

DO NOT SCALE FROM THIS PRINT

TABLE 1

LEAD STYLE	TERMINAL	MAX "A" ("B" IS .000 [.00] MIN)	"C" OVERALL PIN LENGTH
-02	T-1S13-02-XXX-2	.309 [7.85]	.377 [9.6]
-03	T-1S13-03-XXX-2	.467 [11.86]	.535 [13.6]
-04	T-1S13-06-XXX-2	.487 [12.37]	.555 [14.1]
-06	T-1S13-10-XXX-2	.605 [15.37]	.673 [17.1]
-07	T-1S13-11-XXX-2	.683 [17.35]	.751 [19.1]
-09	T-1S13-13-XXX-2	.388 [9.86]	.456 [11.6]

- NOTES:
- MAX. PIN ROTATION IN BODY: 2°
 - PUSHOUT FORCE SHALL BE 1 LB MIN.
 - Ⓢ REPRESENTS A CRITICAL DIMENSION
 - ALL DIMENSIONS IN BRACKETS [] TO BE MILLIMETERS.
 - HEIGHT VARIATION BETWEEN ANY TWO PINS SHALL BE .010 MAX
 - TUBE POSITIONS -04 THROUGH -36 ONLY; BULK PACKAGE -02 & -03. TUBE PLUG MUST BE ALLIGNED WITH INSULATOR. (SEE DETAIL ON PAGE 2)
 - MOLDED OR STAKED ALIGNMENT PIN AT SAMTEC'S DISCRETION.
 - SPACE OPTION FROM .170 TO .209 REQUIRES AN ADDITIONAL REPRESS.
 - NOTE DELETED.
 - M OPTION AVAILABLE ON -D ROW ONLY. -P OPTION AVAILABLE ON POSITIONS 4-36 ONLY. -P OPTION AVAILABLE ON 4-36 POSITION ONLY.
 - 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.
 - S-A FOR EXISTING BUSINESS ONLY, NEW DESIGNS WILL BE AN SP.
 - MAX CUT FLASH: .020 [0.51]
 - ORDERS WILL BE PACKAGED ACCORDING TO THE SAMTEC PACKAGING EFFICIENCY STANDARDS (SPES) FOUND ON WWW.SAMTEC.COM
 - ATTACH LABEL TO EACH REEL

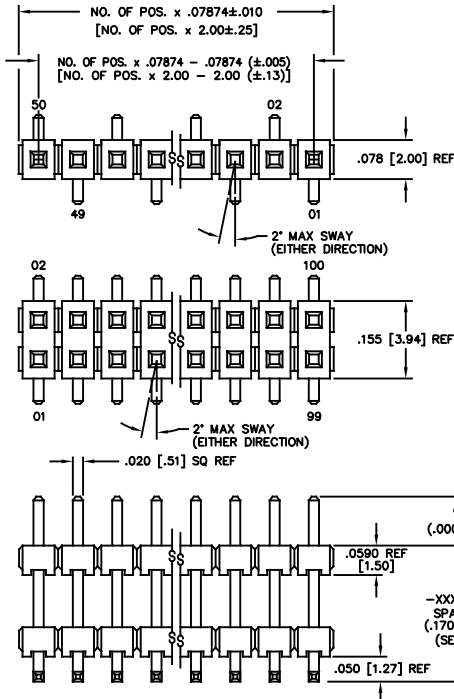


TABLE 2 (SEE NOTE 6)

LEAD STYLE	OPTIONS	TUBE	PLUGS
-02, -04, -07, -09	-D, -D-LC, -D-A	PT-TW001-D-SM	TP-38
-03	-D, -D-LC, -D-A	PT-TW001-D-SM	TP-38
ALL	-S, -S-LC, -S-A	PT-TW002-S-SM	TP-38
-02, -09	-D-A-P, -D-LC-P, -D-P, -D-LC-M, -D-A-M, -D-M	PT-TW001-D-SM	TP-38
-03, -04	-D-A-P, -D-LC-P, -D-P, -D-LC-M, -D-A-M, -D-M	PT-TW001-D-SM	TP-38
-07	-D-A-P, -D-LC-P, -D-P, -D-LC-M, -D-A-M, -D-M	PT-TW001-D-SM	TP-38
-02, -09	-S-LC-P, *S-A-P	PT-TW002-S-SM	TP-38
-03, -04	-S-LC-P, *S-A-P, -S-P	PT-TW002-S-SM	TP-38
-07	-S-LC-P, *S-A-P, -S-P	PT-TW002-S-SM	TP-38
-06	-D-LC	PT-TW001-D-SM	TP-38
-06	NONE, -A, -D	PT-TW001-D-SM	TP-38
-06	-D-A-P, -D-LC-P, -D-P, -D-LC-M, -D-A-M	PT-TW001-D-SM	TP-38
-06	-S-LC-P, -S-A-P, -S-P	PT-TW002-S-SM	TP-38
-06	-D-M	PT-1-24-16-29	TP-38

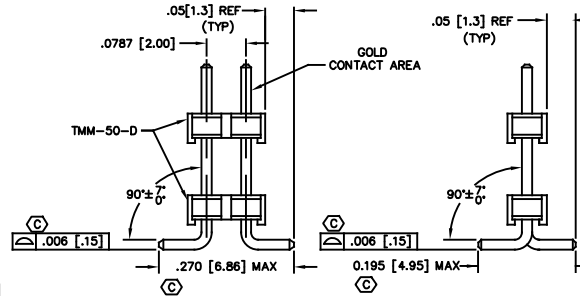


FIG 1

TW-XX-XX-XXX-X-XXX-SM-XXX-XX-X-XX

No. OF POSITIONS EXPRESSED IN # OF POS (-02 THRU -36)
"XX" = No Of POS x .07874 [2.00]

LEAD STYLE (SEE TABLE 1)

PLATING

- G: 20μ" GOLD IN CONTACT AREA, 3μ" GOLD ON TAIL (USE T-1S13-XX-G-2)
- T: MATTE TIN CONTACT AND TAIL (USE T-1S13-XX-T-2)
- S: 30μ" GOLD IN CONTACT AREA, MATTE TIN ON TAIL (USE T-1S13-XX-S-2)
- E: 50μ" GOLD IN CONTACT AREA, 3μ" GOLD ON TAIL (USE T-1S13-XX-E-2)
- L: 10μ" GOLD IN CONTACT AREA, MATTE TIN ON TAIL (USE T-1S13-XX-L-2)
- F: 3μ" GOLD IN CONTACT AREA, MATTE TIN ON TAIL (USE T-1S13-XX-F-2)
- P: 2μ" - 5μ" GOLD IN CONTACT AREA, MATTE TIN ON TAIL (USE T-1S13-XX-P-2)
- TL: TIN/LEAD (90%/10 +/-5%) CONTACT AND TAIL (USE T-1S13-XX-TL-2)
- STL: 30μ" GOLD IN CONTACT AREA, TIN/LEAD (90%/10 +/-5%) TAIL
- LTL: 10μ" GOLD IN CONTACT AREA, (90%/10 +/-5%) TAIL (USE T-1S13-XX-LTL-2)
- H: 30μ" GOLD IN CONTACT AREA, 3μ" GOLD ON TAIL (USE T-1S13-XX-H-2)
- SM: 30μ" GOLD IN CONTACT AREA, MATTE TIN ON TAIL (USE T-1S13-XX-S-2)
- TM: MATTE TIN CONTACT AND TAIL (USE T-1S13-XX-T-2)
- LM: 10μ" GOLD IN CONTACT AREA, MATTE TIN ON TAIL (USE T-1S13-XX-L-2)
- FM: 3μ" GOLD IN CONTACT AREA, MATTE TIN ON TAIL (USE T-1S13-XX-F-2)

ROW OPTION

- S: SINGLE ROW (USE TMM-50-S)
- D: DOUBLE ROW (USE TMM-50-D)

PACKAGING

- BLANK: TUBES (SEE NOTE 6)
- TR: TAPE & REEL (SEE NOTE 14 & 15)
- (-07 LEAD STYLE NOT AVAILABLE IN T & R) (SEE SHEET 3 FOR -S-TR OPTION ORIENTATION VIEW) (.475 MAX "A" WHEN COMBINED WITH -P OPTION)
- FR: FULL REEL QTY TAPE & REEL (SEE NOTE 14 & 15)
- (-07 LEAD STYLE NOT AVAILABLE IN T & R) (SEE SHEET 3 FOR -S-TR OPTION ORIENTATION VIEW) (.475 MAX "A" WHEN COMBINED WITH -P OPTION)

PICK & PLACE OPTION

- P: PICK & PLACE PAD (SEE NOTE 10)
- (-D ROW: USE PPP-10)
- (-S ROW: USE PPP-11)
- NOTE: "B" = .075 [1.91] MIN FOR THIS OPTION (SEE FIG 6)
- M: PICK & PLACE PAD (SEE NOTE 10)
- (-D ROW: USE PPP-10)
- NOTE: "B" MUST BE .075 OR GREATER FOR THIS OPTION. (SEE FIG 5)

OPTION 1

- LC: LOCKING CLIP (SEE FIG 2, SHEET 2)(SEE NOTE 11)
- (-D ROW: USE 2TS-XX-D)
- (-S ROW: USE 2TS-XX-SV)
- (.190 MIN BOARD SPACE)
- *-A: MOLDED ALIGNMENT PIN (SEE FIG 3, SHEET 2 & NOTE 7) (AVAILABLE IN 2-36 POSITIONS) (2 POSITIONS WILL ONLY HAVE ONE ALIGNMENT PIN) (-D ROW: USE 2TS-XX-DV-A) (*-S ROW: USE 2TS-XX-SV-A) (*-SEE NOTE 12) (BOTTOM BODY ONLY, USE TMM-50-X FOR TOP) (STAKED ALIGNMENT PIN (SEE FIG 4, SHEET 2 & NOTE 7) (-D ROW ONLY: USE TMM-50-D, 4 POS MIN) (.190 MIN BOARD SPACE FOR BOTH)

OPTION 2

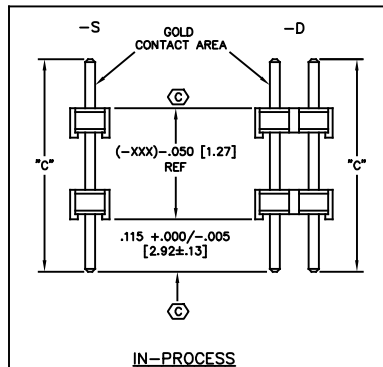
- XXX: POLARIZED POSITION (SPECIFY OMITTED PIN)

SURFACE MOUNT

SPACE OPTION (SEE NOTE 8)

XXX="A" (SEE TABLE 1, .170 [4.32] MIN)

PATENT NUMBERS
5713755 / 5961339



PROPRIETARY NOTE
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MATERIAL:
INSULATOR: LIQUID CRYSTAL POLYMER
COLOR: BLACK

TERMINALS:
PHOSPHOR BRONZE

DESIGN/ASSEMBLY/DM TMM-SM

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MADE BY:
BRYANT 3-8-93

TW-XX-XX-XXX-X-XXX-SM-XXX-XX-X-XX