

DO NOT  
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## DESIGNED & DIMENSIONED IN MILLIMETERS [INCHES]

LPHT-XX-XX-X-RTX-XX

## — OPTIONS

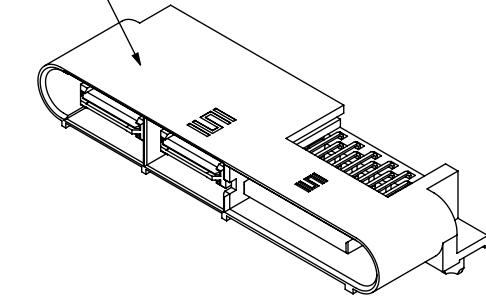
-GP: GUIDE POSTS  
(LEAVE BLANK FOR NO -GP OPTION)  
-BLANK: NO GP OPTION  
\*-HS: HOT SWAP  
(ONE BANK OF OUTER POWER POS ARE  
LONG PINS, POWER PIN ONLY)  
(NOT AVAILABLE ON -02 POWER POS)  
(LEAVE BLANK FOR NO HOT SWAP)

## — TAIL

-RT1:RA-TH, 1.58[.062] BOARD  
-RT2: RA-TH, 2.36[.093] BOARD

(\* = NOT TOOLED)

LPHT-04-24-X-RTX-GP -



7.49 [.295] REF

12.00 [.472]

8.28 [.33]

3.195 [.126] REF

4.06 [.160] REF

0.64 [.025] REF (TYP)

0.45 [.018] REF (TYP)

1.27 [.050] (TYP) (TOL NON-ACCUM)

"A" REF (SEE TABLE 2, SHT 8)

"B" REF (SEE TABLE 2, SHT 8)

"C" REF (SEE TABLE 2, SHT 8)

"C" (SEE TABLE 4, SHT 8)

"D"

"D" ±0.30

"E" ±0.30

"F" (SEE TABLE 4, SHT 8)

"G" (SEE TABLE 4, SHT 8)

"H"

"L": 10  $\mu$ " SELECTIVE AREA, MATTE TIN

"S": 30  $\mu$ " SELECTIVE AREA, MATTE TIN

POWER POS (TOTAL)  
-02, -04, -06, -08,  
-10, -\*12, -\*14

SIGNAL POS (TOTAL)  
-\*12, -16, -20, -24,  
-28, -32, -\*36, -\*40

PLATING SPECIFICA

FIG 1  
IPHT-04-24-X-RTX-GP SHOWN

TABLE 1

**TABLE 1**

TAIL	ROW 1 POWER	ROW 2 POWER	"D"	"E"
-RT1	T-1M110-02-01-X-ST	T-1M110-01-01-X-ST	2.90 [.114]	2.90 [.114]
-RT2	T-1M110-02-02-X-ST	T-1M110-01-02-X-ST	3.60 [.142]	3.60 [.142]

## NOTES:

1. © REPRESENTS A CRITICAL DIMENSION.
2. MINIMUM PUSHOUT FORCE: SIGNAL PIN: 0.5 LBS, POWER PIN: 3.0 LBS.
3. MAXIMUM ALLOWABLE BOW: 0.15[.006] MM/MM AFTER ASSEMBLY.
4. MAXIMUM BURR ON SHEARED TAILS: 0.10[.004].
5. ALL P/N'S REQUIRE PRESSING TO PCB DUE TO ALIGNMENT PEGS,  
CONTACT SAMTEC FOR REQUIRED FIXTURES.
6. ASSEMBLIES TO BE PACKAGED IN TRAYS

UNLESS OTHERWISE SPECIFIED,  
DIMENSIONS ARE IN MILLIMETERS.  
TOLERANCES ARE:  
DECIMALS                    ANGLES  
X.X:  $\pm 0.3$  [.01]                    2°  
X.XX:  $\pm 0.13$  [.005]  
X.XXX:  $\pm 0.051$  [.00201]

MATERIAL: DO NOT SCALE DRAWING  
INSULATORS: LCP, COLOR: BLACK  
SIGNAL TERMINAL: BRASS  
POWER TERMINAL: COPPER ALLOY

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PHONE: 812-944-6733 FAX: 812-948-5047

### OPTION:

ON:  
**LPHT-RA TERMINAL ASSEMBLY**

NO.  
15

PHT-XX-XX-X-RTX-XX

ROY

JOY LUO 11/28/2011 SHEET 1 OF 8

REVISION E

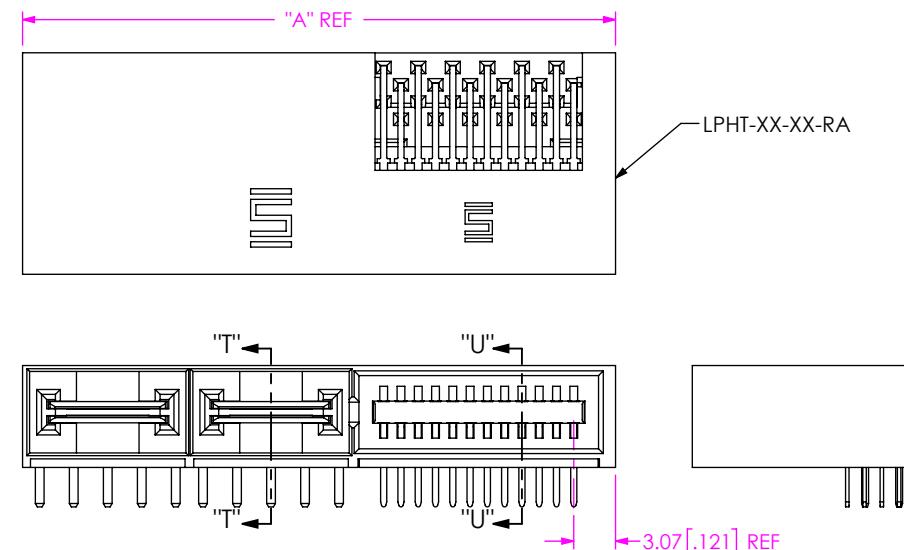
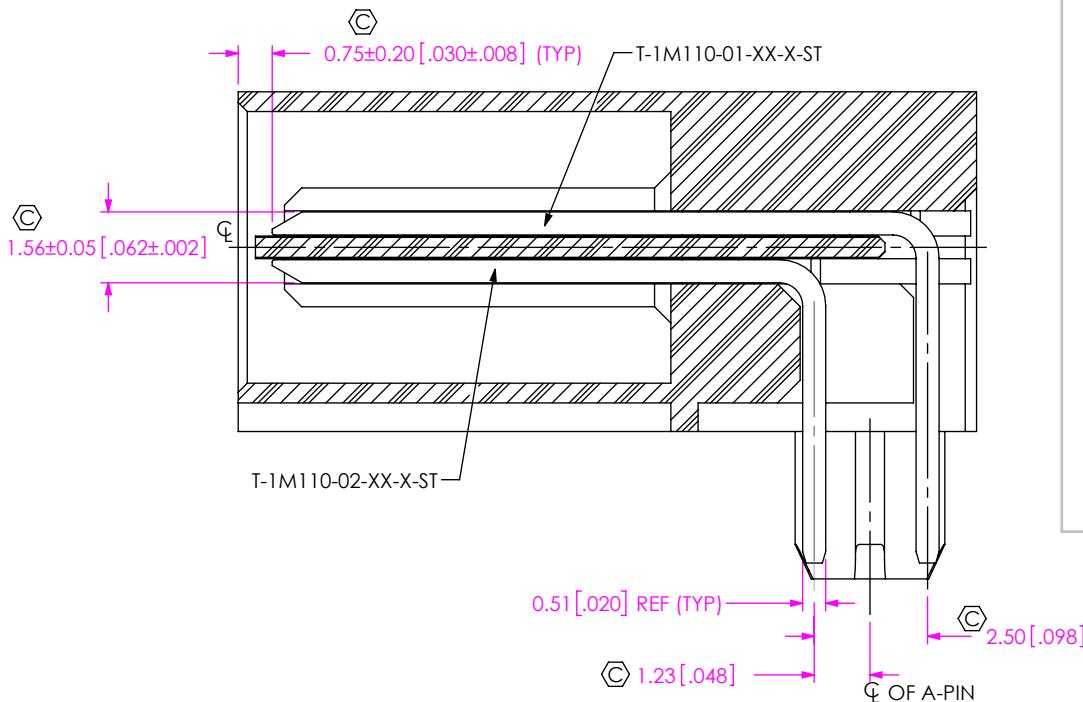
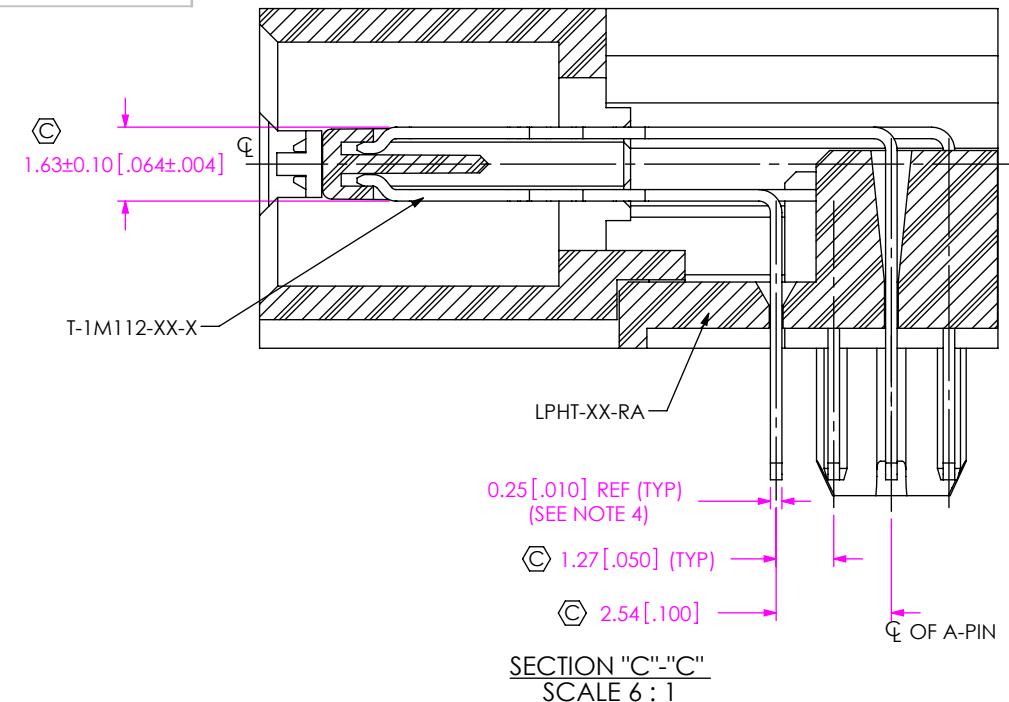
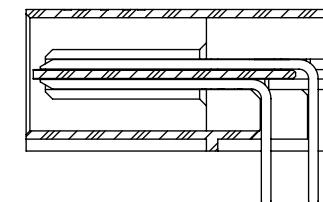
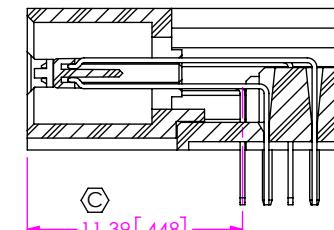


FIG 2  
LPHT-04-24-X-RTX SHOWN  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)



SECTION 'T'-'T'  
(DIFFERENT AS SHOWN,  
OTHERWISE SAME AS SECTION "D"-'D")



SECTION 'U'-'U'  
(DIFFERENT AS SHOWN,  
OTHERWISE SAME AS SECTION "C"-'C")

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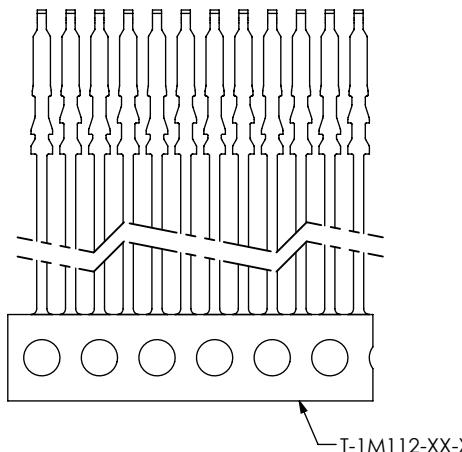
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DESCRIPTION: LPHT-RA TERMINAL ASSEMBLY

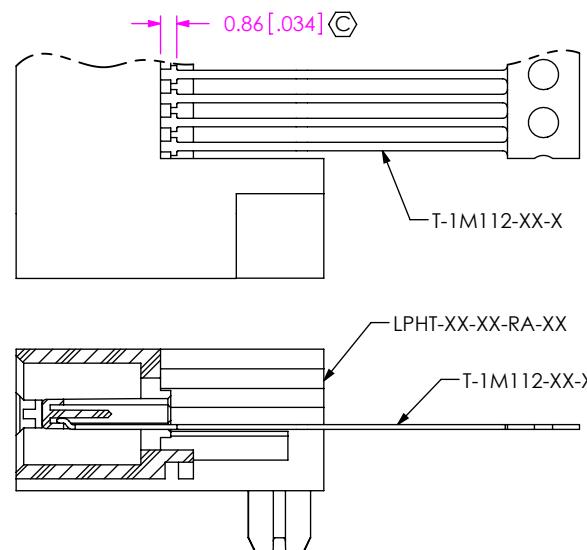
DWG. NO.

LPHT-XX-XX-X-RTX-XX

BY: ROY LUO 11/28/2011 SHEET 2 OF 8

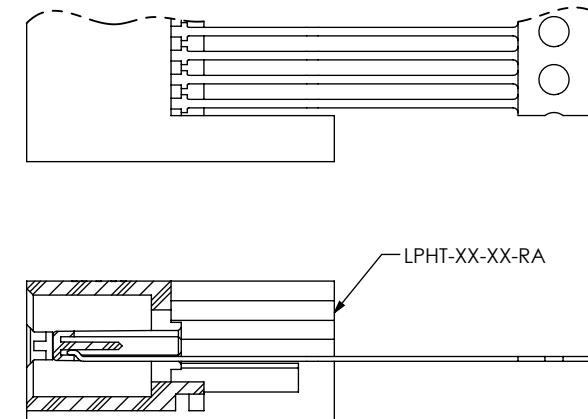


IN-PROCESS 1  
REMOVE TIE BARS FOR T-1M112-XX-X

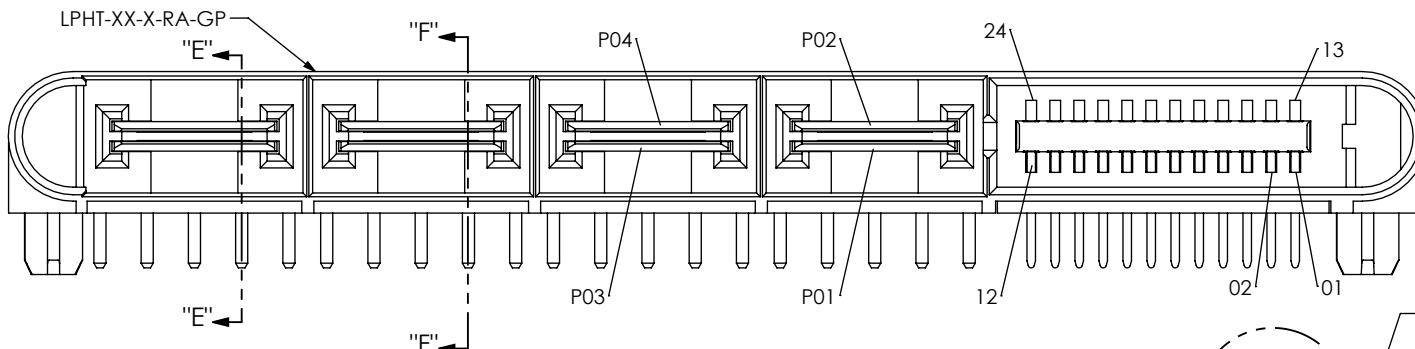


GP OPTION

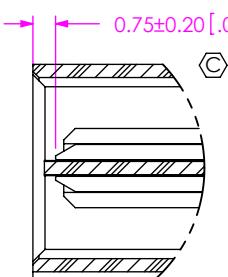
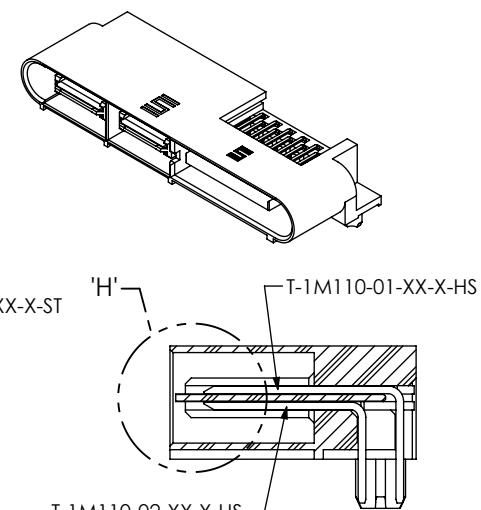
IN-PROCESS 2  
FILL SIGNAL BOTTOM ROW



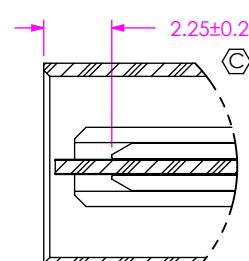
NO GP OPTION  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION)



**FIG 3**  
LPHT-08-24-X-RTX-GP-HS SHOWN  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)  
(NOT TOOLED)



DETAIL 'G'  
SCALE 4 : 1



DETAIL 'H'  
SCALE 4 : 1

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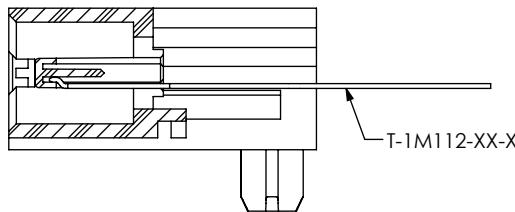
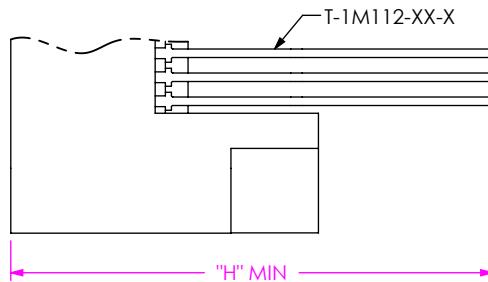
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BY: ROY LUO 11/28/2011 SHEET 3 OF 8

REVISION E



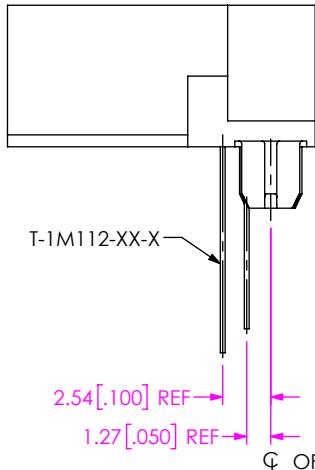
GP OPTION

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(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION)

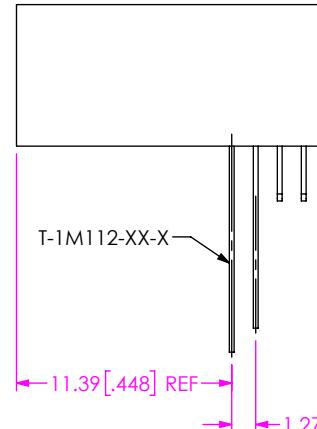
**TABLE 5**

TAIL	"H"
-RT1	19.93 [.785]
-RT2	20.63 [.812]

IN-PROCESS 3  
CUT OFF CARRIER

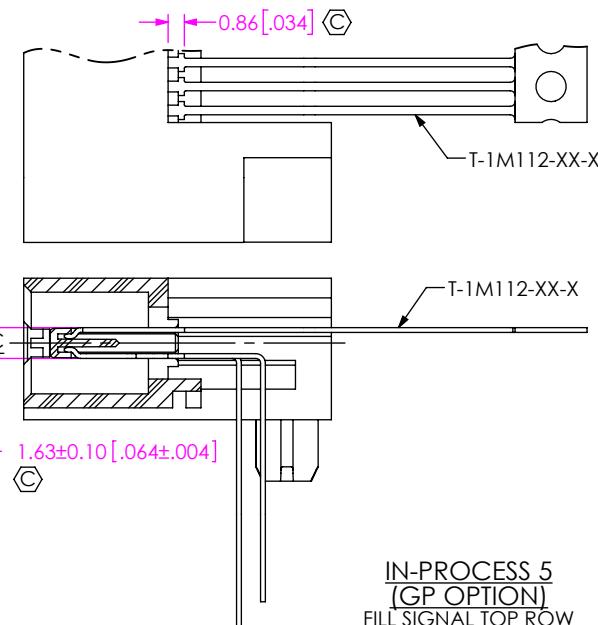


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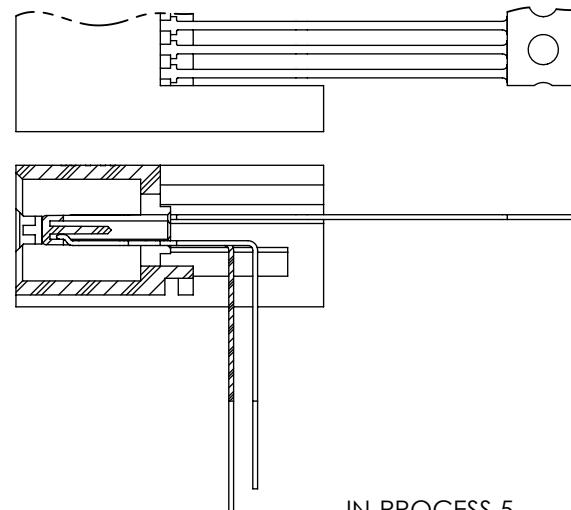


NO GP OPTION  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION)

IN-PROCESS 4  
FORM SIGNAL BOTTOM ROW



IN-PROCESS 5  
(GP OPTION)  
FILL SIGNAL TOP ROW



IN-PROCESS 5  
(NO GP OPTION)  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION)  
FILL SIGNAL TOP ROW

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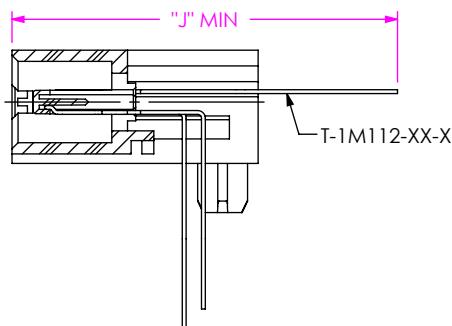
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DWG. NO. LPHT-XX-XX-X-RTX-XX

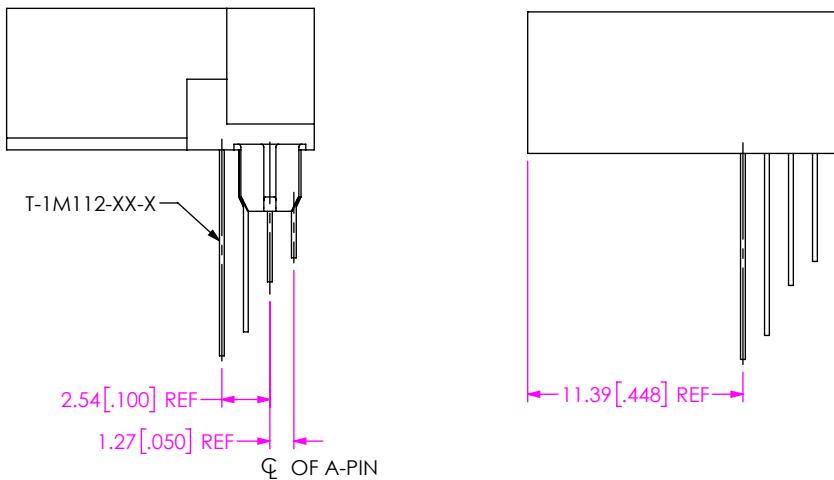
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GP OPTION

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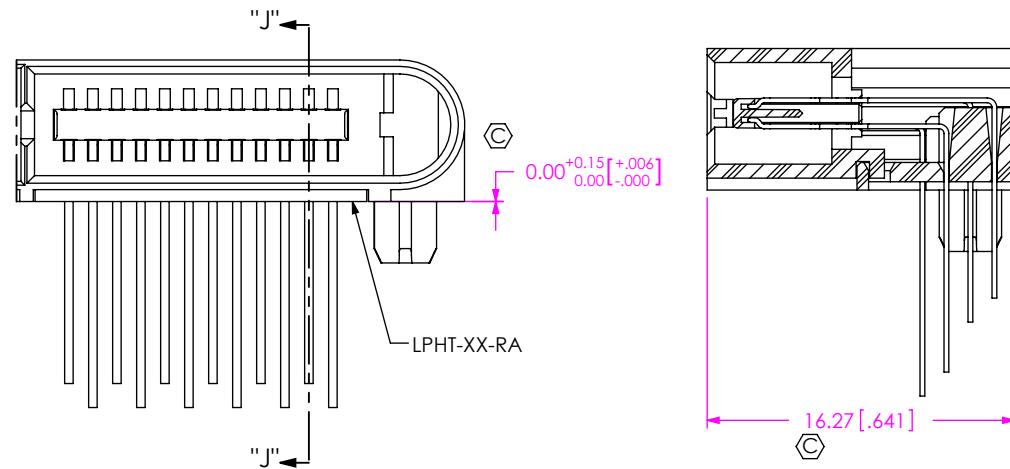
**IN-PROCESS 6**  
CUT OFF CARRIER

TABLE 6	
TAIL	"J"
-RT1	23.85 [.939]
-RT2	24.55 [.967]

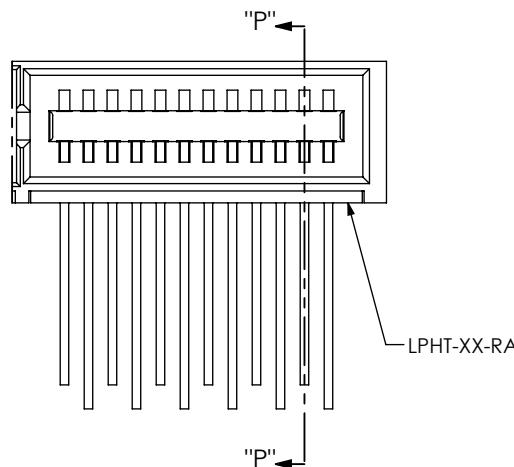
GP OPTION

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(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION)

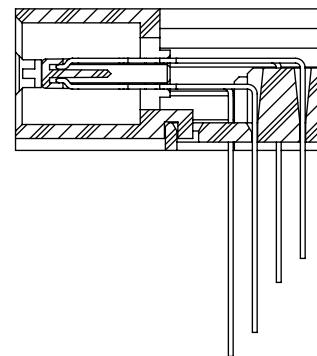
**IN-PROCESS 7**  
FORM SIGNAL TOP ROW



**IN-PROCESS 8**  
(GP OPTION)  
FILL LPHT-XX-RA



**SECTION "J"- "J"**  
SCALE 2.5 : 1



**SECTION "P"- "P"**  
SCALE 2.5 : 1

**IN-PROCESS 8**  
(NO GP OPTION)  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION)  
FILL LPHT-XX-RA

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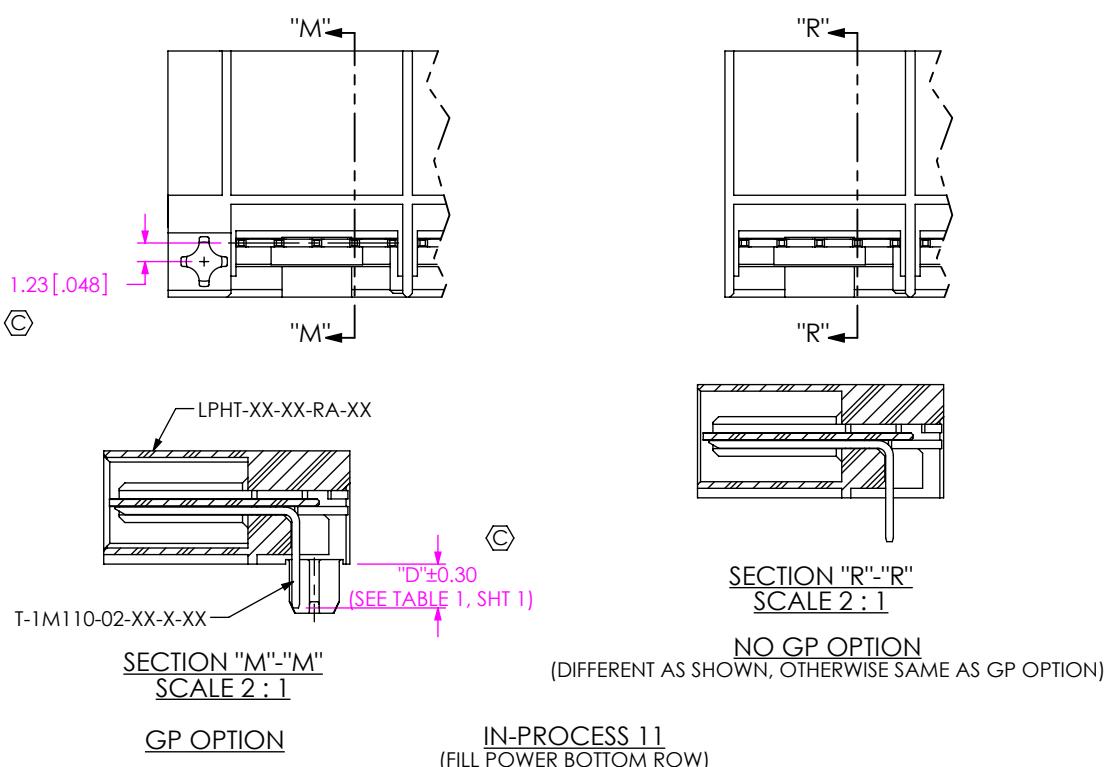
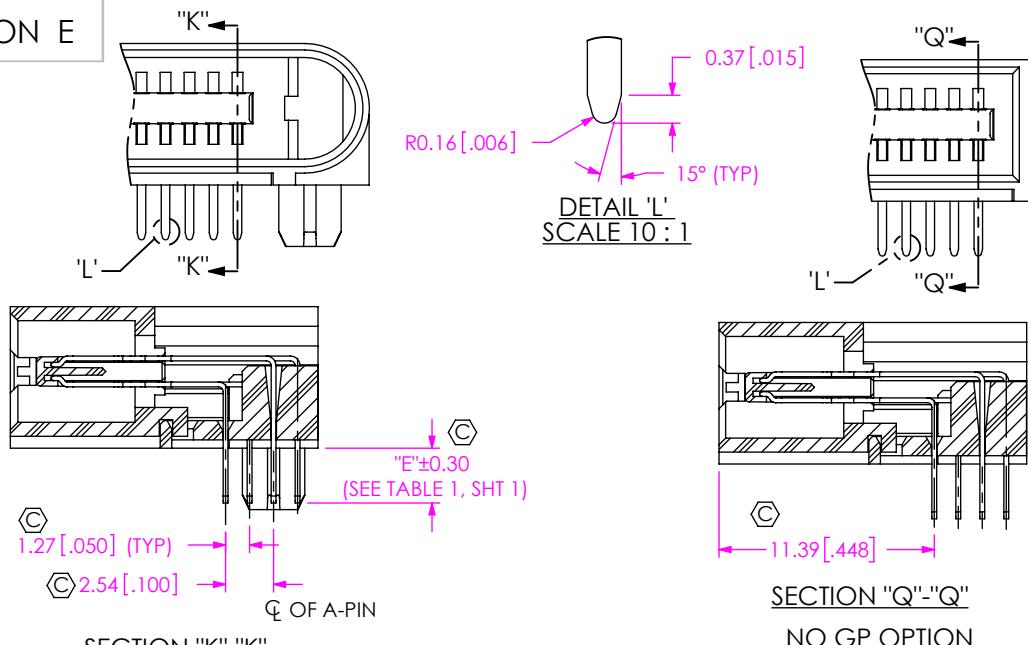
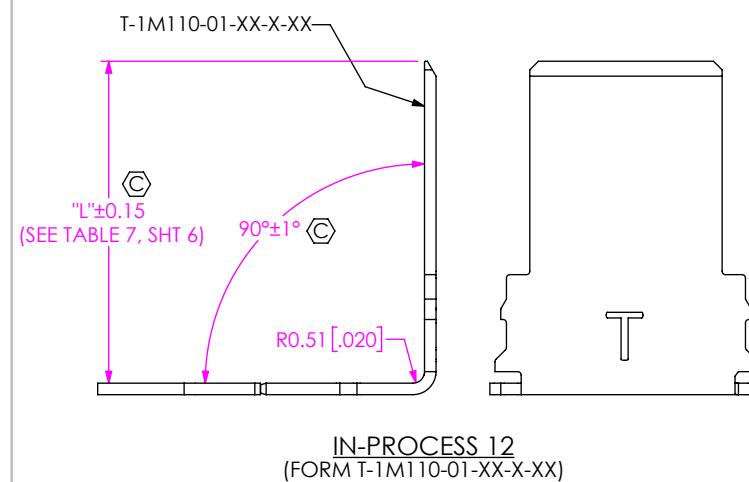
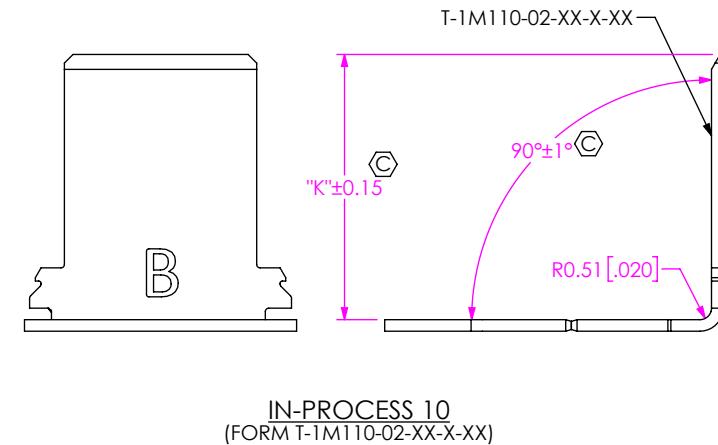


TABLE 7		
OPTION	"K"	"L"
N/A	11.70 [.461]	14.20 [.559]
*-HS	10.20 [.402]	12.70 [.500]
(*) = NOT TOOLED		

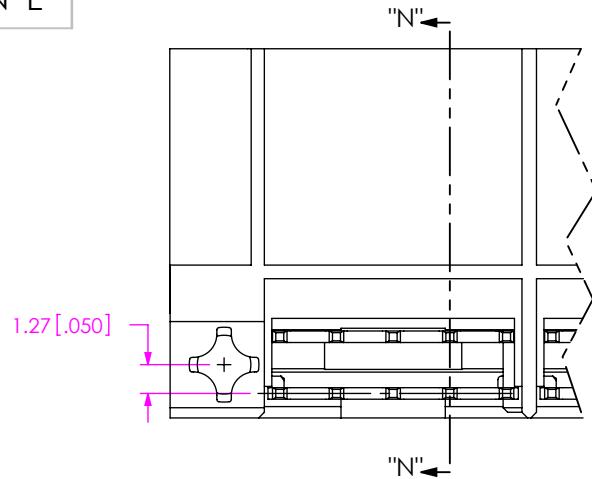


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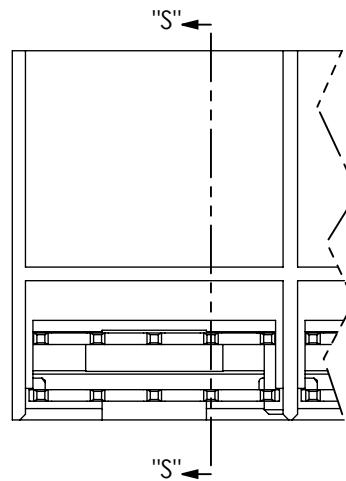
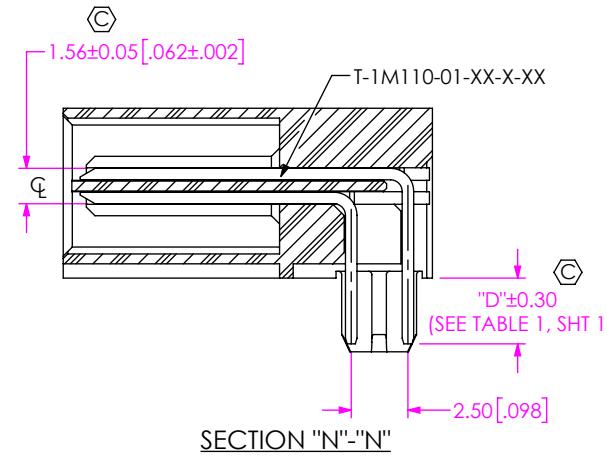
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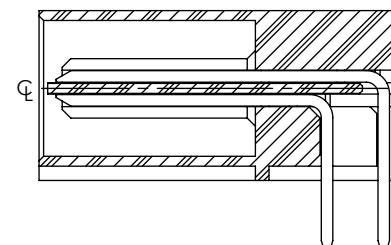
DESCRIPTION: LPHT-RA TERMINAL ASSEMBLY
DWG. NO. LPHT-XX-XX-X-RTX-XX
BY: ROY LUO 11/28/2011 SHEET 6 OF 8



IN-PROCESS 13  
(GP OPTION)  
(FILL POWER TOP ROW)



IN-PROCESS 13  
(NO GP OPTION)  
(FILL POWER TOP ROW)



F:\DWG\MISC\MKTG\LPHT-XX-XX-X-RTX-XX-MKT.SLDDRW

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TABLE 2 SIGNAL/POWER COMBO -A-GP

SIGNAL POS	02 POWER POS			04 POWER POS			06 POWER POS			08 POWER POS		
	"A"	"B"	"C"									
12	31.43 [1.237]	24.09 [0.948]	25.92 [1.020]	43.43 [1.710]	36.09 [1.421]	37.92 [1.493]	55.43 [2.182]	48.09 [1.893]	49.92 [1.965]	67.43 [2.655]	60.09 [2.366]	61.92 [2.438]
16	33.97 [1.337]	26.63 [1.048]	28.46 [1.120]	45.97 [1.810]	38.63 [1.521]	40.46 [1.593]	57.97 [2.282]	50.63 [1.993]	52.46 [2.065]	69.97 [2.755]	62.63 [2.466]	64.46 [2.538]
20	36.51 [1.437]	29.17 [1.148]	31.00 [1.220]	48.51 [1.910]	41.17 [1.621]	43.00 [1.693]	60.51 [2.382]	53.17 [2.093]	55.00 [2.165]	72.51 [2.855]	65.17 [2.566]	67.00 [2.638]
24	39.05 [1.537]	31.71 [1.248]	33.54 [1.320]	51.05 [2.010]	43.71 [1.721]	45.54 [1.793]	63.05 [2.482]	55.71 [2.193]	57.54 [2.265]	75.05 [2.955]	67.71 [2.666]	69.54 [2.738]
28	41.59 [1.637]	34.25 [1.348]	36.08 [1.420]	53.59 [2.110]	46.25 [1.821]	48.08 [1.893]	65.59 [2.582]	58.25 [2.293]	60.08 [2.365]	77.59 [3.055]	70.25 [2.766]	72.08 [2.838]
32	44.13 [1.737]	36.79 [1.448]	38.62 [1.520]	56.13 [2.210]	48.79 [1.921]	50.62 [1.993]	68.13 [2.682]	60.79 [2.393]	62.62 [2.465]	80.13 [3.155]	72.79 [2.866]	74.62 [2.938]
36	46.67 [1.837]	39.33 [1.548]	41.16 [1.620]	58.67 [2.310]	51.33 [2.021]	53.16 [2.093]	70.67 [2.782]	63.33 [2.493]	65.16 [2.565]	82.67 [3.255]	75.33 [2.966]	77.16 [3.038]
40	49.21 [1.937]	41.87 [1.648]	43.70 [1.720]	61.21 [2.410]	53.87 [2.121]	55.70 [2.193]	73.21 [2.882]	65.87 [2.593]	67.70 [2.665]	85.21 [3.355]	77.87 [3.066]	79.70 [3.138]

(\* = NOT TOOLED)

TABLE 2 SIGNAL/POWER COMBO -A-GP CONTINUED

SIGNAL POS	10 POWER POS			*12 POWER POS			*14 POWER		
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"
12	79.43 [3.127]	72.09 [2.838]	73.92 [2.910]	91.43 [3.600]	84.09 [3.311]	85.92 [3.383]	103.43 [4.072]	96.09 [3.783]	97.92 [3.855]
16	81.97 [3.227]	74.63 [2.938]	76.46 [3.010]	93.97 [3.700]	86.63 [3.411]	88.46 [3.483]	105.97 [4.172]	98.63 [3.883]	100.46 [3.955]
20	84.51 [3.327]	77.17 [3.038]	79.00 [3.110]	96.51 [3.800]	89.17 [3.511]	91.00 [3.583]	108.51 [4.272]	101.17 [3.983]	103.00 [4.055]
24	87.05 [3.427]	79.71 [3.138]	81.54 [3.210]	99.05 [3.900]	91.71 [3.611]	93.54 [3.683]	111.05 [4.372]	103.71 [4.083]	105.54 [4.155]
28	89.59 [3.527]	82.25 [3.238]	84.08 [3.310]	101.59 [4.000]	94.25 [3.711]	96.08 [3.783]	113.59 [4.472]	106.25 [4.183]	108.08 [4.255]
32	92.13 [3.627]	84.79 [3.338]	86.62 [3.410]	104.13 [4.100]	96.79 [3.811]	98.62 [3.883]	116.13 [4.572]	108.79 [4.283]	110.62 [4.355]
36	94.67 [3.727]	87.33 [3.438]	89.16 [3.510]	106.67 [4.200]	99.33 [3.911]	101.16 [3.983]	118.67 [4.672]	111.33 [4.383]	113.16 [4.455]
40	97.21 [3.827]	89.87 [3.538]	91.70 [3.610]	109.21 [4.300]	101.87 [4.011]	103.70 [4.083]	121.21 [4.772]	113.87 [4.483]	115.70 [4.555]

(\* = NOT TOOLED)

TABLE 3 SIGNAL/POWER COMBO (NO GP OPTIONS)

SIGNAL POS	02 POWER	04 POWER	06 POWER	08 POWER	10 POWER	*12 POWER	*14 POWER
	"A"	"A"	"A"	"A"	"A"	"A"	"A"
12	23.96 [0.943]	35.96 [1.416]	47.96 [1.888]	59.96 [2.361]	71.96 [2.833]	83.96 [3.306]	95.96 [3.778]
16	26.50 [1.043]	38.50 [1.516]	50.50 [1.988]	62.50 [2.461]	74.50 [2.933]	86.50 [3.406]	98.50 [3.878]
20	29.04 [1.143]	41.04 [1.616]	53.04 [2.088]	65.04 [2.561]	77.04 [3.033]	89.04 [3.506]	101.04 [3.978]
24	31.58 [1.243]	43.58 [1.716]	55.58 [2.188]	67.58 [2.661]	79.58 [3.133]	91.58 [3.606]	103.58 [4.078]
28	34.12 [1.343]	46.12 [1.816]	58.12 [2.288]	70.12 [2.761]	82.12 [3.233]	94.12 [3.706]	106.12 [4.178]
32	36.66 [1.443]	48.66 [1.916]	60.66 [2.388]	72.66 [2.861]	84.66 [3.333]	96.66 [3.806]	108.66 [4.278]
36	39.20 [1.543]	51.20 [2.016]	63.20 [2.488]	75.20 [2.961]	87.20 [3.433]	99.20 [3.906]	111.20 [4.378]
40	41.74 [1.643]	53.74 [2.116]	65.74 [2.588]	77.74 [3.061]	89.74 [3.533]	101.74 [4.006]	113.74 [4.478]

(\* = NOT TOOLED)

TABLE 4

SIGNAL POS	"F"	"G"
12	6.35 [0.250]	6.35 [0.250]
16	8.89 [0.350]	8.89 [0.350]
20	11.43 [0.450]	11.43 [0.450]
24	13.97 [0.550]	13.97 [0.550]
28	16.51 [0.650]	16.51 [0.650]
32	19.05 [0.750]	19.05 [0.750]
36	21.59 [0.850]	21.59 [0.850]
40	24.13 [0.950]	24.13 [0.950]

(\* = NOT TOOLED)

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DESCRIPTION: LPHT-RA TERMINAL ASSEMBLY

DWG. NO.

LPHT-XX-XX-X-RTX-XX

BY: ROY LUO 11/28/2011 SHEET 8 OF 8