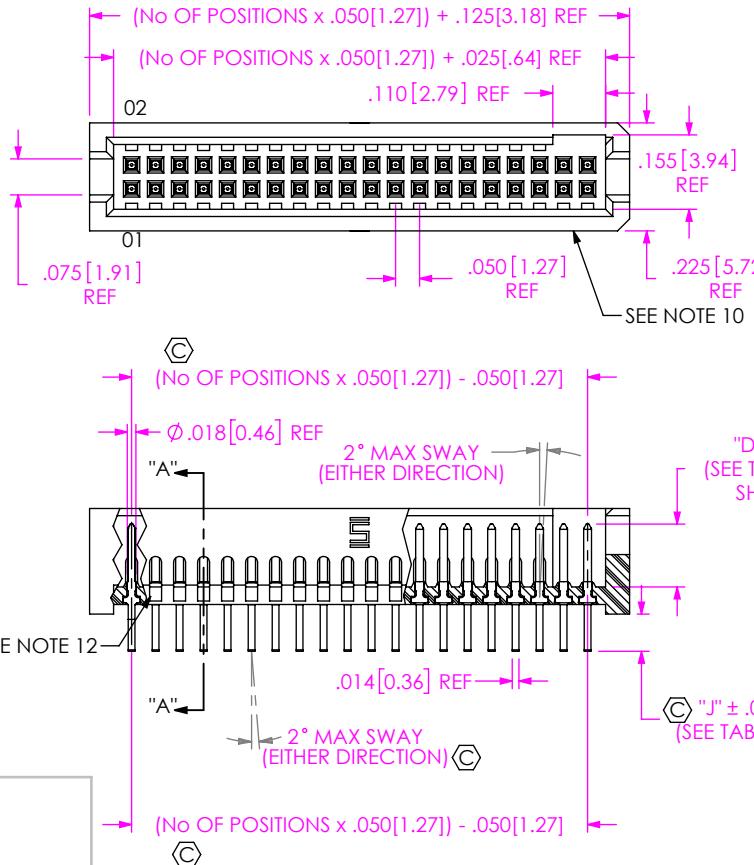
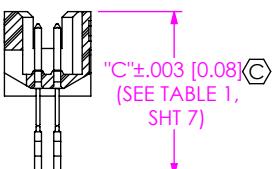


DO NOT  
SCALE FROM  
THIS PRINT

NOTES:

1.  $\odot$  REPRESENTS A CRITICAL DIMENSION.
2. MINIMUM PUSHOUT FORCE FOR CONTACTS, WELD TABS, AND THREADED INSERTS: 12 OZ.
3. MINIMUM LOCKING CLIP RETENTION: 8 OZS.
4. MAXIMUM HEIGHT VARIATION BETWEEN ANY TWO PINS: .005[0.13]
5. MAXIMUM TERMINAL BURR: .003[0.08]
6. COPLANARITY: .004[0.10] = POS 02 THRU 26  $\odot$   
.006[0.15] = POS 27 THRU 50
7. MEASURED FROM BEND.
8. DIMENSION CHANGED PER REVISION AD. CONTACT ENGINEERING FOR INFORMATION.
9. MEASURE FROM TIPS OF PIN.
10. THIS FEATURE ONLY PRESENT ON -01 & -02 LEAD STYLES.
11. 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.
12. SIDES OF PLASTIC BODIES ON ALL LEAD STYLES EXCEPT THE -01, -02 & -03 WILL BE SOLID AND WITHOUT SIDE SLOTS.
13. NOTE DELETED.

FIG 1  
THROUGH HOLE  
-01, -03, -11, -13, -21, -23, -31

IN-PROCESS

## OPTION

- A: ALIGNMENT PIN (USE TFM-XX-D-XX-A, SEE TABLE 1) (SEE FIG 8, SHT 3) (NOT AVAILABLE FOR -RA OR -REX)
- LC: LOCKING CLIP (USE LC-05-TM) (NOT AVAILABLE FOR -RA OR -REX) (SEE FIG 10, SHT 3 & NOTES 3 & 11)
- P: PICK AND PLACE PAD (USE PPP-04) (AVAILABLE IN ALL POSITIONS -05 THRU -50 EXCEPT -05 WITH -WT) (NOT AVAILABLE FOR -RA OR -REX, SEE FIG 7, SHT 3)
- RA: RIGHT ANGLE (AVAILABLE ONLY IN LEAD STYLE: -01 SEE FIG 5, SHT 2)
- TR: TAPE AND REEL (SEE FIG 4, SHT 7) (NOT AVAILABLE WITH -DS OPTION OR THROUGH HOLE LEAD STYLE)
- SA: STAKED ALIGNMENT PIN (SEE FIG 9, SHT 3) (ONLY AVAILABLE ON SURFACE MOUNT LEAD STYLE)
- K: POLYIMIDE FILM (SEE FIG 3, SHT 2) (USE K-DOT-217-313-005) (NOT AVAILABLE FOR -RA OR -REX) (ALL LEAD STYLES EXCEPT -21 AVAILABLE)
- WT: WELD TABS (USE WT-25-XX-T) (AVAILABLE ON -01, -02 & -03 LEAD STYLES ONLY) (SEE FIG 6, SHT 2) (MATES WITH SFSS/SFSD-SR & -DR ONLY) (NOT AVAILABLE WITH -A, -LC, -RA, OR -SA OPTIONS)
- RE1: RIGHT ANGLE ELEVATED .062 PCB (USE TFM-XX-D-01-RE, NOT AVAILABLE WITHOUT -WT, AVAILABLE IN LEAD STYLE -01 ONLY, -03 THRU -50 POS) (MATES WITH SFSS/SFSD-SR & -DR ONLY) (SEE FIG 11, SHT 4)
- RE2: RIGHT ANGLE ELEVATED .093 PCB (USE TFM-XX-D-01-RE, NOT AVAILABLE WITHOUT -WT, AVAILABLE IN LEAD STYLE -01 ONLY, -03 THRU -50 POS) (MATES WITH SFSS/SFSD-SR & -DR ONLY) (SEE FIG 11, SHEET 4)
- SN: SOLDER NAIL FOR .062 BOARD (TFM-XX-D-01-SN AND WT-27-01-T) (SEE FIG 12, SHT 3) (ONLY AVAILABLE WITH -02 LEAD STYLE) (NOT AVAILABLE WITH OPTIONS -A, -LC, -RA, -SA, -WT, -RE1 OR -RE2)
- SN2: SOLDER NAIL FOR .093 BOARD (TFM-XX-D-01-SN AND WT-27-02-T) (SEE FIG 12, SHT 3) (ONLY AVAILABLE WITH -02 LEAD STYLE) (NOT AVAILABLE WITH OPTIONS -A, -LC, -RA, -SA, -WT, -RE1 OR -RE2)
- DS: DUAL SCREW DOWN FOR .062 BOARD (SEE FIG 18, SHT 5) (ONLY AVAILABLE WITH -01 & -02 LEAD STYLE) (NOT AVAILABLE WITH OPTIONS -A, -LC, -P, -RA, -TR, -SA, -K, -WT, -RE1, -RE2, -SN, -SN2) (-01 LEAD STYLE USES TFM-XX-D-01-DSL & T1-M2-4-VSFM-T, 02 LEAD STYLE USES TFM-XX-D-01-DSA & T1-M2-4-VSFM-T)

NO OF POSITIONS  
LEAD STYLE -01, -02, -03, -02 THRU -50 (ALL POSITIONS AVAILABLE)  
LEAD STYLES -11, -12, -13: (-05 THRU -50 MULTIPLES OF 5) POSITIONS 12, 16, 17 ALSO AVAILABLE  
LEAD STYLES -21, -22, -23: (-05 THRU -50 MULTIPLES OF 5) POSITIONS 12 & 13 ALSO AVAILABLE  
LEAD STYLES 31, 32: 12 POSITION ALSO AVAILABLE

## LEAD STYLE

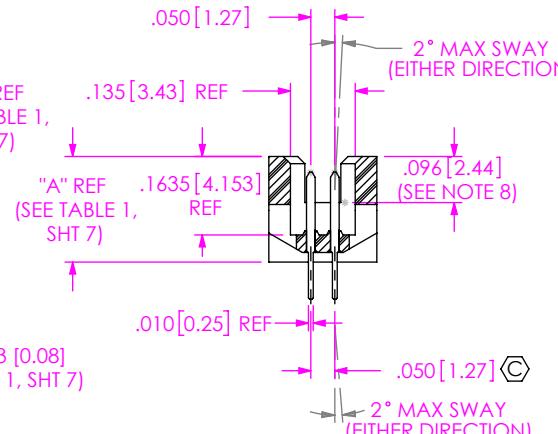
THROUGH HOLE	SURFACE MOUNT
-01, -03 (SEE FIG 1)	-02 (SEE FIG 2)
-11, -13 (SEE FIG 1)	-12 (SEE FIG 2)
-21, -23 (SEE FIG 1)	-22 (SEE FIG 2)
-31 (SEE FIG 1)	-32 (SEE FIG 2)

## PLATING SPECIFICATION

-S: 30 $\mu$ " SELECTIVE GOLD ON CONTACT AREA, MATTE TIN TAIL  
-L: 15 $\mu$ " SELECTIVE GOLD ON CONTACT AREA, MATTE TIN TAIL  
-F: 3 $\mu$ " FLASH GOLD ON CONTACT AREA, MATTE TIN TAIL  
-H: 30 $\mu$ " SELECTIVE GOLD ON CONTACT AREA, 3 $\mu$ " FLASH GOLD ON TAIL  
-SM: 30 $\mu$ " SELECTIVE GOLD ON CONTACT AREA, MATTE TIN TAIL  
-LM: 15 $\mu$ " SELECTIVE GOLD ON CONTACT AREA, MATTE TIN TAIL  
-FM: 3 $\mu$ " FLASH GOLD ON CONTACT AREA, MATTE TIN TAIL  
-STL: 30 $\mu$ " SELECTIVE GOLD ON CONTACT AREA, TIN/LEAD (90/10 ±5%) TAIL

## BODY SPECIFICATION

-D: DOUBLE ROW



## SECTION "A"-A"

UNLESS OTHERWISE SPECIFIED,  
DIMENSIONS ARE IN INCHES.

TOLERANCES ARE:

DECIMALS	ANGLES
.XX: ±.01[0.3]	2°
XXX: ±.005[0.13]	
XXXX: ±.0020[0.051]	

MATERIAL:

INSULATOR:  
LCP, UL 94-VO  
COLOR: BLACK

TERMINAL: PHOSPHOR BRONZE

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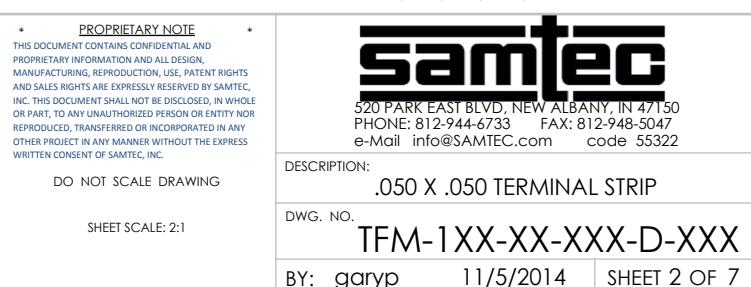
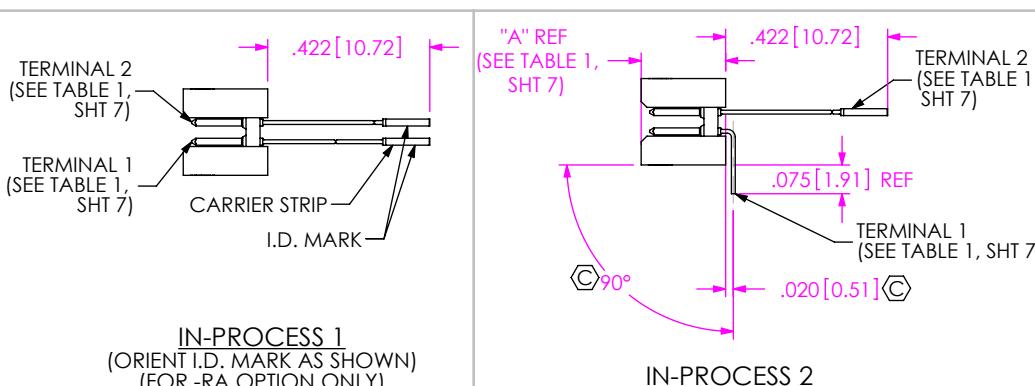
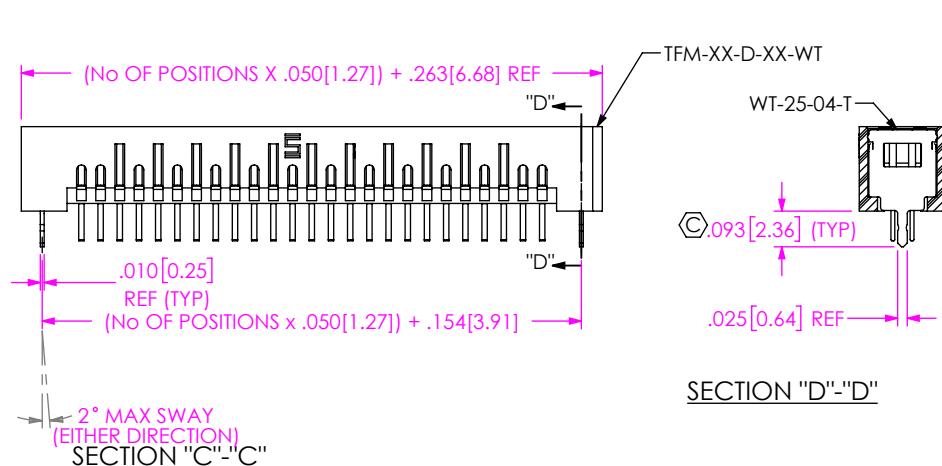
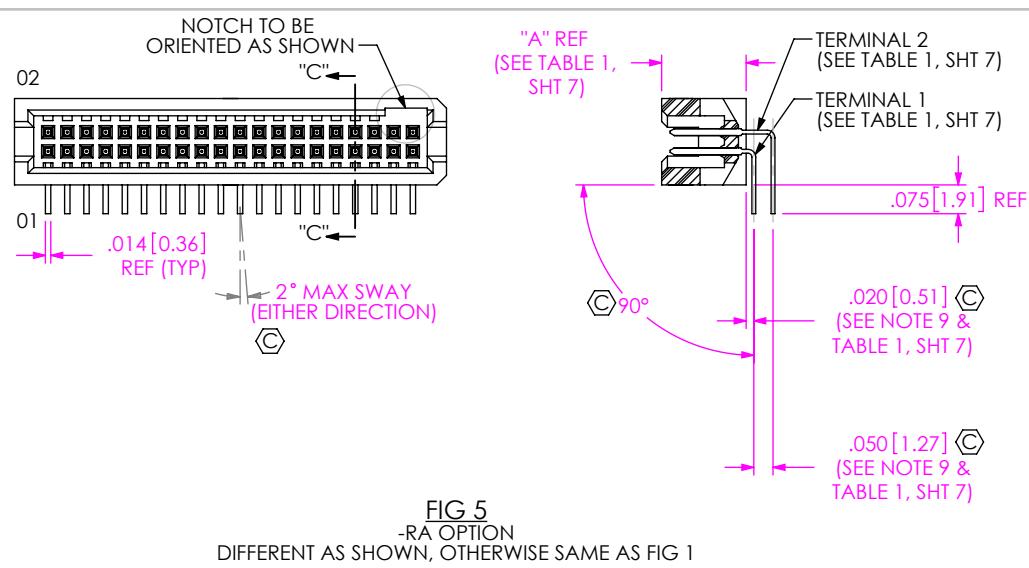
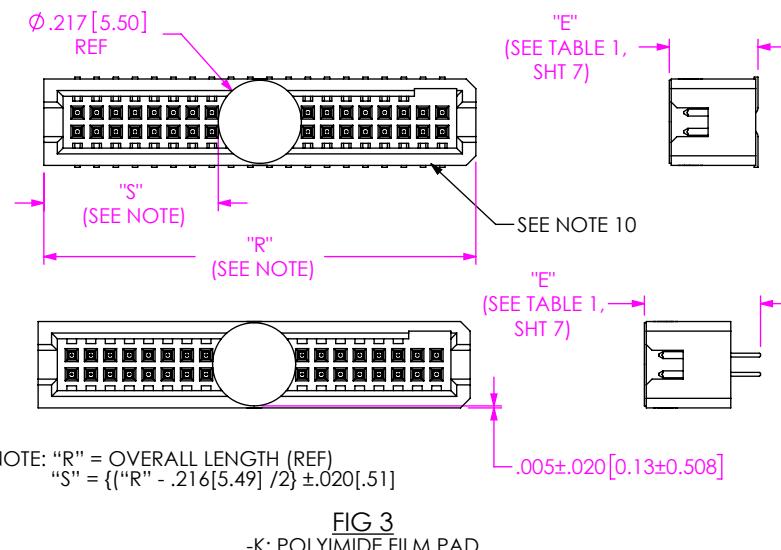
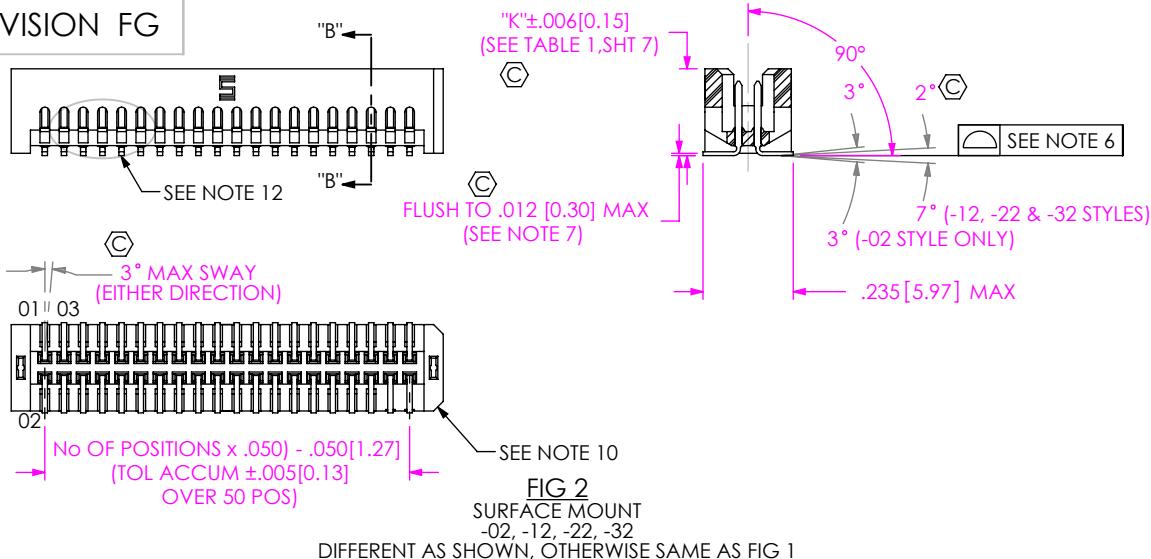
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DWG. NO.

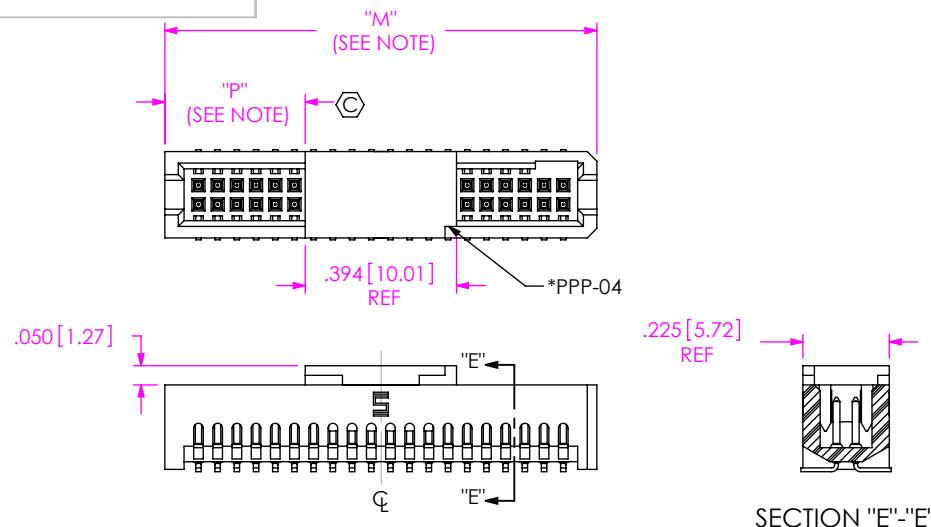
TFM-1XX-XX-XXX-D-XXX

BY: garyp 11/5/2014 SHEET 1 OF 7

## REVISION FG



# REVISION FG



NOTE: "M" = (No. OF POSITIONS x .050[1.27]) + .125[3.18] (REF)  
 WITH -WT "M" = (No. OF POSITIONS x .050[1.27]) + .263[6.68] (REF)  
 "P" = {"M" - .394[10.01]} / 2 ± .020[.51]

\* NOTCH ON PAD TO BE ON SAME END  
 AS THE NOTCH IN THE TFM BODY

FIG 7  
 -P OPTION  
 DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1  
 (PAD TO BE POSITIONED ON C.L. AS SHOWN)

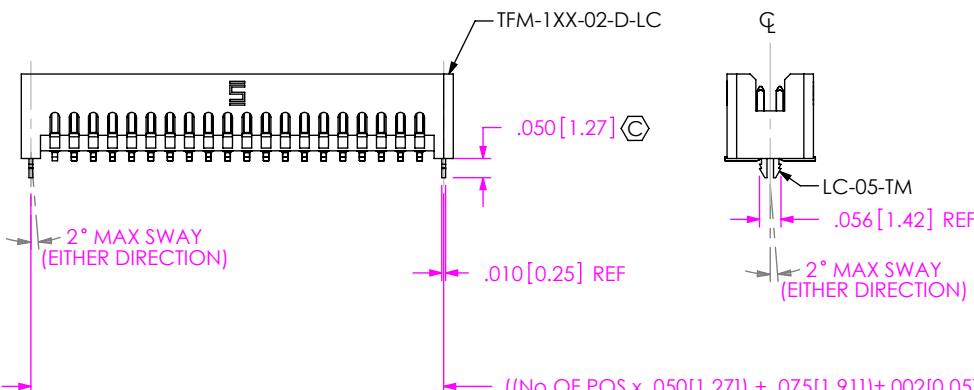


FIG 10  
 -LC OPTION  
 DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1  
 (NOT AVAILABLE ON -RA)

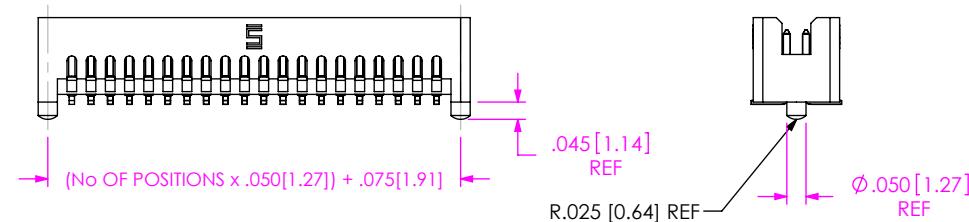


FIG 8  
 -A OPTION  
 DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1

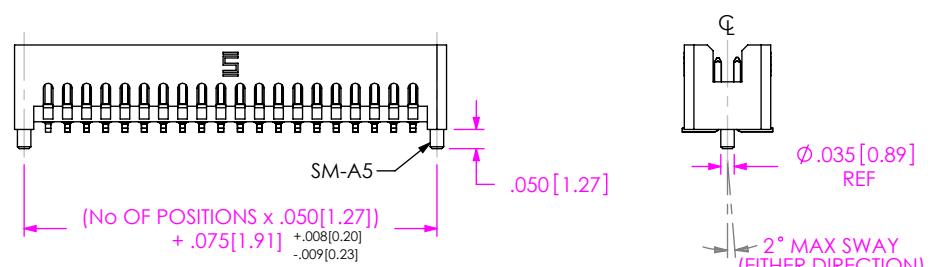


FIG 9  
 -SA OPTION: STAKED ALIGNMENT PIN  
 DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1

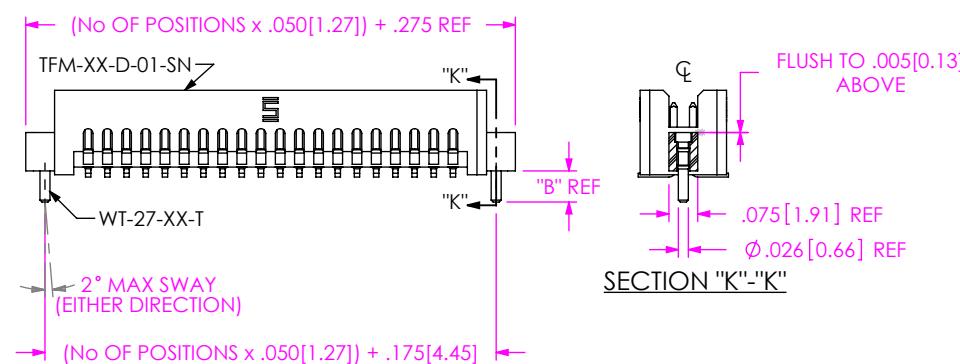


FIG 12  
 -SNX: SOLDER NAIL  
 DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1

TABLE 4	
OPTION	"B"
-SN	.081 2.06
-SN2	.115 2.92

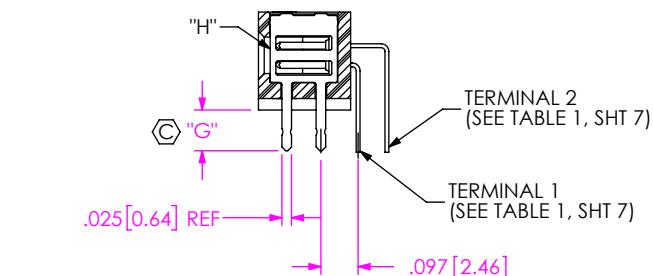
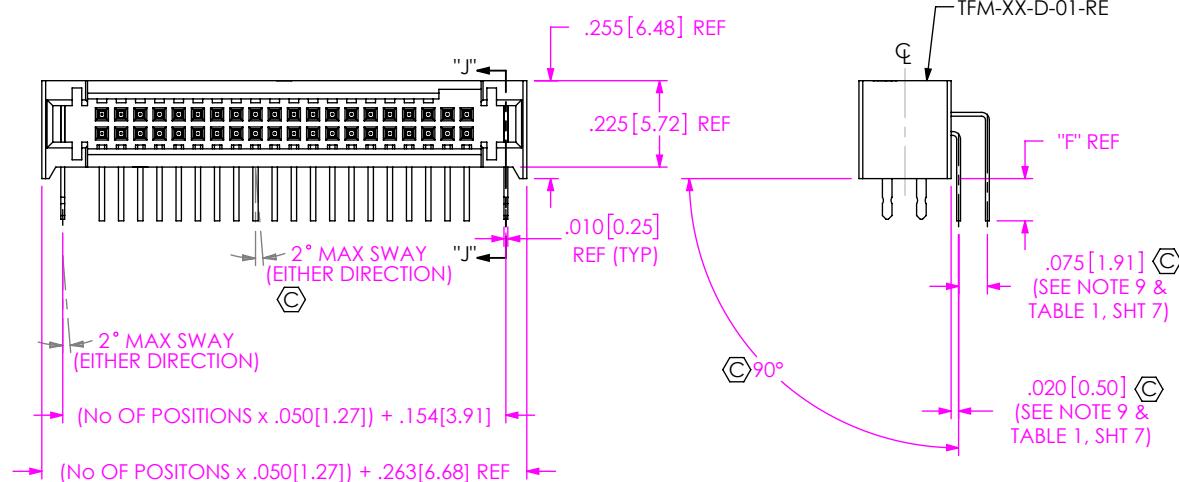
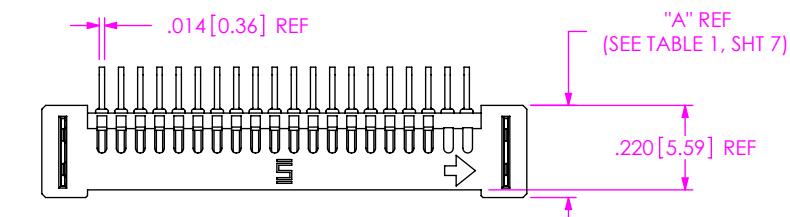
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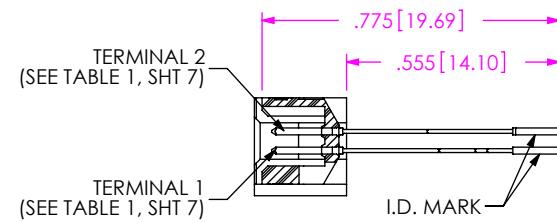
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 DWG. NO. TFM-1XX-XX-XXX-D-XXX  
 BY: garyp 11/5/2014 SHEET 3 OF 7

REVISION FG

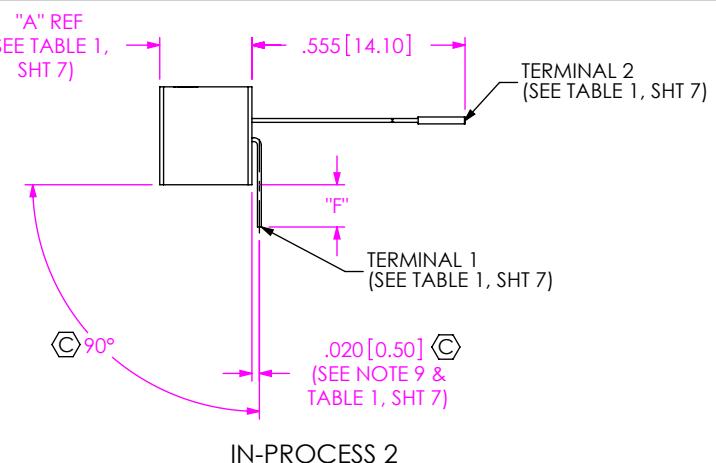


SECTION "J"- "J"

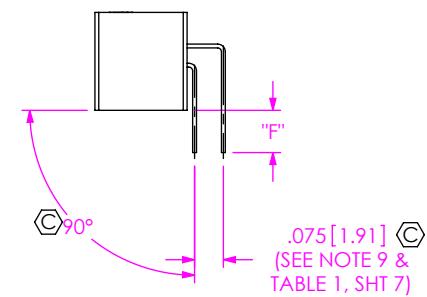
FIG 11  
-REX: RIGHT ANGLE ELEVATED  
TFM-120-XX-XXX-D-RE2 SHOWN  
DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1



IN-PROCESS 1  
(ORIENT I.D. MARK AS SHOWN)  
(FOR -RA OPTION ONLY)



IN-PROCESS 2



IN-PROCESS 3

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DESCRIPTION:  
.050 X .050 TERMINAL STRIP

DWG. NO.  
TFM-1XX-XX-XXX-D-XXX

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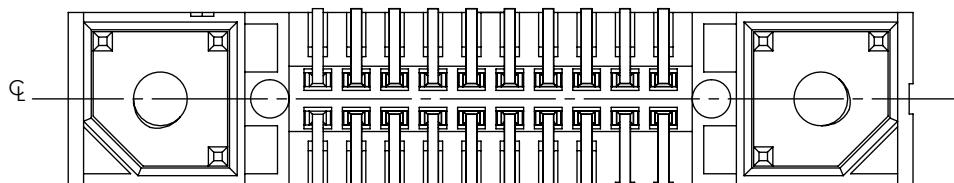
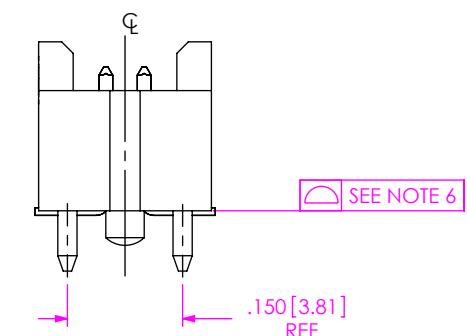
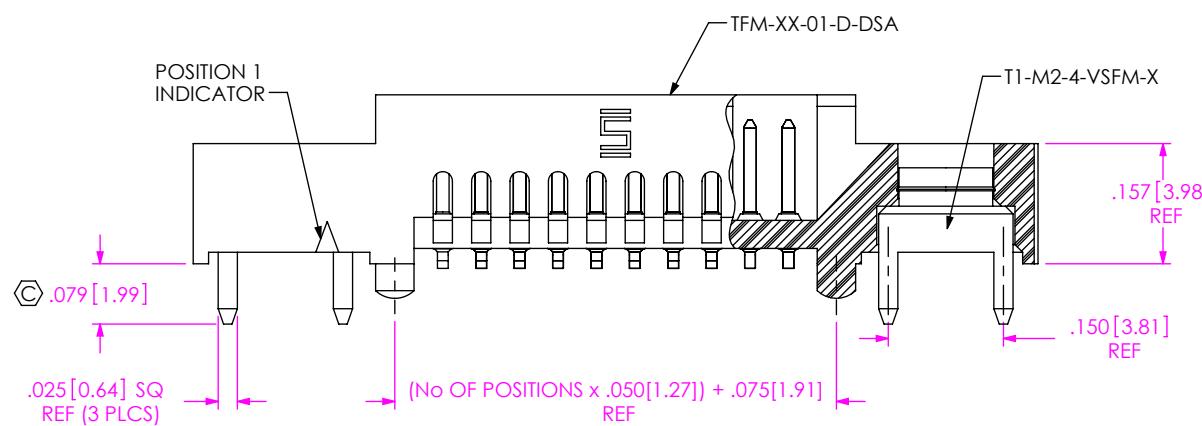
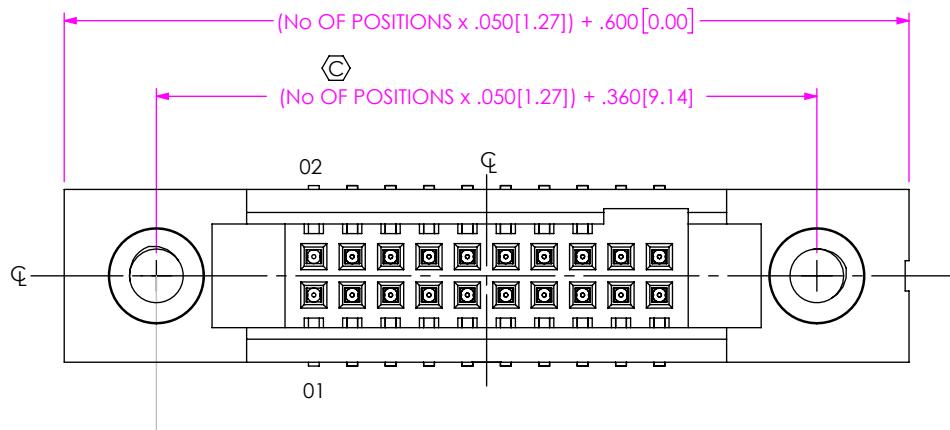


FIG 18  
-DS: DUAL SCREW DOWN  
TFM-110-02-XXX-D-DS SHOWN  
DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1

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DESCRIPTION:	.050 X .050 TERMINAL STRIP
DWG. NO.	TFM-1XX-XX-XXX-D-XXX
BY:	garyp 11/5/2014 SHEET 5 OF 7

## PARTS TO BE PACKAGED IN TUBES AS SHOWN

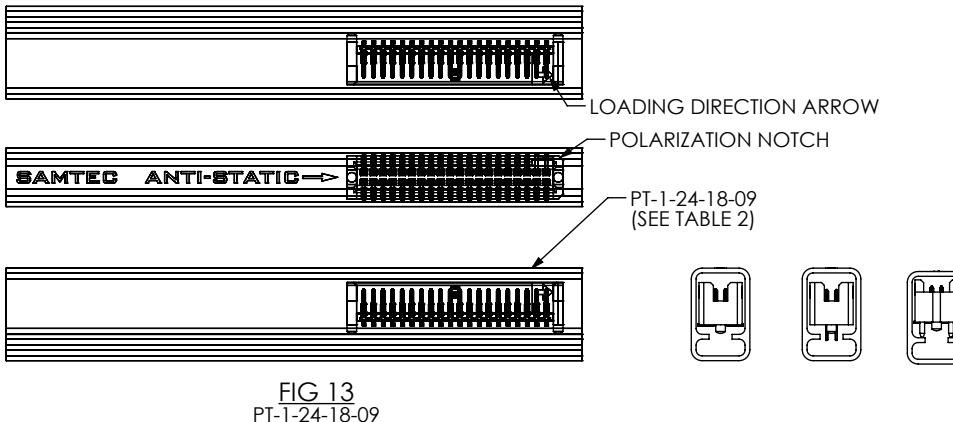
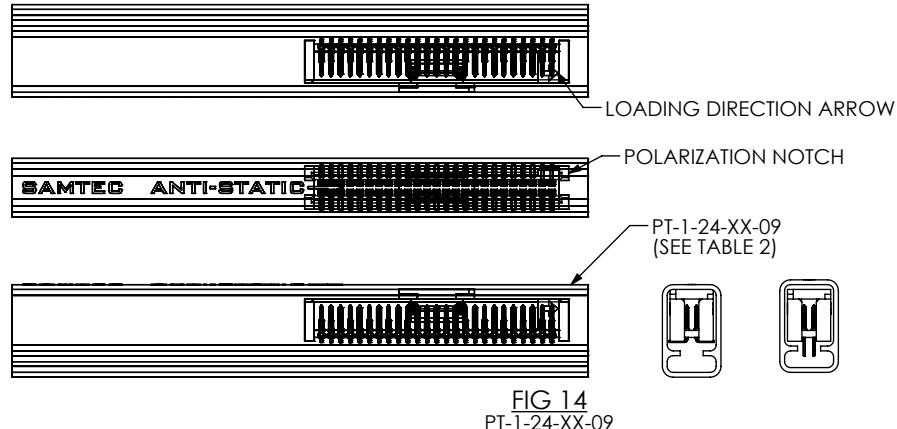
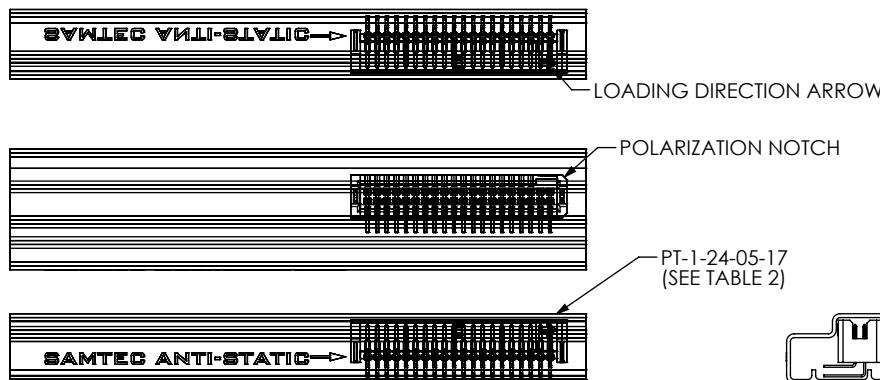
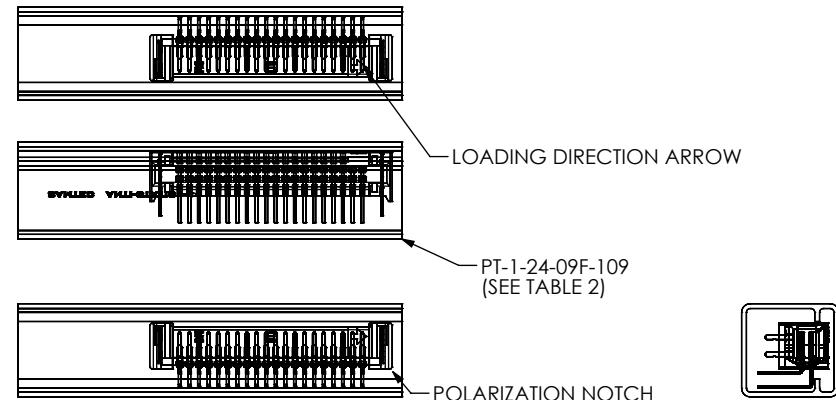
FIG 13  
PT-1-24-18-09FIG 14  
PT-1-24-XX-09FIG 15  
PT-1-24-05-17FIG 16  
PT-1-24-09F-109

TABLE 2

LEAD STYLE	PACKAGING TUBE	PLUG
-RA (ALL LEAD STYLES)	PT-1-24-05-17	TP-07
-REX	PT-1-24-09F-109	TP-29
-01, -01-A, -01-LC, -01-WT, -01-A-K, -02, -02-A, -02-A-K, -02-LC, -02-SN	PT-FTSH002-DV-A-P-M	TP-03
-12 (ALL OPTIONS), -22-K, -22, -22-A, -22-A-K, -22-LC, -22-LC-K	PT-1-24-04-09	TP-07
-02-A-P, -02-K, -02-LC-K, -02-LC-P, -02-P, -02-WT, -02-WT-K	PT-1-24-18-09	TP-09
-01-K, -01-LC-P, -01-A-P, -01-WT-P, -01-WT-K, -11, -11-A, -11-LC, -11-K, -11-LC-K, -11-A-K		
-03 (ALL OPTIONS)		
-13, -13-A, -13-LC, -13-K, -13-LC-K, -13-A-K	PT-1-24-02-09	TP-07
-01-DS, -02-DS	PT-1-24-05-09	TP-07
-31-A-K, -31-A-P, -31-LC-P, -31-P, -32, -32-K, -32-A, -32-A-K,	PT-1-24-20-09	TP-07
-32-A-P, -32-LC-K, -32-LC-P, -32-P, -32-LC		
-31, -21-P, -22-P, -31-LC, -21-A-P, -21-LC-P, -22-LC-P, -22-A-P, -31-A,		
-13-P, -13-LC-P, -13-A-P, -21, -23, -23-P, -23-A-P,		
-11-P, -11-LC-P, -11-A-P, -21-K, -21-A, -21-LC, -21-A-K, -21-LC-K,		
-23-K, -23-A, -23-A-K, -23-LC, -23-LC-K		

## NOTE:

1. PARTS TO BE PACKAGED WITH THE LOADING DIRECTION ARROW POINTED IN SAME DIRECTION AS THE ARROW ON TUBE.
2. A PART WITH -SA OPTION WILL USE THE SAME TUBE AS THE CORRESPONDING PART WITH THE -A OPTION

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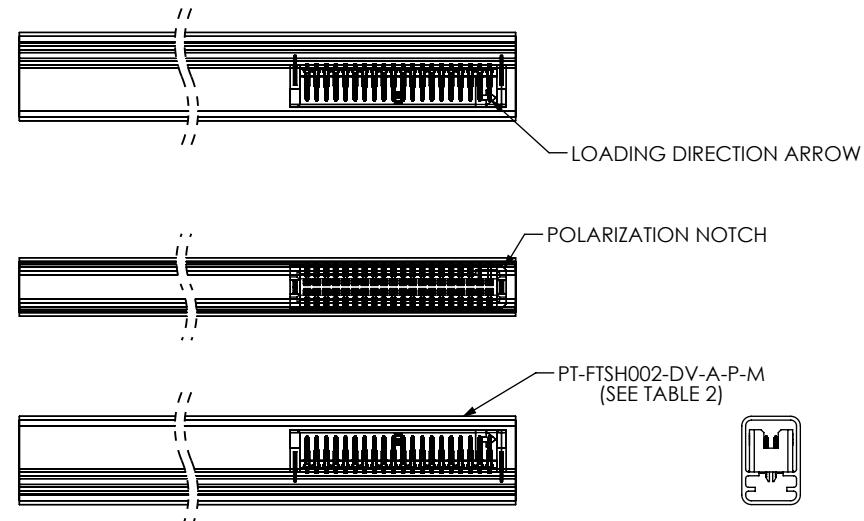
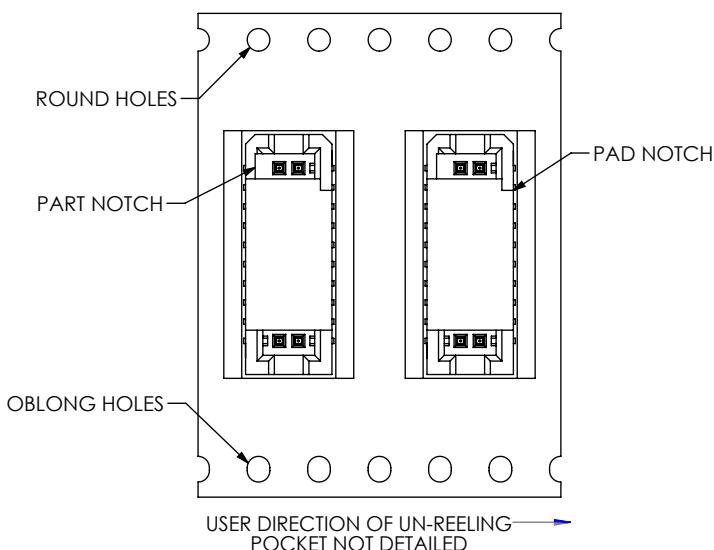
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DESCRIPTION: .050 X .050 TERMINAL STRIP  
DWG. NO. TFM-1XX-XX-XXX-D-XXX  
BY: garyp 11/5/2014 SHEET 6 OF 7

TABLE 1

LEAD STYLE	BODY	"A"	TERMINAL 1	TERMINAL 2	"C"	"D"	"E"	"J"	"K"
-01	TFM-XX-D-01-XX	.2200 [5.588]	T-1R16-01-XX-2	N/A	.428 [10.87]	.131 [3.33]	.303 [7.70]	.078 [1.98]	N/A
-11	TFM-XX-D-02-XX	.2900 [7.366]	T-1R20-03-XX	N/A	.645 [16.38]	.139 [3.53]	.375 [9.53]	.080 [2.03]	N/A
-21	TFM-XX-D-03-XX	.3600 [9.144]	T-1R20-04-XX	N/A	.645 [16.38]	.139 [3.53]	N/A	.080 [2.03]	N/A
-31	TFM-XX-D-04-XX	.4350 [11.049]	T-1R20-02-XX	N/A	.645 [16.38]	.139 [3.53]	.520 [13.21]	.080 [2.03]	N/A
-02	TFM-XX-D-01-XX	.2200 [5.588]	T-1R16-01-XX-2	N/A	.428 [10.87]	.131 [3.33]	.231 [5.87]	N/A	.226 [5.74]
-12	TFM-XX-D-02-XX	.2900 [7.366]	T-1R20-03-XX	N/A	.645 [16.38]	.139 [3.53]	.301 [7.65]	N/A	.296 [7.52]
-22	TFM-XX-D-03-XX	.3600 [9.144]	T-1R20-04-XX	N/A	.645 [16.38]	.139 [3.53]	.371 [9.42]	N/A	.366 [9.30]
-32	TFM-XX-D-04-XX	.4350 [11.049]	T-1R20-02-XX	N/A	.645 [16.38]	.139 [3.53]	.446 [11.33]	N/A	.441 [11.20]
-01-RA	TFM-XX-D-01-XX	.2200 [5.588]	T-1R16-02-XX	T-1R16-03-XX	N/A	.142 [3.59]	N/A	N/A	N/A
-01-RE1	TFM-XX-D-01-RE	.2400 [6.096]	T-1R16-06-XX	T-1R16-07-XX	N/A	.139 [3.52]	N/A	N/A	N/A
-01-RE2	TFM-XX-D-01-RE	.2400 [6.096]	T-1R16-08-XX	T-1R16-09-XX	N/A	.139 [3.52]	N/A	N/A	N/A
-03	TFM-XX-D-01-XX	.2200 [5.588]	T-1R16-10-XX	N/A	.645 [16.38]	.139 [3.53]	.336 [8.53]	.111 [2.82]	N/A
-13	TFM-XX-D-02-XX	.2900 [7.366]	T-1R20-05-XX	N/A	.645 [16.38]	.139 [3.53]	.406 [10.31]	.111 [2.82]	N/A
-23	TFM-XX-D-03-XX	.3600 [9.144]	T-1R20-06-XX	N/A	.645 [16.38]	.139 [3.53]	.476 [12.09]	.111 [2.82]	N/A



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DESCRIPTION: .050 X .050 TERMINAL STRIP  
DWG. NO. TFM-1XX-XX-XXX-D-XXX  
BY: garyp 11/5/2014 SHEET 7 OF 7