

REVISION DY

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THIS PRINT

NOTES:

1. MINIMUM PUSHOUT FORCE TO BE 12 OZ RETENTION FOR CONTACTS AND WELD TABS.
2. COPLANARITY: .004[.10] = POS 02 THRU 26
.006[.15] = POS 27 THRU 50
3. NOTE DELETED.
4. $\odot$ REPRESENTS A CRITICAL DIMENSION.
5. [] DIMENSIONS ARE IN MILLIMETERS.
6. MEASURED FROM BEND.
7. DIMENSION CHANGED PER REVISION AD.
CONTACT ENGINEERING FOR INFORMATION.
8. SIDES OF PLASTIC BODIES ON ALL LEAD STYLES EXCEPT
THE -01 & -02 WILL BE SOLID, NOT RIBBED.
9. MEASURE FROM TIPS OF PIN.
10. NOTE DELETED.
11. .003[.08] MAXIMUM TERMINAL BURR.
12. .005 MAXIMUM HEIGHT VARIATION BETWEEN ANY TWO PINS.
13. MINIMUM LOCKING CLIP RETENTION TO BE 8 OZS.
14. THIS FEATURE ONLY PRESENT ON -01 & -02 LEAD STYLES.
15. AVAILABLE IN -05, -07, -10, -15, -20, -25 & -30 POS. ONLY.
16. 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.

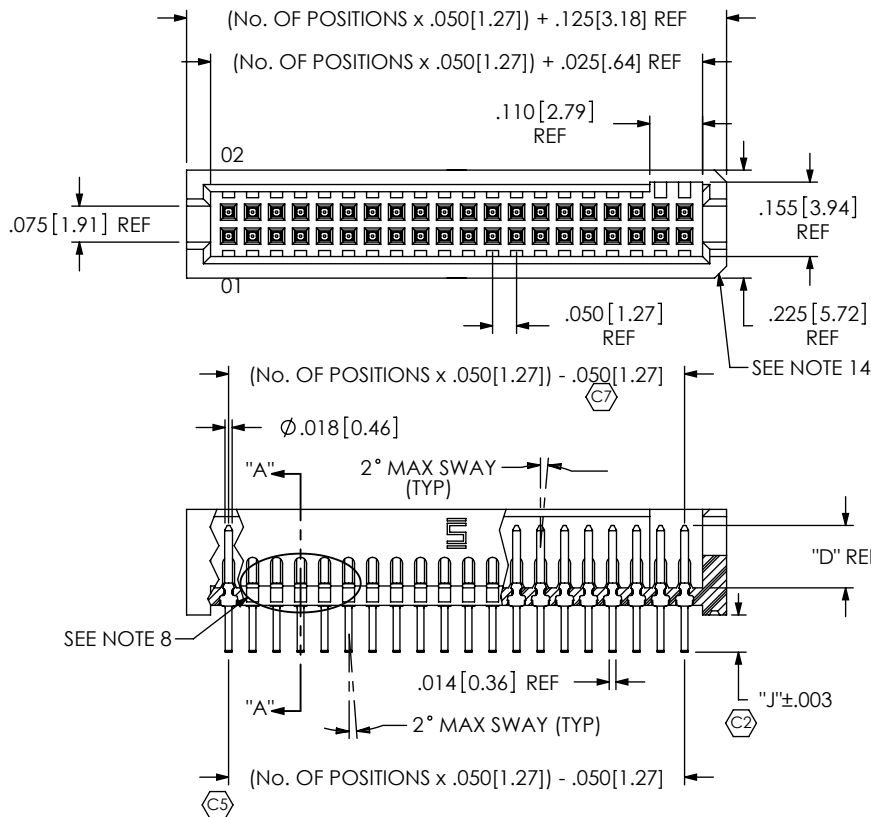
FIGURE 1
THROUGH HOLE
-01, -03, -11, -13, -21, -23, -31

TABLE 1

LEAD STYLE	BODY	"A"	TERMINAL 1	TERMINAL 2	"C"	"D"	"E"	"J"
-01, -02	TFM-XX-D-01-XX	.2200 [5.588]	T-1R16-01-XX-2	N/A	.0427 [10.85]	.0133 [3.38]	.0230 [5.84]	.0078 [1.97]
-11, -12	TFM-XX-D-02-XX	.2900 [7.366]	T-1R20-03-XX	N/A	.0644 [16.36]	.0141 [3.58]	.0300 [7.62]	.0078 [1.97]
-21, -22	TFM-XX-D-03-XX	.3600 [9.144]	T-1R20-04-XX	N/A	.0644 [16.36]	.0141 [3.58]	.0370 [9.40]	.0078 [1.97]
-31, -32	TFM-XX-D-04-XX	.4350 [11.049]	T-1R20-02-XX	N/A	.0644 [16.36]	.0141 [3.58]	.0445 [11.30]	.0078 [1.97]
-01-RA	TFM-XX-D-01-XX	.2200 [5.588]	T-1R16-02-XX	T-1R16-03-XX	N/A	.0133 [3.38]	.0230 [5.84]	N/A N/A
-01-RE1	TFM-XX-D-01-RE	.2400 [6.096]	T-1R16-06-XX	T-1R16-07-XX	N/A	.0138 [3.51]	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	.0138 [3.51]	N/A	N/A N/A
-03	TFM-XX-D-01-XX	.2200 [5.588]	T-1R16-10-XX	N/A	.0644 [16.36]	.0141 [3.58]	.0230 [5.84]	.0109 [2.77]
-13	TFM-XX-D-02-XX	.2900 [7.366]	T-1R20-05-XX	N/A	.0644 [16.36]	.0141 [3.58]	.0300 [7.62]	.0109 [2.77]
-23	TFM-XX-D-03-XX	.3600 [9.144]	T-1R20-06-XX	N/A	.0644 [16.36]	.0141 [3.58]	.0370 [9.40]	.0109 [2.77]

TFM-1XX-XX-XXX-X-XXX

No OF POSITIONS

- LEAD STYLE -01: (-5 THRU -50 ALL POSITIONS AVAILABLE)
LEAD STYLE -02: (-5 THRU -50 ALL POSITIONS AVAILABLE)
ALL OTHER LEAD STYLES: (-5 THRU -50 MULTIPLES OF 5)
LEAD STYLES -11, -12 POS 12, 16, 17 ALSO AVAILABLE
LEAD STYLES -21, -22, -31, -32 POS 12 AND 13 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

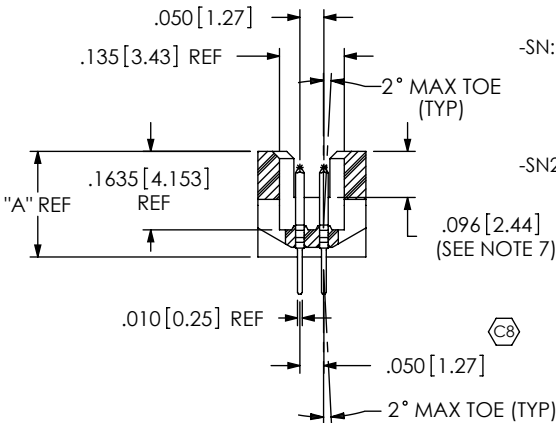
- S: SELECTIVE
-L: LIGHT SELECTIVE
-F: FLASHED GOLD
-P: GOLD FLASHED PALLADIUM NICKEL
-H: HEAVY GOLD
-SM: SELECTIVE HEAVY GOLD, MATTE TIN TAIL
-LM: SELECTIVE LIGHT GOLD, MATTE TIN TAIL
-FM: SELECTIVE FLASH GOLD, MATTE TIN TAIL
-STL: SELECTIVE TIN LEAD

BODY SPECIFICATION

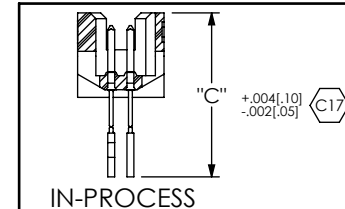
- D: DOUBLE ROW

OPTION

- A: ALIGNMENT PIN (USE TFM-XX-D-XX-A, SEE TABLE 1) (SEE FIG. 8 SHEET 3) (NOT AVAILABLE FOR -RA OR -REX)
-LC: LOCKING CLIP (USE LC-05-TM) (SEE NOTE 16) (NOT AVAILABLE FOR -RA OR -REX) (SEE FIG. 10 SHEET 3) (SEE NOTE 13)
-P: PICK AND PLACE PAD (USE PPP-04) (AVAILABLE IN ALL POSITIONS EXCEPT -05 WITH -WT) (NOT AVAILABLE FOR -RA OR -REX, SEE FIG. 7 SHEET 3)
-RA: RIGHT ANGLE (AVAILABLE ONLY IN LEAD STYLE: -01 SEE FIG. 5, SHEET 2)
-TR: TAPE AND REEL (SEE FIG. 4, SHEET 5)
-SA: STAKED ALIGNMENT PIN (SEE FIG. 9, SHEET 3) (NOT AVAILABLE FOR -RA OR -RE)
-K: POLYIMIDE FILM (SEE FIG. 3) (NOT AVAILABLE FOR -RA OR -REX)
-WT: WELD TABS (USE WT-25-XX-T) (AVAILABLE ON -01 AND -02 LEAD STYLES ONLY) (SEE FIG. 6 SHEET 2) (WHEN -REX OPTION NOT SPECIFIED, -WT OPTION AVAILABLE ON -05, -07, -10, -15, -20, -25, AND -30 POS ONLY)
-RE1: RIGHT ANGLE ELEVATED .062 PCB (USE TFM-XX-D-01-RE, NOT AVAILABLE WITHOUT -WT, AVAILABLE IN LEAD STYLE -01 ONLY) (SEE FIG. 11, SHEET 4) (SEE NOTE 15)
-RE2: RIGHT ANGLE ELEVATED .093 PCB (USE TFM-XX-D-01-RE, NOT AVAILABLE WITHOUT -WT, AVAILABLE IN LEAD STYLE -01 ONLY) (SEE FIG. 11, SHEET 4) (SEE NOTE 15)
-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)



SECTION "A"-A"



IN-PROCESS

UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE IN INCHES.

TOLERANCES ARE:

DECIMALS

ANGLES

.XX: $\pm .01$ [.3]

2°

.XXX: $\pm .005$ [.13].XXXX: $\pm .0020$ [.051]

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MATERIAL:

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SHEET SCALE: 2.5:1

INSULATOR: LIQUID CRYSTAL POLYMER, COLOR: BLACK
TERMINAL: PHOSPHOR BRONZE

DESCRIPTION:

.050 X .050 TERMINAL STRIP

DWG. NO.

TFM-1XX-XX-XXX-X-XXX

BY: B RAY

7-10-2007

SHEET 1 OF 5

(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG. 1

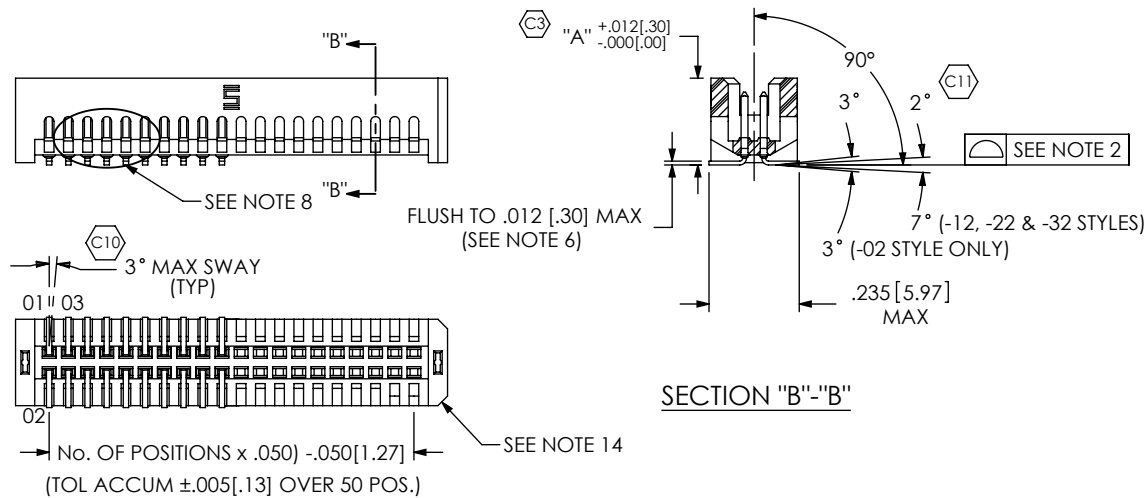


FIGURE 3
-K: POLYIMIDE FILM PAD

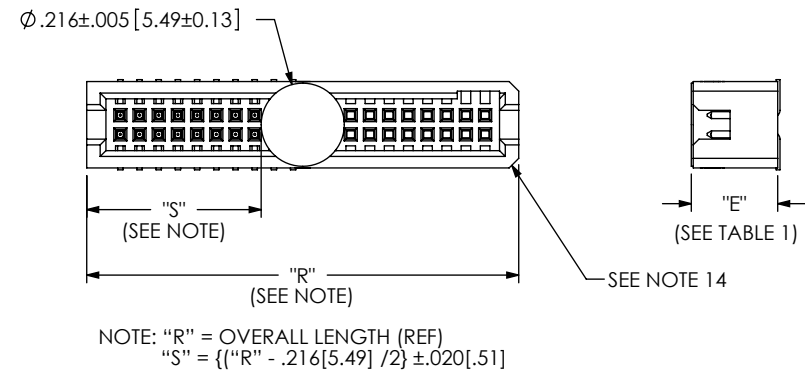


FIGURE 5
-RA OPTION
DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG. 1

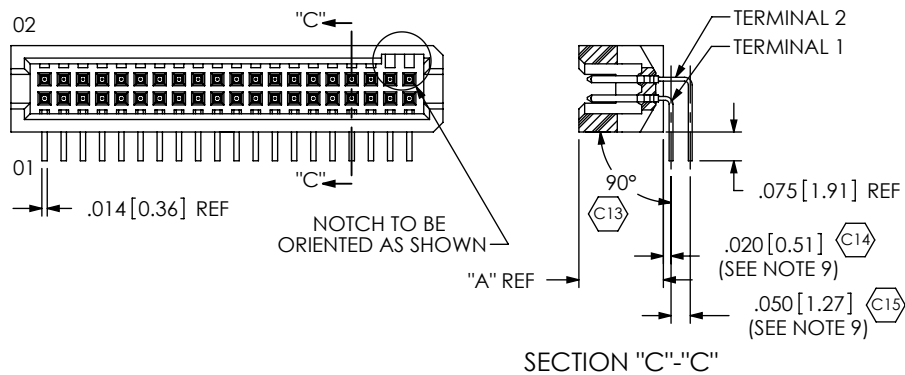
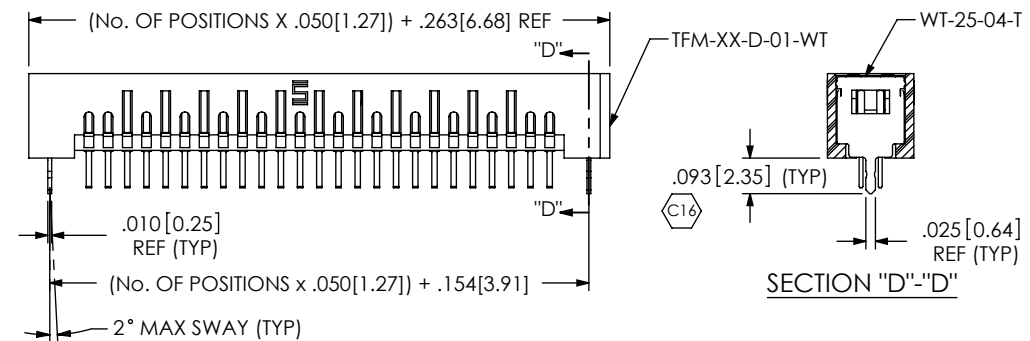
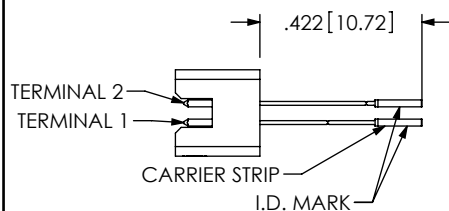


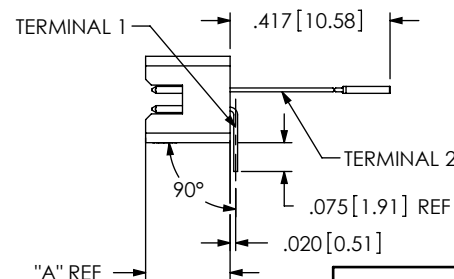
FIGURE 6
-WT OPTION
DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG. 1



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



IN-PROCESS 2



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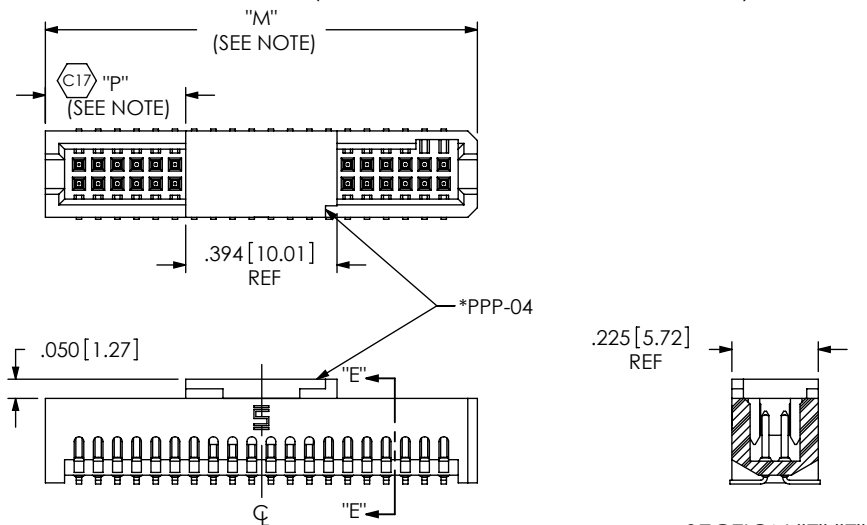


520 PARK EAST BLVD, NEW ALBANY, IN 47150
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DESCRIPTION: .050 X .050 TERMINAL STRIP

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

BY: B RAY	7-10-2007	SHEET 2 OF 5
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FIGURE 7
-P OPTIONDIFFERENT AS SHOWN, OTHERWISE SAME AS FIG. 1
(PAD TO BE POSITIONED ON C.L. AS SHOWN)

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

SECTION "E"-"E"

FIGURE 8
-A OPTION

DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG. 1

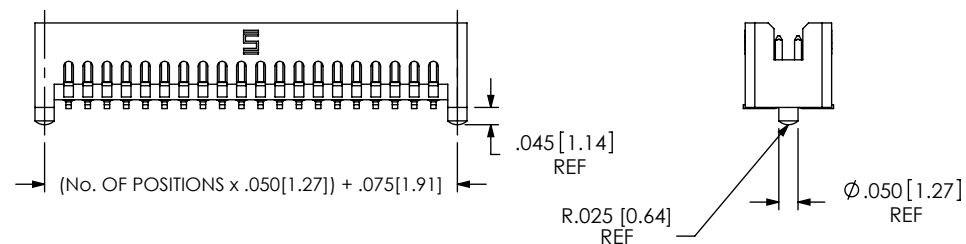
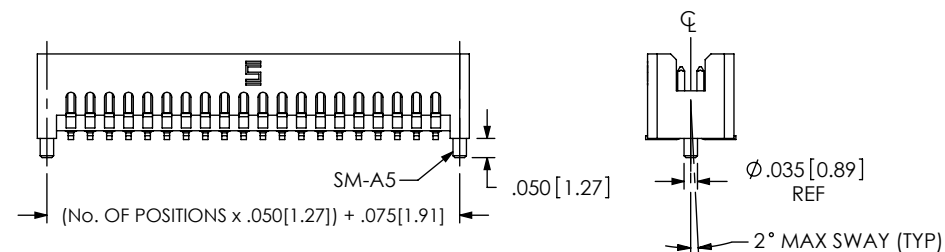
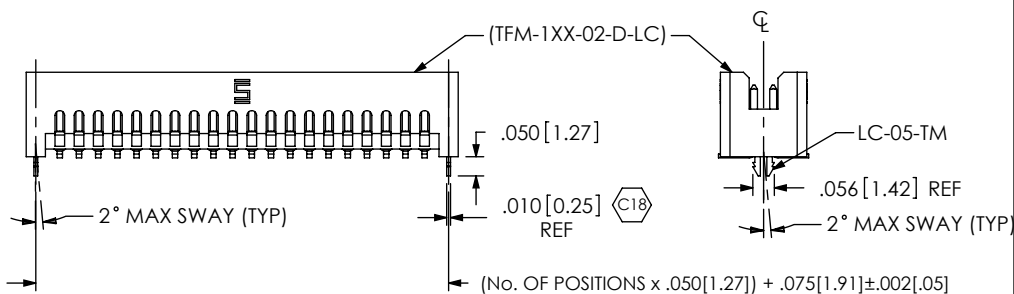
FIGURE 9
-SA OPTION: STAKED ALIGNMENT PIN
DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG. 1FIGURE 10
-LC OPTION
DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG. 1
(NOT AVAILABLE ON -RA)

FIGURE 12

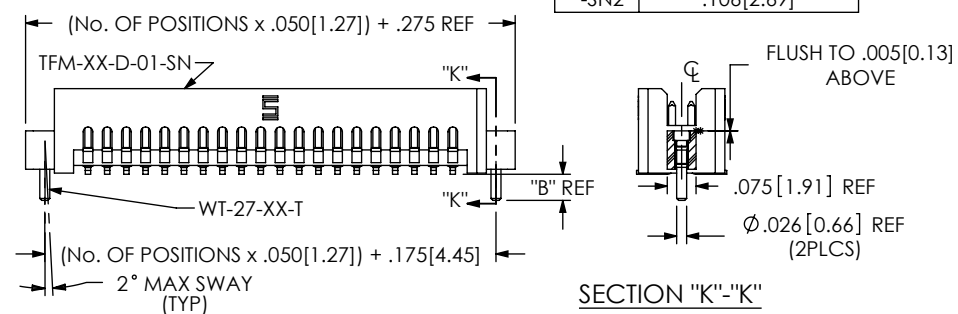
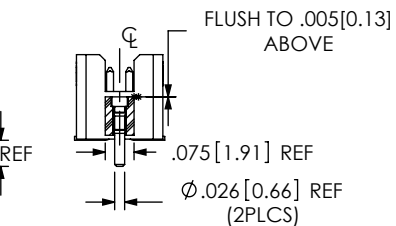
-SNX: SOLDER NAIL
DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG. 1

TABLE 4	
OPTION	"B"
-SN	.071 [1.80]
-SN2	.106 [2.69]



SECTION "K"-"K"

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DESCRIPTION:

.050 X .050 TERMINAL STRIP

DWG. NO.

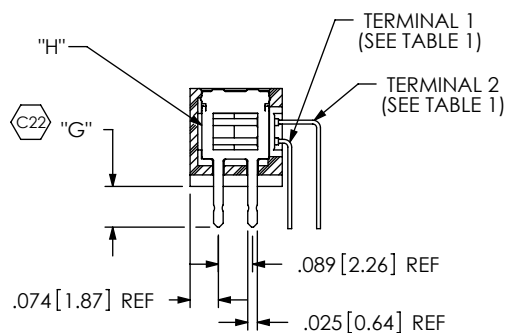
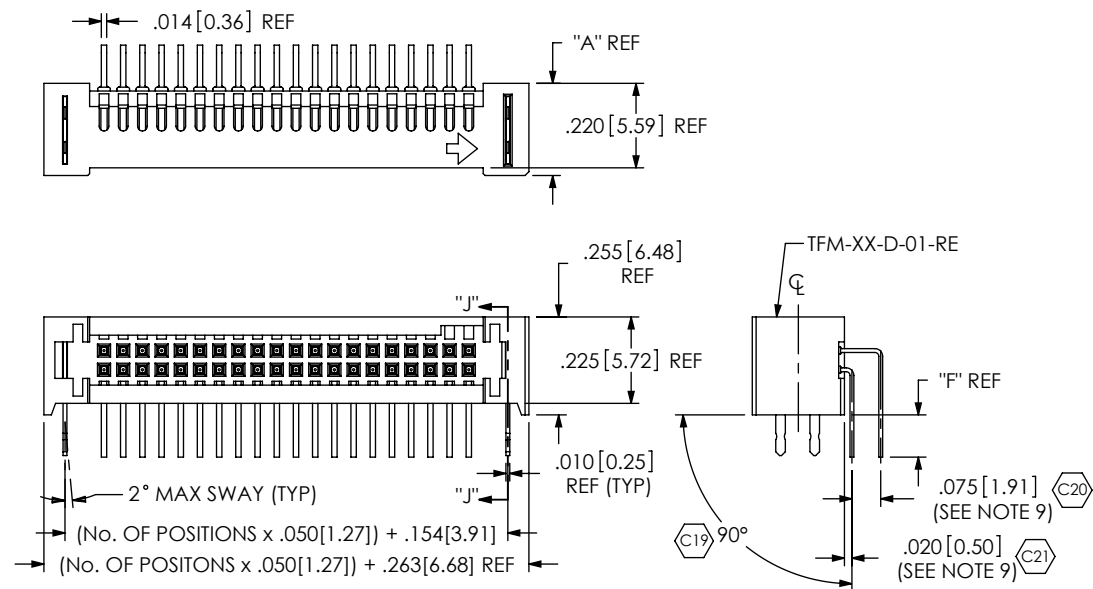
TFM-1XX-XX-XXX-X-XXX

BY: B RAY

7-10-2007

SHEET 3 OF 5

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

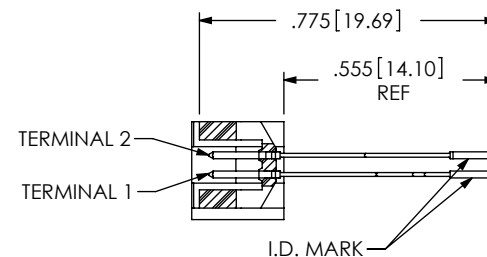


SECTION "J"-"J"

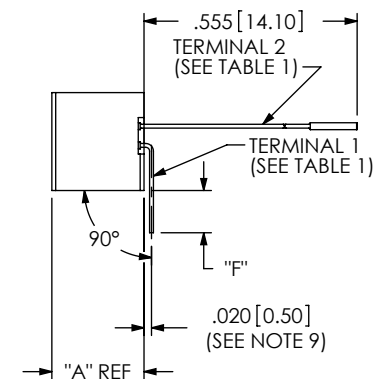
TABLE 3

LEAD STYLE	"F"	"G"	"H"
-01-RE1	.078 [1.98]	.074 [1.88]	WT-25-05-T
-01-RE2	.110 [2.79]	.106 [2.69]	WT-25-06-T

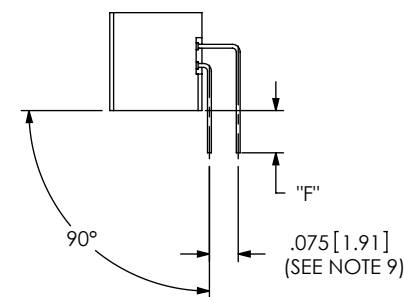
IN-PROCESS 1
(ORIENT I.D. MARK AS SHOWN)
(FOR -RA OPTION ONLY)



IN-PROCESS 2



IN-PROCESS 3



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DESCRIPTION:

.050 X .050 TERMINAL STRIP

DWG. NO.

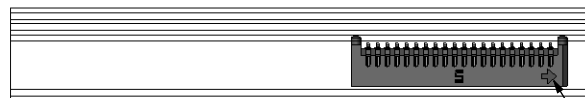
TFM-1XX-XX-XXX-X-XXX

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7-10-2007

SHEET 4 OF 5

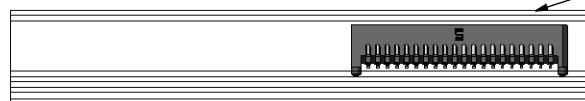
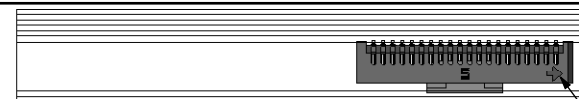
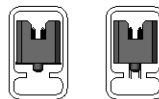
PARTS TO BE PACKAGED IN TUBES AS SHOWN



LOADING DIRECTION ARROW



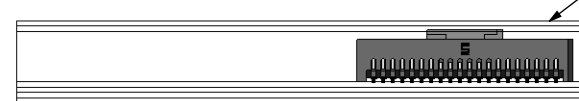
POLARIZATION NOTCH

PT-1-24-18-09
(SEE TABLE 2)

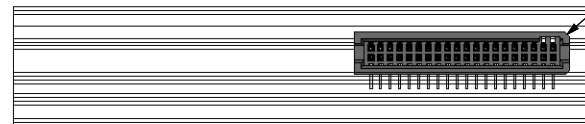
LOADING DIRECTION ARROW



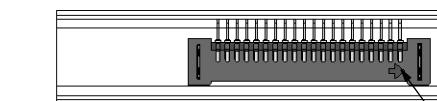
POLARIZATION NOTCH

PT-1-24-XX-09
(SEE TABLE 2)

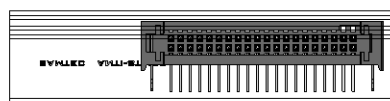
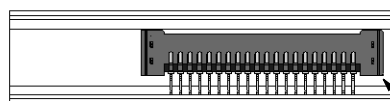
LOADING DIRECTION ARROW



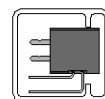
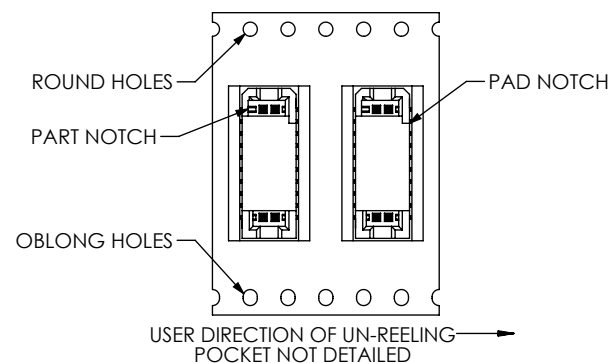
POLARIZATION NOTCH

PT-1-24-05-17
(SEE TABLE 2)

LOADING DIRECTION ARROW

PT-1-24-09F-109
(SEE TABLE 2)

POLARIZATION NOTCH

FIGURE 4
-TR: TAPE AND REEL

ROUND HOLES

PART NOTCH

OBLONG HOLES

PAD NOTCH

USER DIRECTION OF UN-REELING
POCKET NOT DETAILED

TABLE 2		
LEAD STYLE	PACKAGING TUBE	PLUG
-RA (ALL LEAD STYLES)	PT-1-24-5-17	TP-07
-REX	PT-1-24-09F-109	TP-29
-02, -02-A, -02-A-K, -02-LC	PT-1-24-01-09	TP-24
-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, A8	PT-1-24-18-09	TP-09
-01 (ALL OPTIONS), -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
-31-A-K, -31-A-P, -31-LC-P, -31-P, -32, -32-K, -32-A, -32-A-K,		
-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, -31-A,	PT-1-24-05-09	TP-07
-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	PT-1-24-20-09	TP-07

NOTE:
PARTS TO BE PACKAGED WITH THE LOADING DIRECTION ARROW
POINTED IN SAME DIRECTION AS THE ARROW ON TUBE.

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DESCRIPTION:
.050 X .050 TERMINAL STRIP

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

BY: B RAY 7-10-2007 SHEET 5 OF 5