



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



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NOTES:

1.  $\text{\textcircled{C}}$  REPRESENTS A CRITICAL DIMENSION.
2. PARTS MAY BE CUT TO POSITION.
3. MAXIMUM CUT FLASH: .010[0.25] ON TAIL SIDE, ALL OTHER AREAS AT .015[0.38]. LOOSE CUT FLASH MUST BE REMOVED.
4. MINIMUM PUSHOUT FORCE: 1.0 LB.
5. TERMINALS TO BE SHEARED TO MEET DIMENSION SPECIFICATION.
6. LAYER PACKAGE 2 - 4 POSITIONS AND TUBE 5 - 50 POSITIONS.
7. MAXIMUM BURR ALLOWANCE: .003[0.08].
8. DUE TO THE HIGH AMOUNT OF INSERTION FORCE NEEDED, THE -EC OPTION IS NOT COMPATIBLE WITH AUTO PLACEMENT. SAMTEC RECOMMENDS MANUAL PLACEMENT FOR ALL ASSEMBLIES WITH THE -EC OPTION.
9. MAXIMUM HEIGHT VARIATION BETWEEN ROWS: .005[0.13].
10. VOIDS MAY OR MAY NOT BE PRESENT ON POSITIONS 5 THROUGH 8 AND CAN BE MIXED WITHIN AN ORDER.

FTSH-1XX-XX-XXX-D-XXX-XX

No OF POSITIONS

-02 THRU -50  
(PER ROW)

LEAD STYLE

-01: .120 [3.05]  
-02: .075 [1.91]  
-03: .065 [1.65]  
-04: .150 [3.81]

PLATING SPECIFICATION

- G: 10 $\mu$ " GOLD IN CONTACT AREA, 3 $\mu$ " GOLD ON TAIL
- F: 3 $\mu$ " FLASH SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL
- L: 10 $\mu$ " LIGHT SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL
- S: 30 $\mu$ " SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL
- H: 30 $\mu$ " HEAVY GOLD IN CONTACT AREA, 3 $\mu$ " GOLD ON TAIL
- FM: 3 $\mu$ " FLASH SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL
- LM: 10 $\mu$ " LIGHT SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL
- SM: 30 $\mu$ " SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL
- LTL: 10 $\mu$ " LIGHT GOLD IN CONTACT AREA, TIN/LEAD (90%/10 +/-5%) ON TAIL

ROW SPECIFICATION

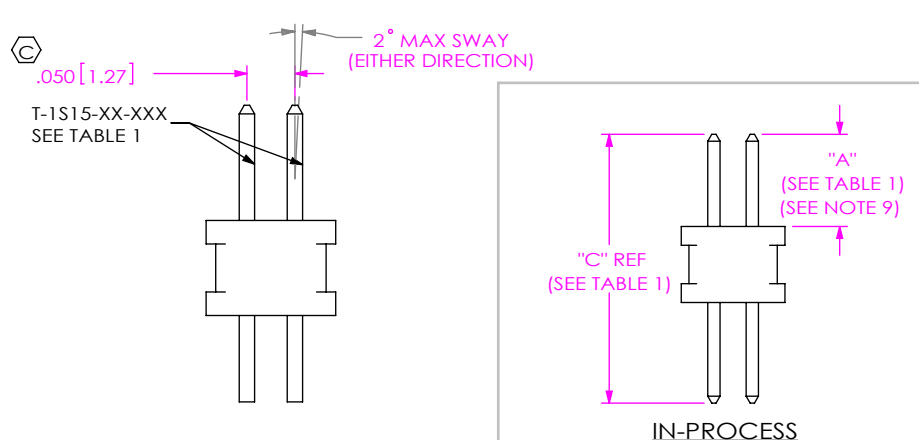
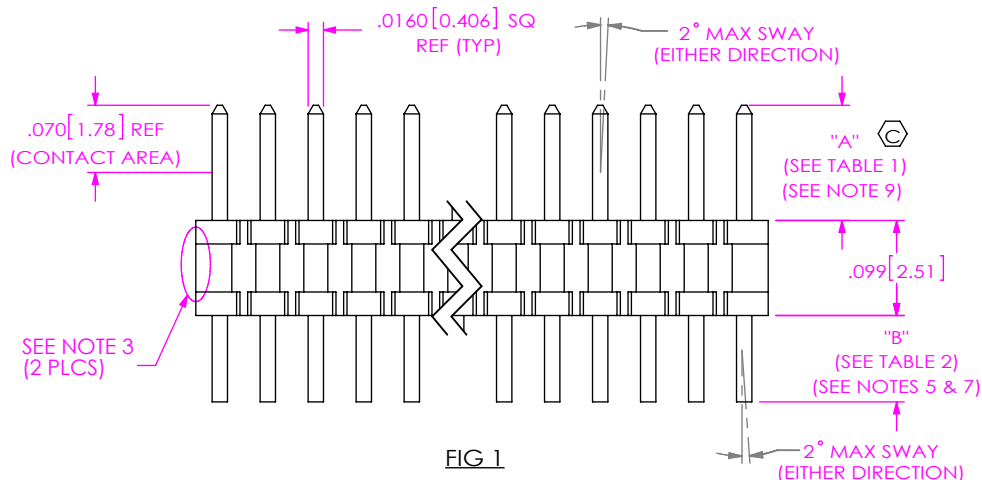
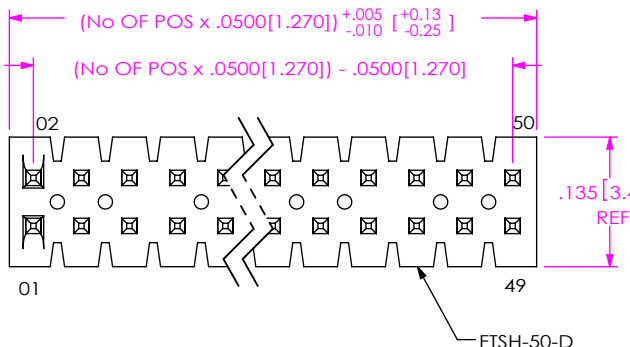
-D: DOUBLE ROW

OPTIONS

- ES: END SHROUDS (SEE FIG 2, SHT 2) (MOLDED 5 POS MIN; -02 & -03 LEAD STYLE ONLY) (MUST USE FTSH-XX-ES-XX-X) (SNAP SHROUDS 9 POS MIN; -02 & -03 LEAD STYLE ONLY) (MUST USE FTSH-50-D)
- EJ: EJECTOR SHROUDS: (SEE FIG 3, SHT 2) (10 POS MIN; -01 LEAD STYLE ONLY) (MUST USE FTSH-50-D)
- EC: LOCKING CLIP (SEE FIG 4, SHT 2; SEE NOTE 8) (9 POS MIN; -02 & -03 LEAD STYLES ONLY) (MUST USE FTSH-50-D)
- EP: GUIDE POST (SEE FIG 5, SHT 2) (9 POS MIN; -02 & -03 LEAD STYLES ONLY) (USE ONLY WHEN MATING WITH CLP) (MUST USE FTSH-50-D)
- EL: BOARD LOCKS (SEE FIG 6, SHT 2) (9 POS MIN; -02 & -03 LEAD STYLES ONLY) (USE ONLY WHEN MATING WITH CLP) (MUST USE FTSH-50-D)
- K: KEYING OPTION FOR MATING WITH FFSD (05 THRU 25 ONLY) (POSITION 13, 17, 20 & 25 AVAILABLE WITH -EJ OPTION) (LEAD STYLE -01 ONLY, SEE FIG 7, SHT 3) (MUST USE FTSH-XX-CN-XX)
- LC: LOCKING CLIP: (SEE FIG 8, SHT 3) (5 POS MIN, ONLY AVAILABLE IN -01 LEAD STYLE) (IN COMBINATION WITH -K, USE FTSH-XX-CN-XX, 10 POSITION MINIMUM, ONLY AVAILABLE IN -01 LEAD STYLE) (MUST USE FTSH-50-D) (SINGLE MATING CYCLE ONLY) (MUST BE MATED TO SAMTEC FFSD SERIES)

POLARIZING OPTION

XXX INDICATES POSITION TO BE OMITTED (NOT AVAILABLE WITH EX OPTIONS) (ONLY AVAILABLE WITH -F, -FM, -L, -LM PLATING OPTIONS)



LEAD STYLE	"A"	TERMINAL	"C" REF
-01	.120 [3.05]	T-1S15-02-XX	.350 [8.89]
-02	.075 [1.91]	T-1S15-02-XX	.350 [8.89]
-03	.065 [1.65]	T-1S15-04-XX	.450 [11.43]
-04	.150 [3.81]	T-1S15-04-XX	.450 [11.43]

OPTIONS	"B"
NONE	.09 [2.3]
-ES, -EC	.09 [2.3]
-EJ, -EJ-K	.11 [2.7]
-EP	.09 [2.3]
-EL	.09 [2.3]
-K	.09 [2.3]
-LC, -K-LC	.12 [3.0]

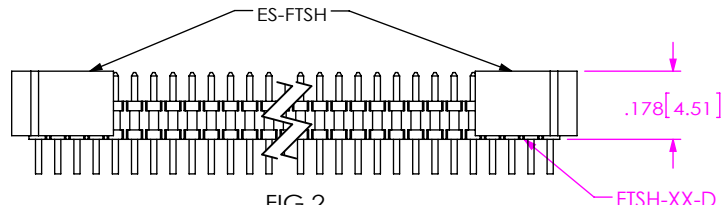
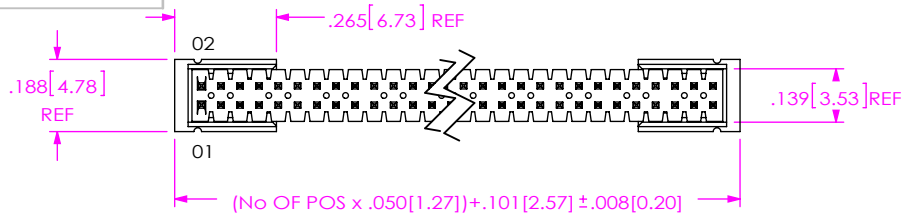
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE:  
DECIMALS ANGLES  
.XX:  $\pm 0.01$  [3] 1°  
.XXX:  $\pm 0.005$  [13]  
.XXXX:  $\pm 0.0010$  [25]

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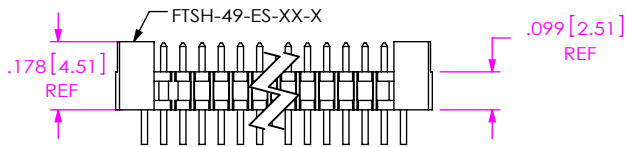
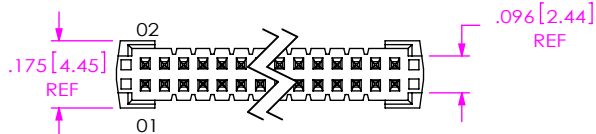
MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 5:1  
INSULATOR: LCD UL 94-V0  
TERMINAL: PHOSPHOR BRONZE  
F:\DWG\MISC\MKTG\FTSH-1XX-XX-XXX-D-XXX-XX-MKT.SLDDRW

**samtec**  
520 PARK EAST BLVD. NEW ALBANY, IN 47150  
PHONE: 812-944-6733 FAX: 812-948-5047  
e-Mail: info@SAMTEC.com code 55322

DESCRIPTION:  
.050 x .050 CL THROUGH HOLE TERMINAL STRIP  
DWG. NO. FTSH-1XX-XX-XXX-D-XXX-XX  
BY: J. FERRY 02/27/1996 SHEET 1 OF 3



**FIG 2**  
-ES OPTION  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)  
(-02 OR -03 LEAD STYLE ONLY)  
(9 POS MIN FOR SNAP SHROUDS)  
(5 POS MIN FOR MOLDED SHROUDS)

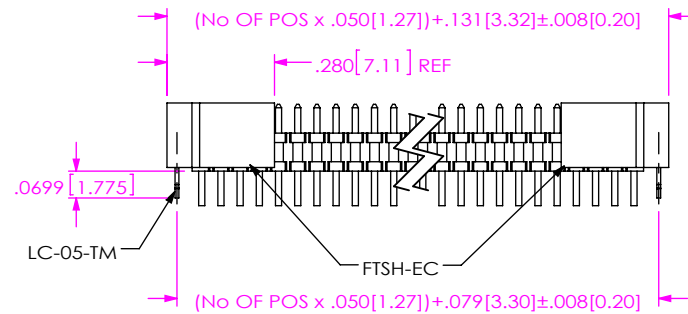
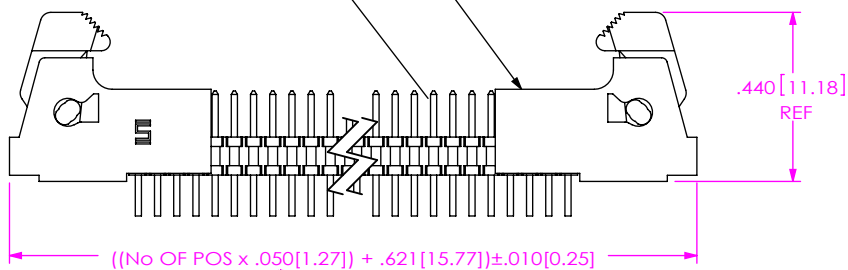


(MOLDED SHROUDS)

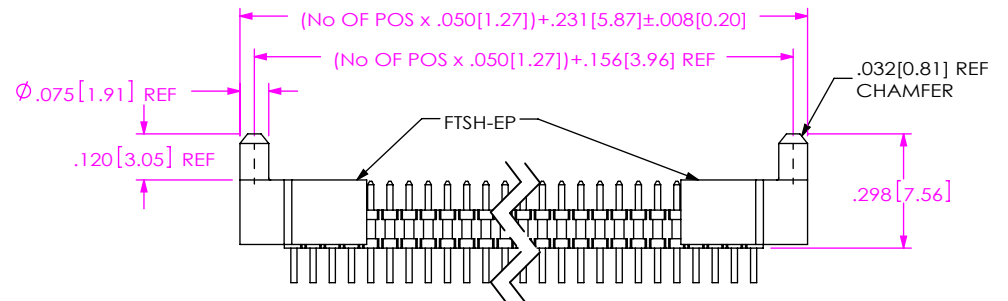
**FIG 3**  
-EJ OPTION  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)  
(-01 LEAD STYLE ONLY)

USE SUB-FTSH-EJEHA  
(2 REQ'D PER ASSEMBLY  
EACH USES 1 EHA-02,  
1 FTSH-EJ)

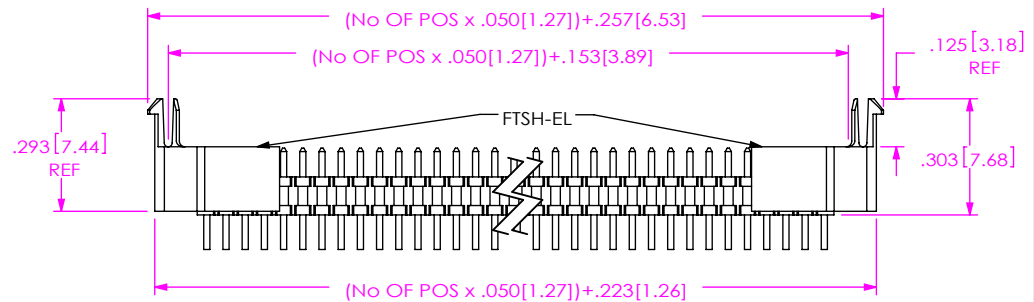
POST SIDE OF CONNECTOR



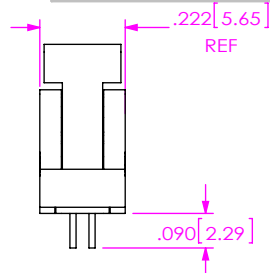
**FIG 4**  
-EC OPTION  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 2)



**FIG 5**  
-EP OPTION  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 2)  
(USE ONLY WHEN MATING WITH CLP)



**FIG 6**  
-EL OPTION  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 2)  
(USE ONLY WHEN MATING WITH CLP)



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SHEET SCALE: 2:1

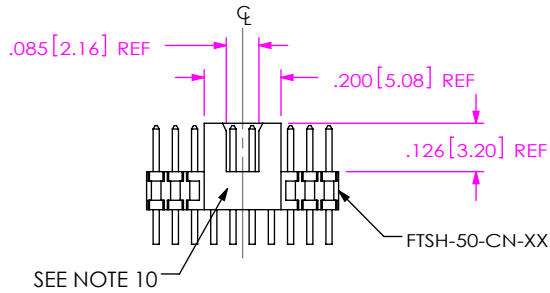
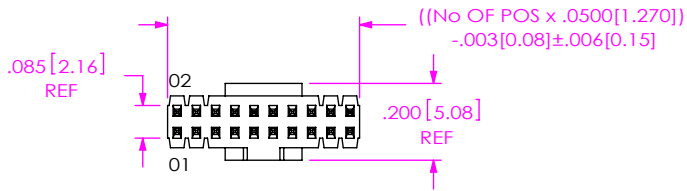


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PHONE: 812-944-6733 FAX: 812-948-5047  
e-Mail: info@SAMTEC.com code 55322

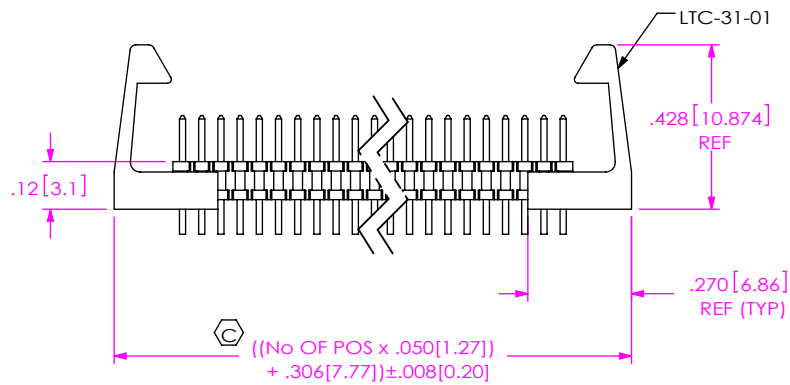
DESCRIPTION:  
.050 x .050 CL THROUGH HOLE TERMINAL STRIP

DWG. NO.  
**FTSH-1XX-XX-XXX-D-XXX-XX**

BY: J. FERRY 02/27/1996 SHEET 2 OF 3



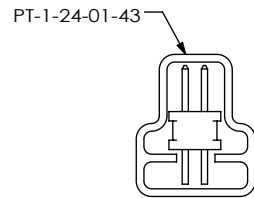
**FIG 7**  
**-K OPTION**  
 (LEAD STYLE -01)  
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)  
 (POSITION 13, 17, 20 & 25 AVAILABLE WITH -K & -EJ OPTION)



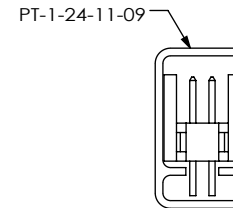
**FIG 8**  
**-LC OPTION**  
 (LEAD STYLE -01)  
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

**TABLE 3**  
 (SEE NOTE 6)

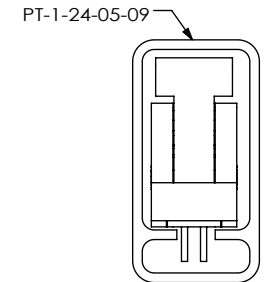
LEAD STYLE	OPTION(S)	PACKAGING TUBE	TUBE PLUG
-01, -02, -03	NONE	PT-1-24-01-43	TP-24
-04	NONE	PT-1-24-11-09	TP-09
ALL	-EJ, -EJ-K, -LC, -K-LC	PT-1-24-05-09	TP-07
ALL	-EC, -EC-K	PT-1-24-01-38	TP-24
ALL	-EL, -EP, -EL-K, -EP-K	PT-1-24-03-09	TP-09
ALL	-K	PT-1-24-11-09	TP-09
ALL	-ES, -ES-K	PT-1-24-01-55	TP-24



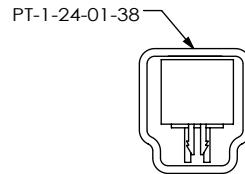
-01, -02, -03



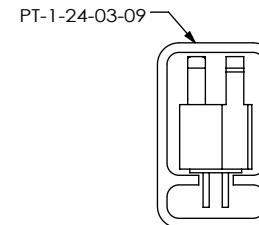
-04 & -K



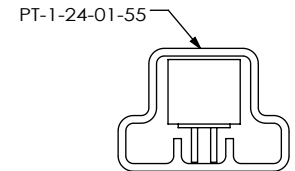
-EJ, -EJ-K, -LC & -LC-K



-EC & -EC-K



-EL, -EP, -EL-K & -EP-K



-ES & -ES-K

**FIG 9**  
 TUBE VIEWS

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