

DO NOT  
SCALE FROM  
THIS PRINT

DESIGNED & DIMENSIONED  
IN MILLIMETERS[INCHES]

LPHS-XX-XX-X-RTX-XX

POWER POS (TOTAL)

-02, -04, -06, -08,  
-10, \*-12, \*-14

SIGNAL POS (TOTAL)

\*-12, -16, -20, -24,  
-28, -32, \*-36, \*-40

PLATING SPECIFICATION

-L: 10  $\mu$ " SELECTIVE GOLD IN CONTACT  
AREA, MATTE TIN ON TAIL  
-S: 30  $\mu$ " SELECTIVE GOLD IN CONTACT  
AREA, MATTE TIN ON TAIL  
(SEE NOTE 7)

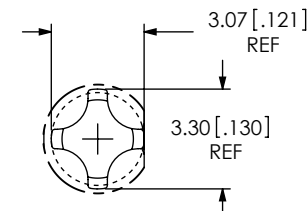
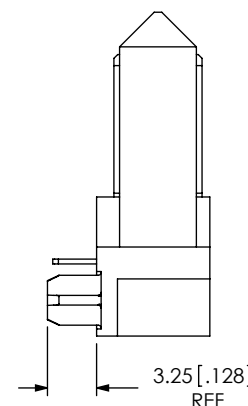
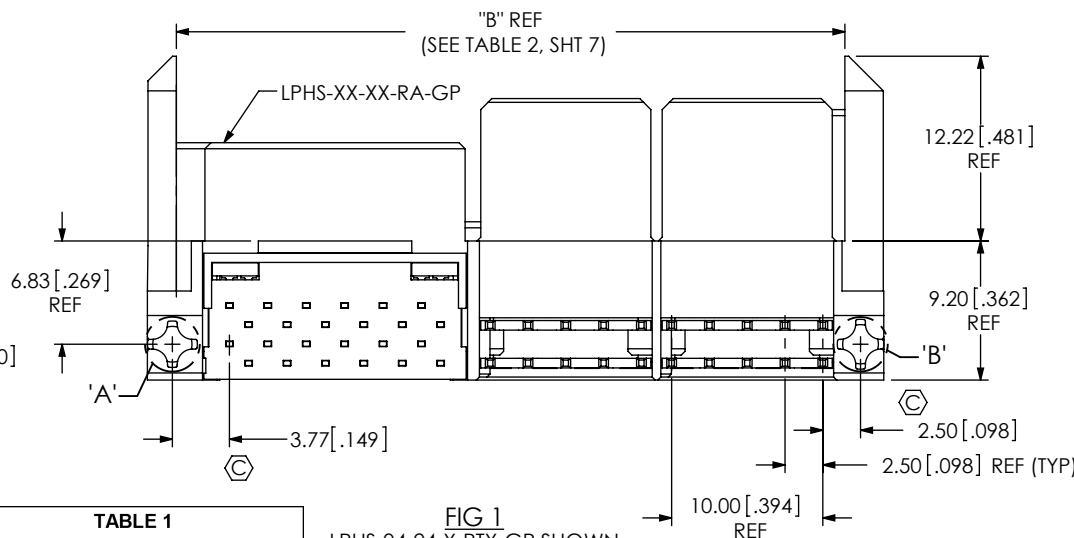
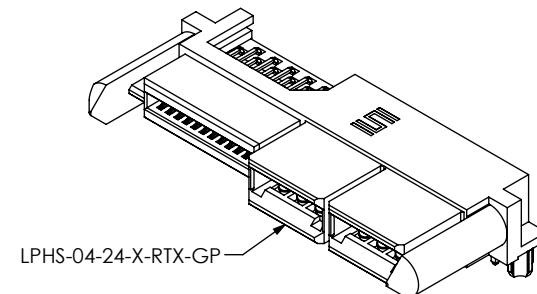
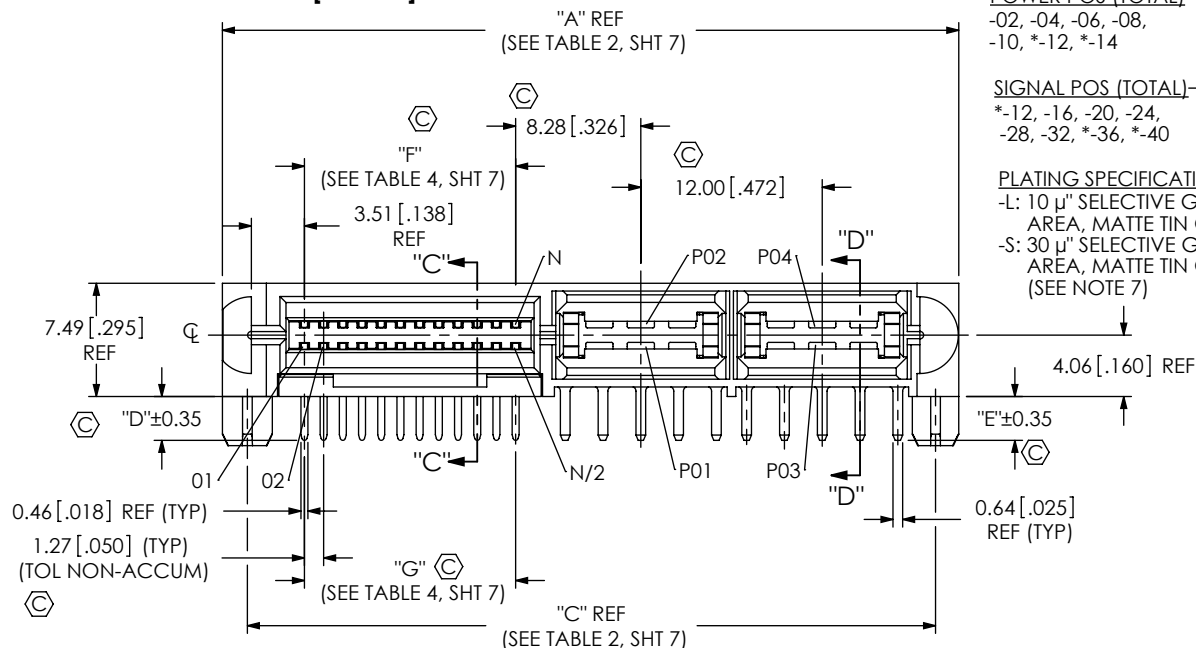
OPTIONS

-GP: GUIDE POSTS  
(LEAVE BLANK FOR NO -GP OPTION)  
-BLANK: NO GP OPTION

TAIL

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

(\* = NOT TOOLED)



DETAIL 'B'  
SCALE 4 : 1

DETAIL 'A'  
SCALE 4 : 1

TABLE 1		
TAIL	"D"	"E"
-RT1	2.90 [.114]	2.90 [.114]
-RT2	3.60 [.142]	3.60 [.142]

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

NOTES:

1.  $\odot$  REPRESENTS A CRITICAL DIMENSION.
2. MINIMUM PUSHOUT FORCE: SIGNAL: 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: 0.15[.006].
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.
7. SELECTIVE PLATING LUBRICATED WITH ACCL-53T WHICH CAN BE DETECTED USING A UVA ULTRAVIOLET LIGHT SOURCE.

UNLESS OTHERWISE SPECIFIED,  
DIMENSIONS ARE IN MILLIMETERS.  
TOLERANCES ARE:

DECIMALS ANGLES  
X.X:  $\pm 0.3$  [.01]  
X.XX:  $\pm 0.13$  [.005]  
X.XXX:  $\pm 0.051$  [.0020]

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MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 2:1

INSULATOR: LCP, COLOR: BLACK  
SIGNAL CONTACT: BRASS  
POWER CONTACT: COPPER ALLOY

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

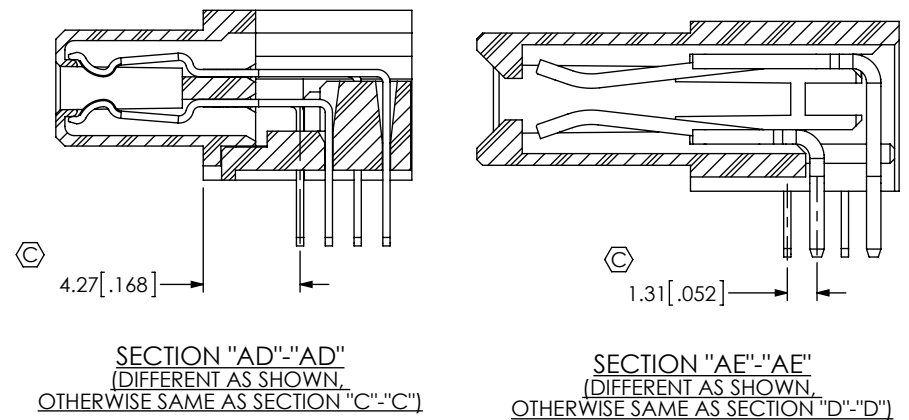
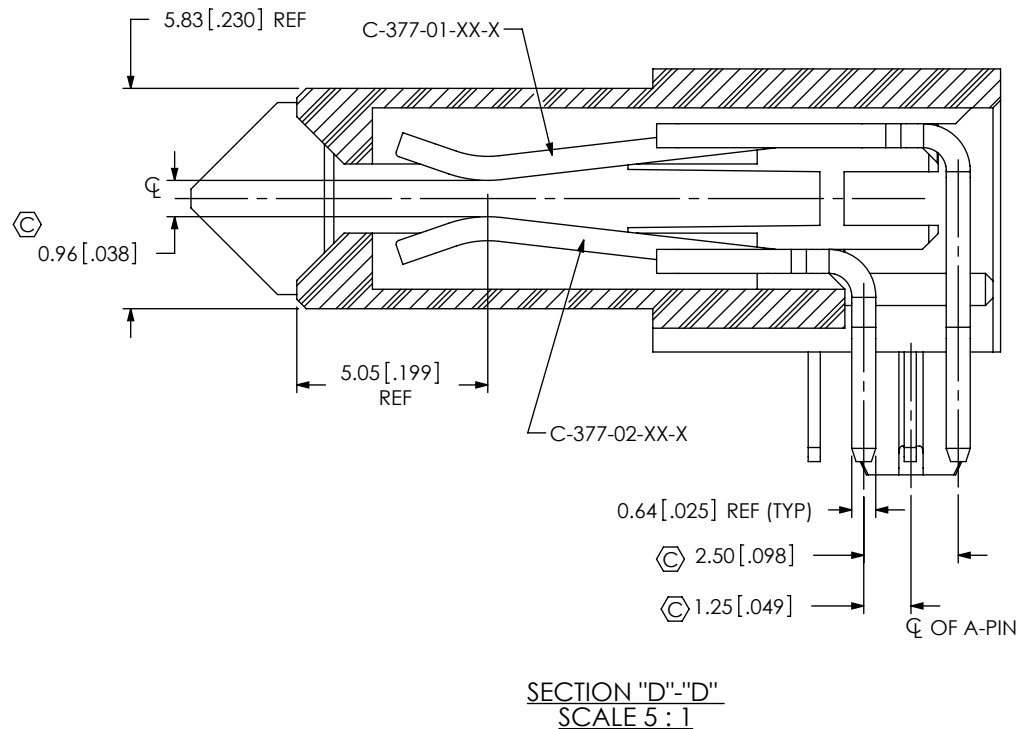
**samtec**

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

DESCRIPTION:  
LPHS-RA SOCKET ASSEMBLY

DWG. NO.  
LPHS-XX-XX-X-RTX-XX

BY: ROY LUO 12/13/2011 SHEET 1 OF 7



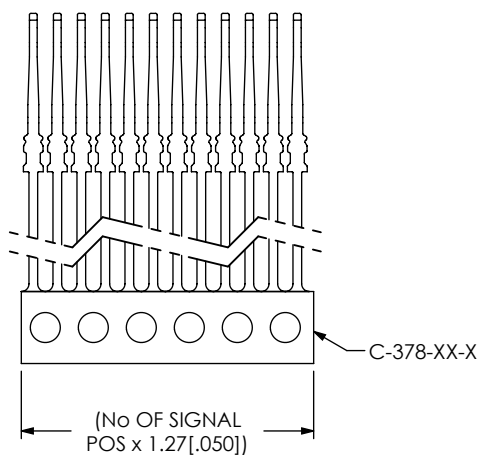
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PHONE: 812-944-6733 FAX: 812-948-5047  
e-Mail [info@SAMTEC.com](mailto:info@SAMTEC.com) code 55322

DESCRIPTION: LPHS-RA SOCKET ASSEMBLY

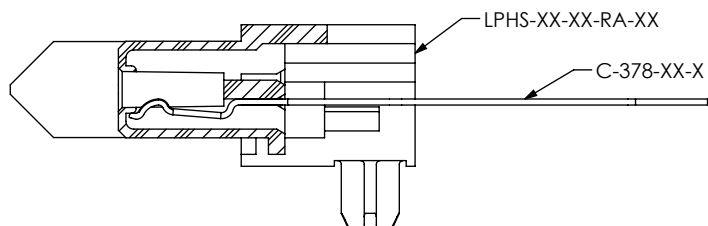
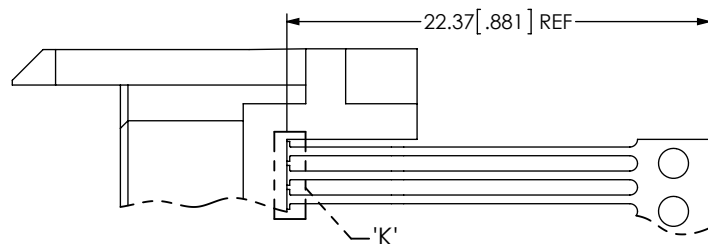
DWG. NO. LPHS-XX-XX-X-RTX-XX

BY: ROY LUO 12/13/2011	SHEET 2 OF 7
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# REVISION F

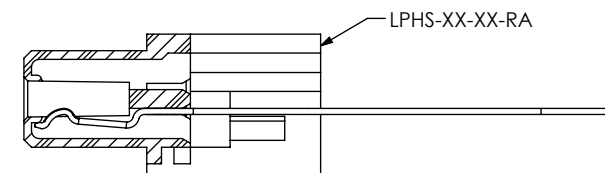
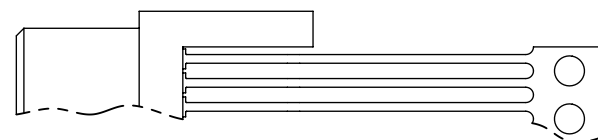


**IN-PROCESS 1**  
CUT COMB & REMOVE TIE BARS FOR C-378-XX-X

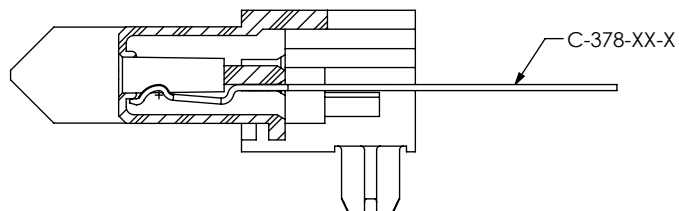
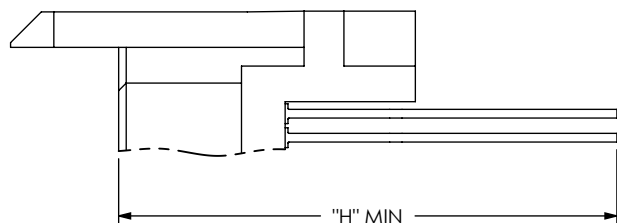


**GP OPTION**

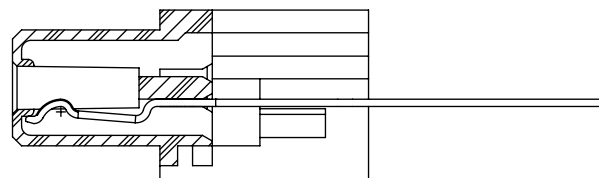
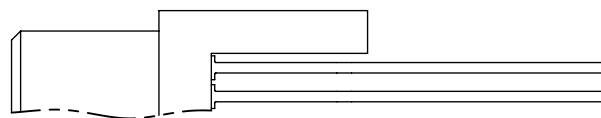
**IN-PROCESS 2**  
FILL SIGNAL BOTTOM ROW



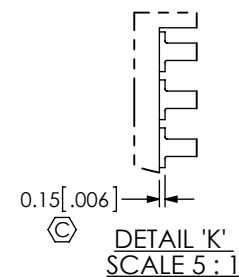
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(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION)



**GP OPTION**



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



**IN-PROCESS 3**  
CUT OFF CARRIER

**TABLE 5**

TAIL	"H"
-RT1	19.36 [.762]
-RT2	20.06 [.790]

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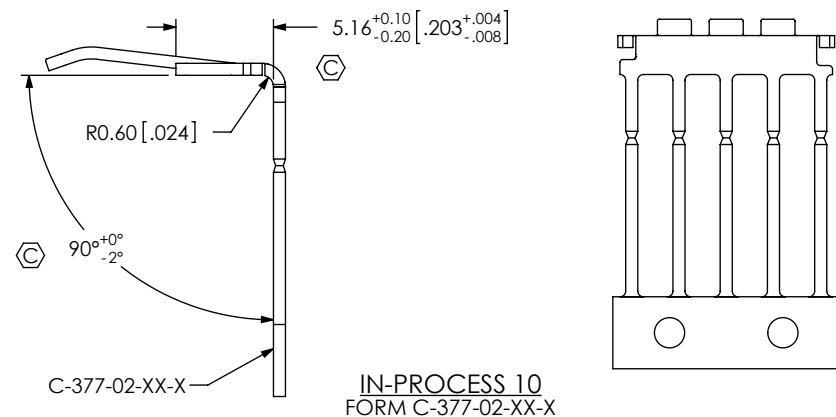
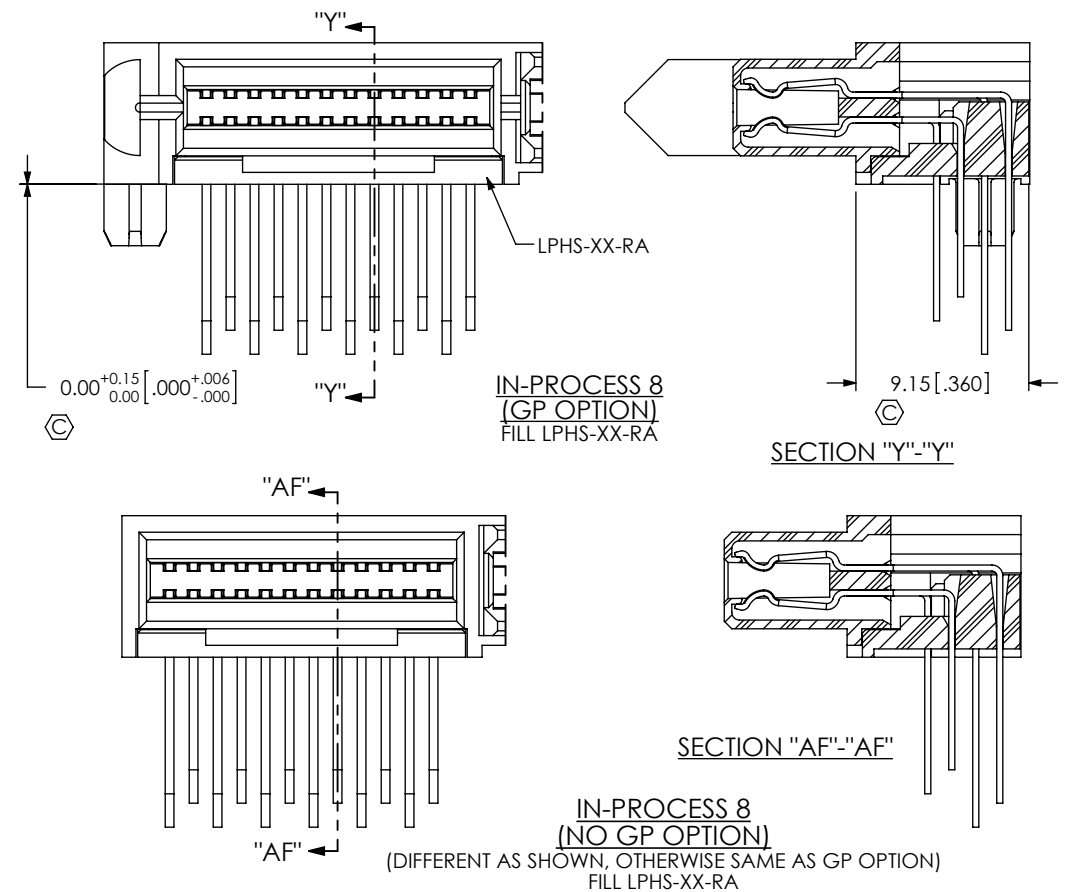
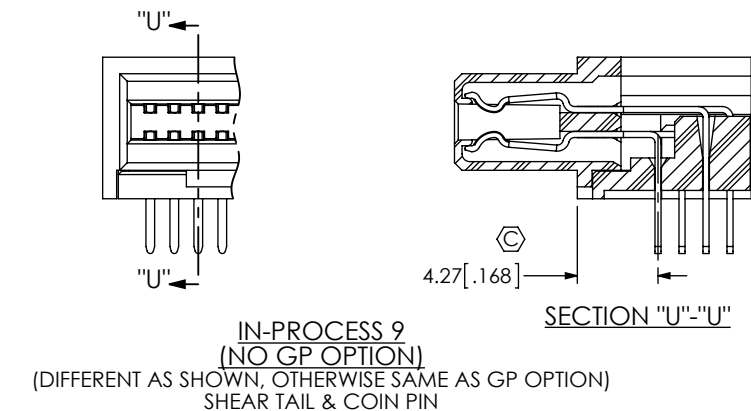
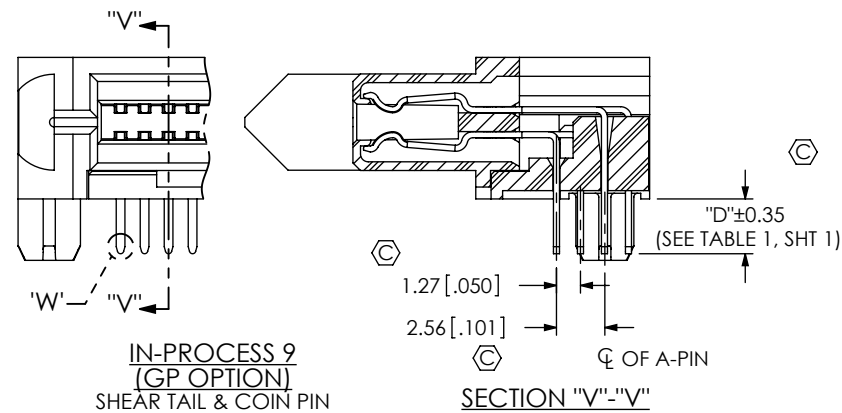
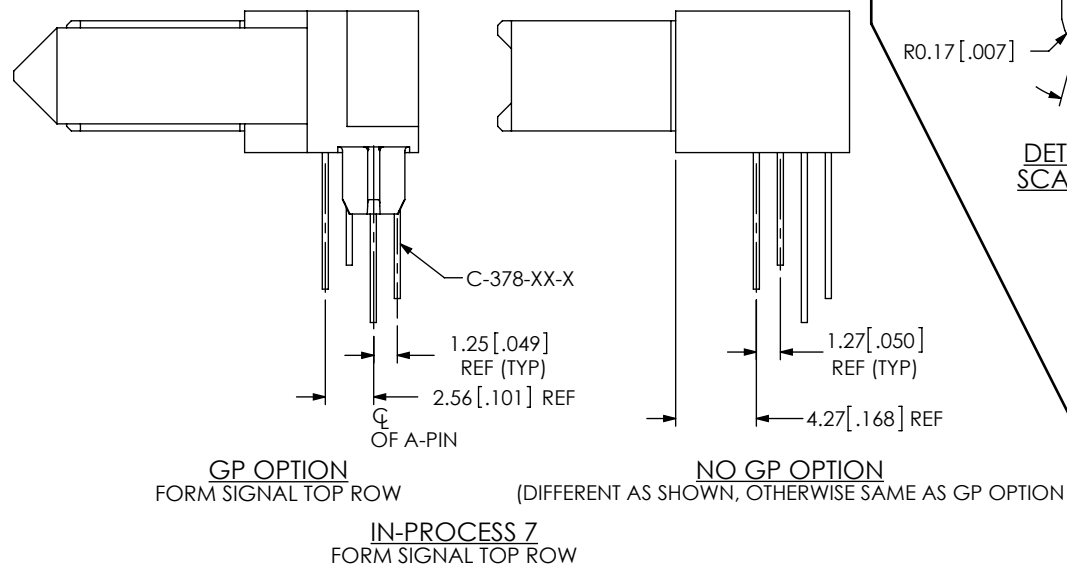
520 PARK EAST BLVD, NEW ALBANY, IN 47150  
PHONE: 812-944-6733 FAX: 812-948-5047  
e-Mail: info@SAMTEC.com code 55322

DESCRIPTION: LPHS-RA SOCKET ASSEMBLY

DWG. NO. LPHS-XX-XX-X-RTX-XX

BY: ROY LUO 12/13/2011 SHEET 3 OF 7





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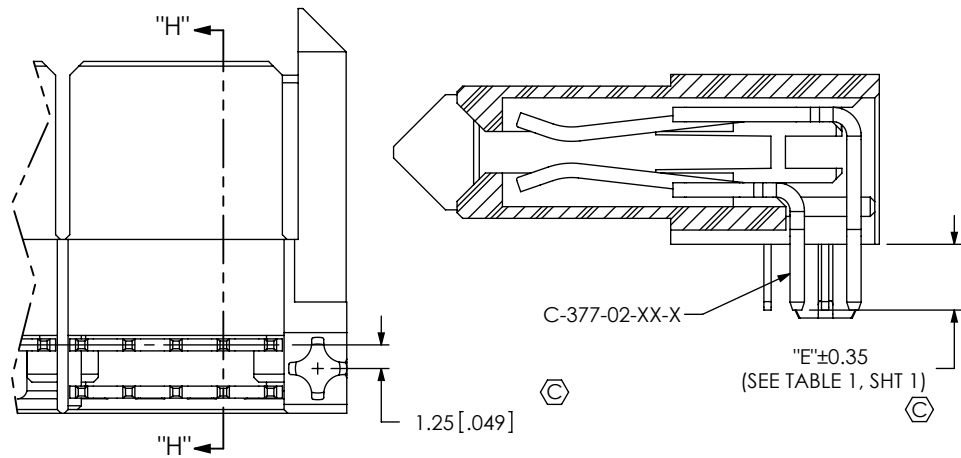
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e-Mail: info@SAMTEC.com code 55322

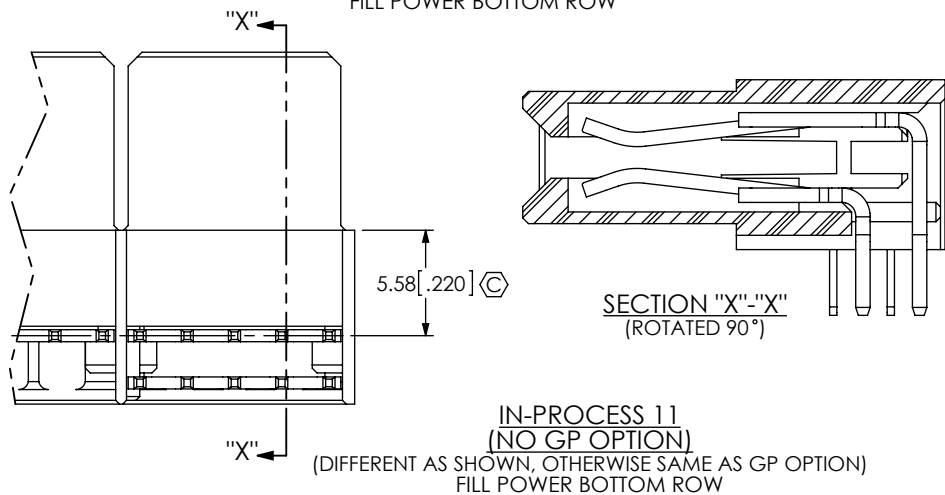
DESCRIPTION: LPHS-RA SOCKETASSEMBLY

DWG. NO. LPHS-XX-XX-X-RTX-XX

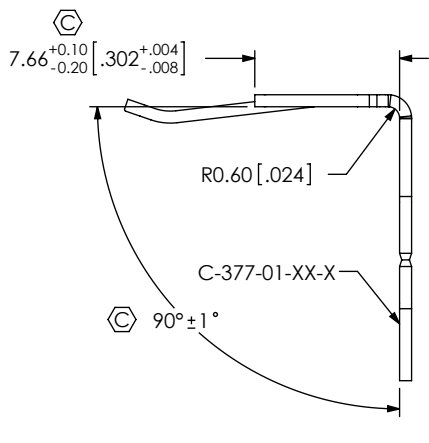
BY: ROY LUO 12/13/2011 SHEET 5 OF 7



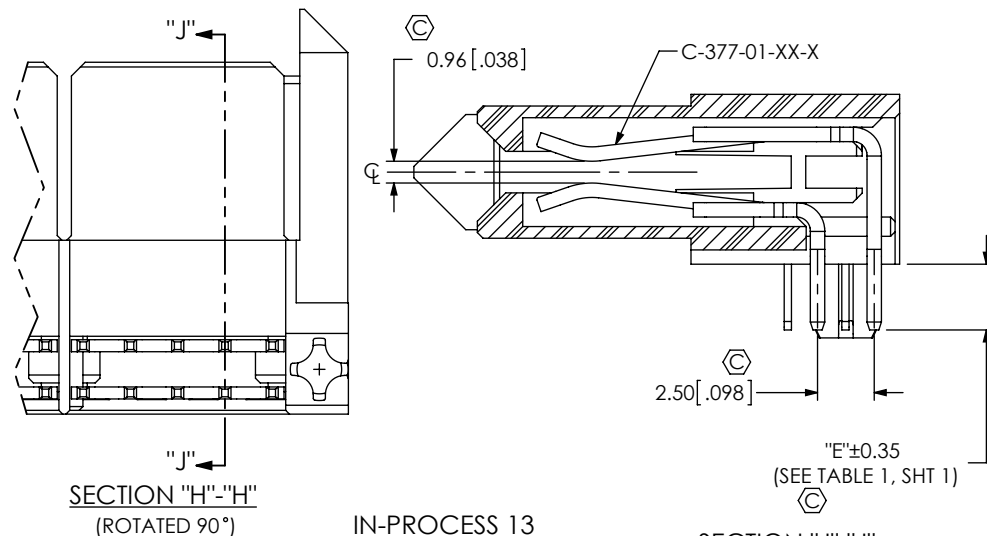
IN-PROCESS 11  
(GP OPTION)  
FILL POWER BOTTOM ROW



IN-PROCESS 11  
(NO GP OPTION)  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION)  
FILL POWER BOTTOM ROW



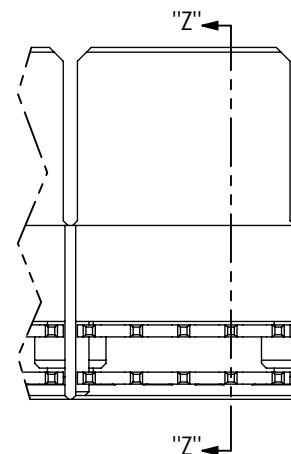
IN-PROCESS 12  
FORM C-377-01-XX-X



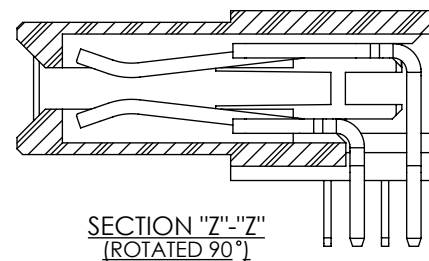
SECTION "H"-"H"  
(ROTATED 90°)

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

SECTION "J"-"J"  
(ROTATED 90°)



IN-PROCESS 13  
(NO GP OPTION)  
(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION)  
FILL POWER TOP ROW



SECTION "Z"-"Z"  
(ROTATED 90°)

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TABLE 2 SIGNAL/POWER COMBO -A-GP

	02 POWER POS			04 POWER POS			06 POWER POS			08 POWER POS		
SIGNAL POS	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"
* 12	29.09 [1.145]	24.60 [0.969]	25.90 [1.020]	41.09 [1.618]	36.60 [1.441]	37.90 [1.492]	53.09 [2.090]	48.60 [1.913]	49.90 [1.965]	65.09 [2.563]	60.60 [2.386]	61.90 [2.437]
16	31.63 [1.245]	27.14 [1.069]	28.44 [1.120]	43.63 [1.718]	39.14 [1.541]	40.44 [1.592]	55.63 [2.190]	51.14 [2.013]	52.44 [2.065]	67.63 [2.663]	63.14 [2.486]	64.44 [2.537]
20	34.17 [1.345]	29.68 [1.169]	30.98 [1.220]	46.17 [1.818]	41.68 [1.641]	42.98 [1.692]	58.17 [2.290]	53.68 [2.113]	54.98 [2.165]	70.17 [2.763]	65.68 [2.586]	66.98 [2.637]
24	36.71 [1.445]	32.22 [1.269]	33.52 [1.320]	48.71 [1.918]	44.22 [1.741]	45.52 [1.792]	60.71 [2.390]	56.22 [2.213]	57.52 [2.265]	72.71 [2.863]	68.22 [2.686]	69.52 [2.737]
28	39.25 [1.545]	34.76 [1.369]	36.06 [1.420]	51.25 [2.018]	46.76 [1.841]	48.06 [1.892]	63.25 [2.490]	58.76 [2.313]	60.06 [2.365]	75.25 [2.963]	70.76 [2.786]	72.06 [2.837]
32	41.79 [1.645]	37.30 [1.469]	38.60 [1.520]	53.79 [2.118]	49.30 [1.941]	50.60 [1.992]	65.79 [2.590]	61.30 [2.413]	62.60 [2.465]	77.79 [3.063]	73.30 [2.886]	74.60 [2.937]
* 36	44.33 [1.745]	39.84 [1.569]	41.14 [1.620]	56.33 [2.218]	51.84 [2.041]	53.14 [2.092]	68.33 [2.690]	63.84 [2.513]	65.14 [2.565]	80.33 [3.163]	75.84 [2.986]	77.14 [3.037]
* 40	46.87 [1.845]	42.38 [1.669]	43.68 [1.720]	58.87 [2.318]	54.38 [2.141]	55.68 [2.192]	70.87 [2.790]	66.38 [2.613]	67.68 [2.665]	82.87 [3.263]	78.38 [3.086]	79.68 [3.137]

(\* = NOT TOOLED)

TABLE 2 SIGNAL/POWER COMBO -A-GP CONTINUED

	10 POWER POS			*12 POWER POS			*14 POWER		
SIGNAL POS	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"
* 12	77.09 [3.035]	72.60 [2.858]	73.90 [2.909]	89.09 [3.507]	84.60 [3.331]	85.90 [3.382]	101.09 [3.980]	96.60 [3.803]	97.90 [3.854]
16	79.63 [3.135]	75.14 [2.958]	76.44 [3.009]	91.63 [3.607]	87.14 [3.431]	88.44 [3.482]	103.63 [4.080]	99.14 [3.903]	100.44 [3.954]
20	82.17 [3.235]	77.68 [3.058]	78.98 [3.109]	94.17 [3.707]	89.68 [3.531]	90.98 [3.582]	106.17 [4.180]	101.68 [4.003]	102.98 [4.054]
24	84.71 [3.335]	80.22 [3.158]	81.52 [3.209]	96.71 [3.807]	92.22 [3.631]	93.52 [3.682]	108.71 [4.280]	104.22 [4.103]	105.52 [4.154]
28	87.25 [3.435]	82.76 [3.258]	84.06 [3.309]	99.25 [3.907]	94.76 [3.731]	96.06 [3.782]	111.25 [4.380]	106.76 [4.203]	108.06 [4.254]
32	89.79 [3.535]	85.30 [3.358]	86.60 [3.409]	101.79 [4.007]	97.30 [3.831]	98.60 [3.882]	113.79 [4.480]	109.30 [4.303]	110.60 [4.354]
* 36	92.33 [3.635]	87.84 [3.458]	89.14 [3.509]	104.33 [4.107]	99.84 [3.931]	101.14 [3.982]	116.33 [4.580]	111.84 [4.403]	113.14 [4.454]
* 40	94.87 [3.735]	90.38 [3.558]	91.68 [3.609]	106.87 [4.207]	102.38 [4.031]	103.68 [4.082]	118.87 [4.680]	114.38 [4.503]	115.68 [4.554]

(\* = NOT TOOLED)

TABLE 3 SIGNAL/POWER COMBO (NO -GP OPTIONS NOT RELEASED)

	02 POWER	04 POWER	06 POWER	08 POWER	10 POWER	*12 POWER	*14 POWER
SIGNAL POS	"A"	"A"	"A"	"A"	"A"	"A"	"A"
* 12	23.42 [0.922]	35.42 [1.394]	47.42 [1.867]	59.42 [2.339]	71.42 [2.812]	83.42 [3.284]	95.42 [3.757]
16	25.96 [1.022]	37.96 [1.494]	49.96 [1.967]	61.96 [2.439]	73.96 [2.912]	85.96 [3.384]	97.96 [3.857]
20	28.50 [1.122]	40.50 [1.594]	52.50 [2.067]	64.50 [2.539]	76.50 [3.012]	88.50 [3.484]	100.50 [3.957]
24	31.04 [1.222]	43.04 [1.694]	55.04 [2.167]	67.04 [2.639]	79.04 [3.112]	91.04 [3.584]	103.04 [4.057]
28	33.58 [1.322]	45.58 [1.794]	57.58 [2.267]	69.58 [2.739]	81.58 [3.212]	93.58 [3.684]	105.58 [4.157]
32	36.12 [1.422]	48.12 [1.894]	60.12 [2.367]	72.12 [2.839]	84.12 [3.312]	96.12 [3.784]	108.12 [4.257]
* 36	38.66 [1.522]	50.66 [1.994]	62.66 [2.467]	74.66 [2.939]	86.66 [3.412]	98.66 [3.884]	110.66 [4.357]
* 40	41.20 [1.622]	53.20 [2.094]	65.20 [2.567]	77.20 [3.039]	89.20 [3.512]	101.20 [3.984]	113.20 [4.457]

(\* = 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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DO NOT SCALE DRAWING

SHEET SCALE: 2:1



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

DESCRIPTION:  
LPHS-RA SOCKETASSEMBLY

DWG. NO.  
LPHS-XX-XX-X-RTX-XX

BY: ROY LUO 12/13/2011 SHEET 7 OF 7