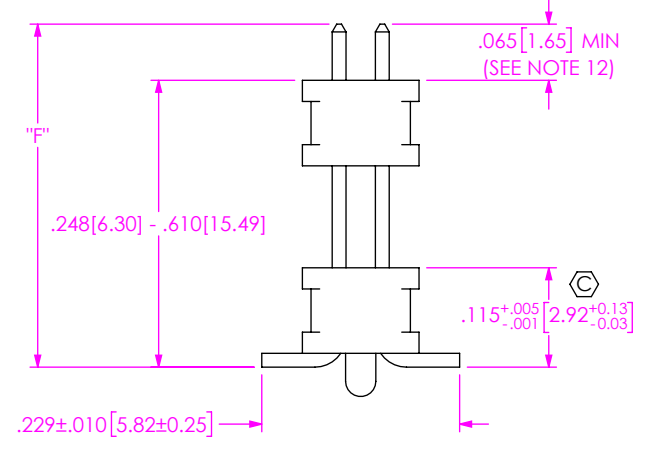
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DWG. NO.  
**FW-XX-XX-XX-D-XXX-XXX-XX-X-XX**  
BY: BRATCHER 11-03-1994 SHEET 3 OF 4



IN-PROCESS 1  
SHEAR TAILS TO DIM SHOWN



IN-PROCESS 2



IN-PROCESS 3

IN-PROCESS FOR -A OPTION  
(FOR HAND FILL ONLY)

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e-Mail info@SAMTEC.com code 55322

DESCRIPTION:  
.050 x .050 SURFACE MOUNT BOARD SPACERS

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

BY: BRATCHER 11-03-1994 SHEET 4 OF 4