REVISION K

**DESIGNED & DIMENSIONED IN MILLIMETERS[INCHES]**

DO NOT SCALE FROM THIS PRINT

# LPHS-XX-XX-X-RTX-XX

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

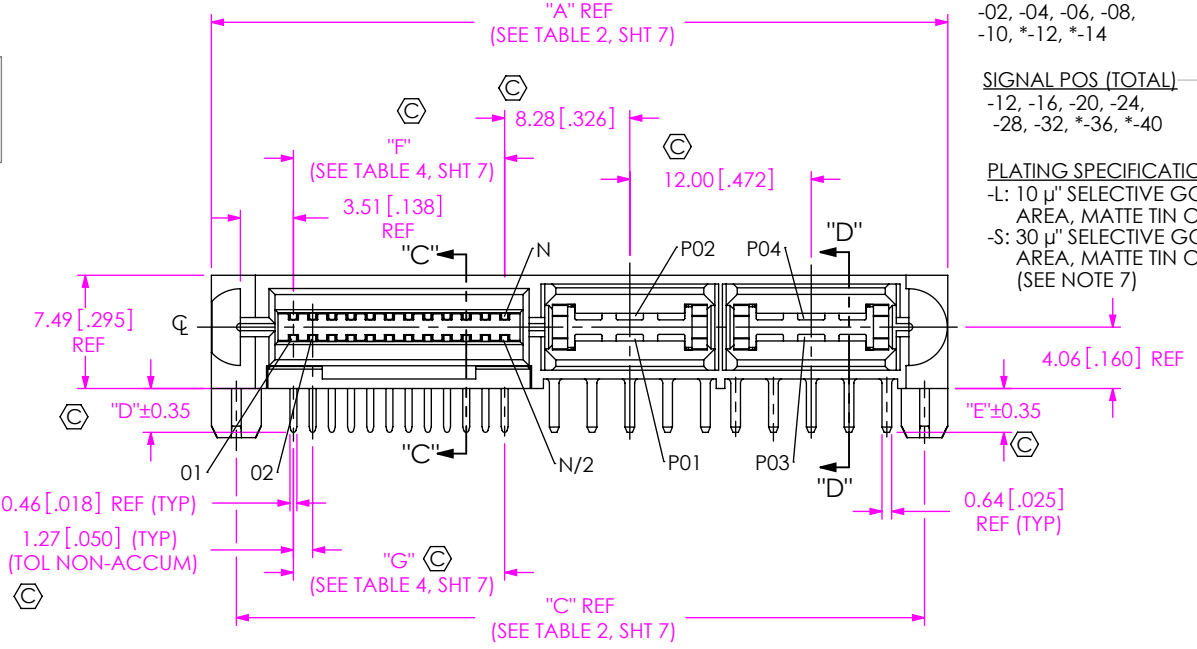
SIGNAL POS (TOTAL)
-12, -16, -20, -24,
-28, -32, *-36, *-40

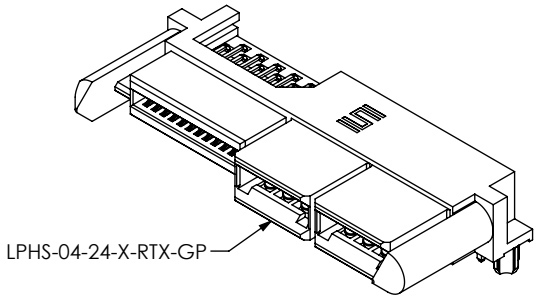
PLATING SPECIFICATION
-L: 10 µ" SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL
-S: 30 µ" SELECTIVE GOLD IN CONTACT AREA, MATTE TIN ON TAIL (SEE NOTE 7)

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)



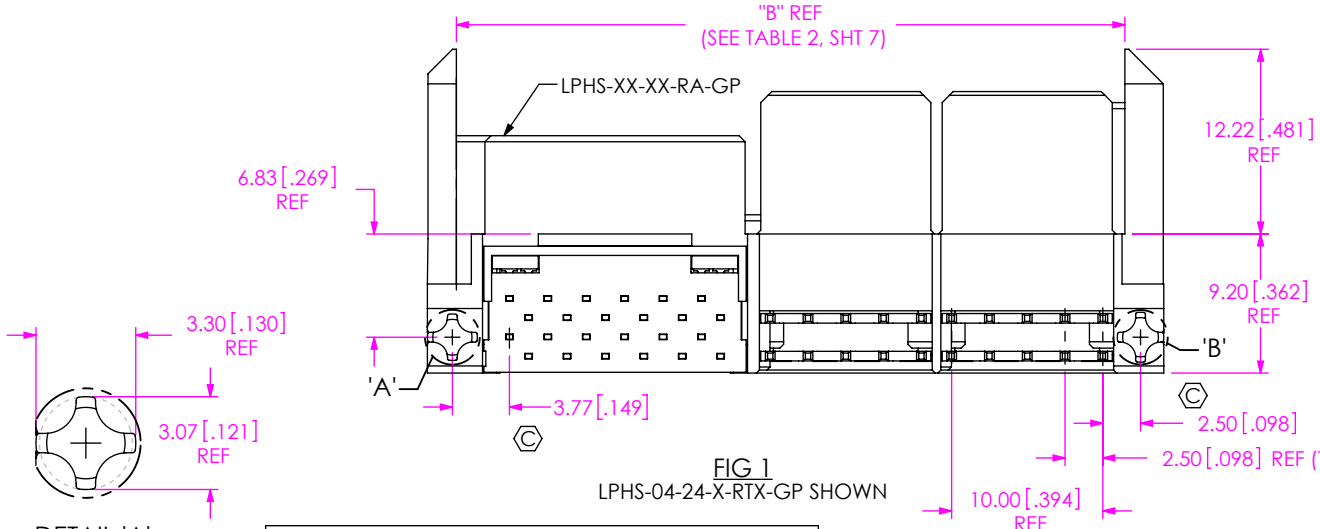
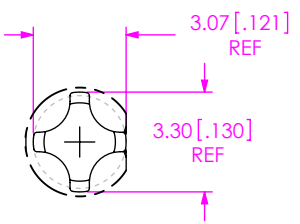




FIG 1
LPHS-04-24-X-RTX-GP SHOWN




DETAIL 'A'
SCALE 4 : 1




DETAIL 'B'
SCALE 4 : 1

**TABLE 1**

| TAIL | ROW 1 POWER | ROW 2 POWER | "D" | "E" |
|---|---|---|---|---|
| -RT1 | C-377-02-01-X | C-377-01-01-X | 2.90 [.114] | 2.90 [.114] |
| -RT2 | C-377-02-02-X | C-377-01-02-X | 3.60 [.142] | 3.60 [.142] |

NOTES:

1. Ⓒ 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: X.X: ±0.3 [.01] X.XX: ±0.13 [.005] X.XXX: ±0.051 [.0020]
ANGLES: 2 °


* PROPRIETARY NOTE *
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.


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

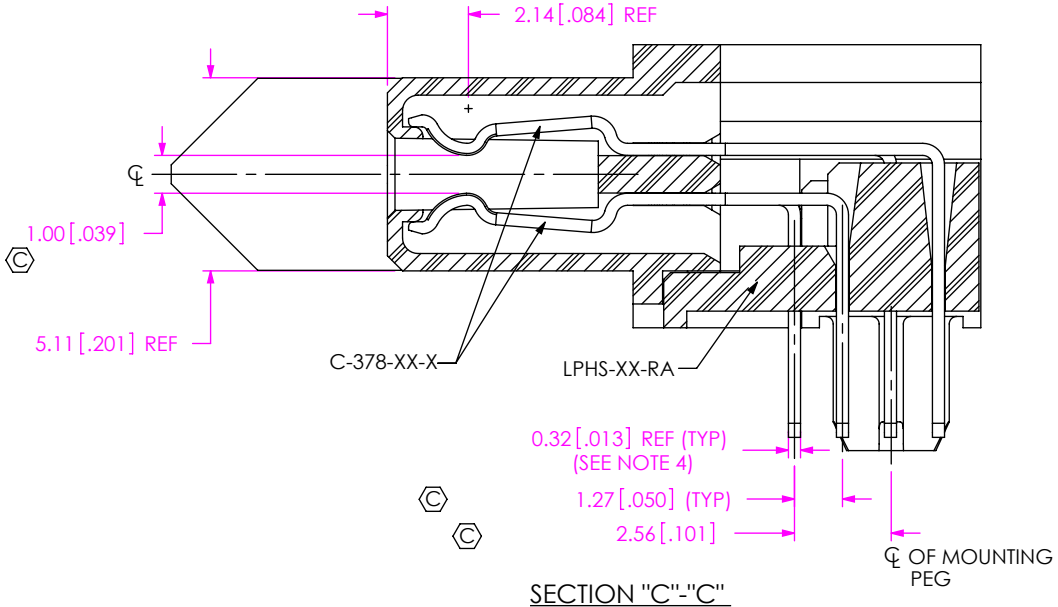

samtec
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail info@SAMTEC.com code 55322


DESCRIPTION: LPHS-RA SOCKETASSEMBLY

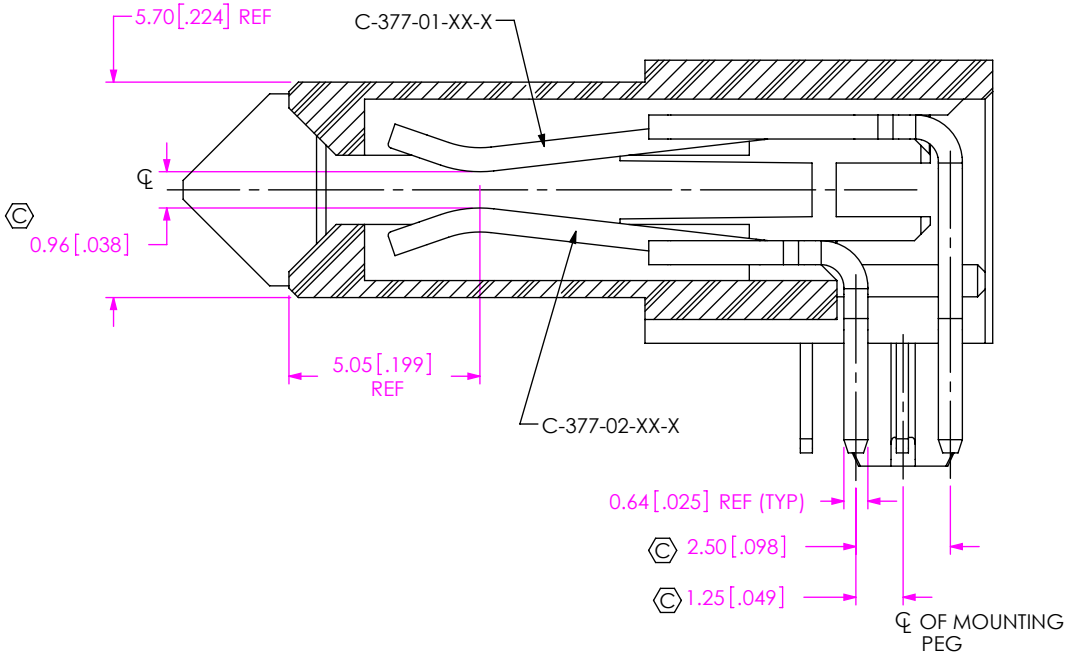
DWG. NO. LPHS-XX-XX-X-RTX-XX

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

REVISION K




SECTION "C"-"C"
SCALE 5 : 1




SECTION "D"-"D"
SCALE 5 : 1

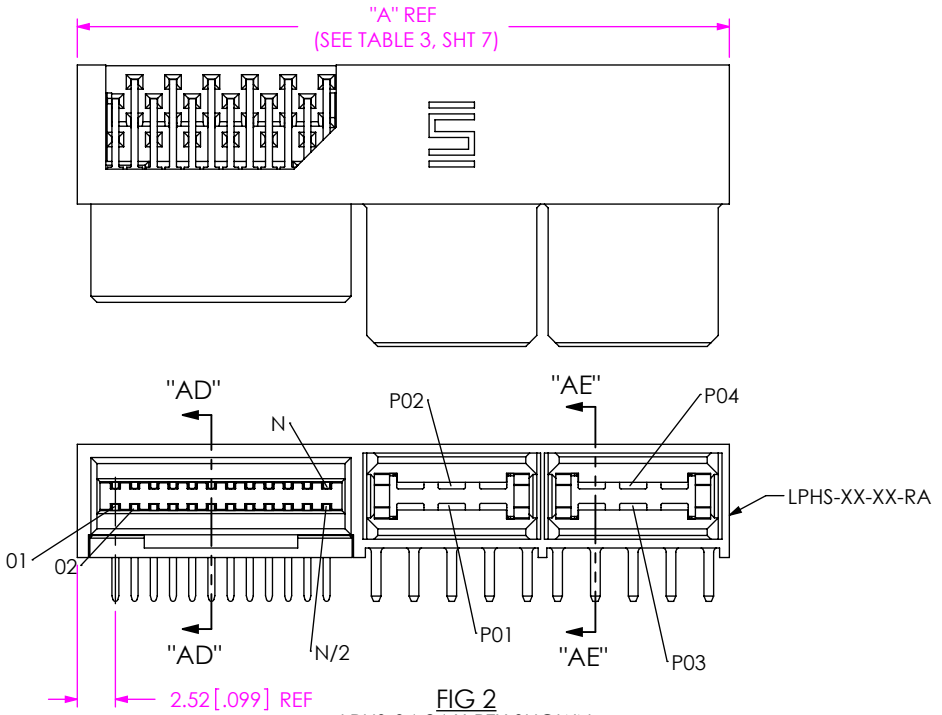
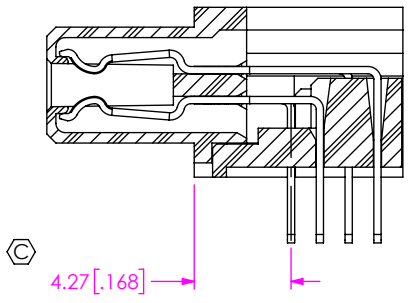
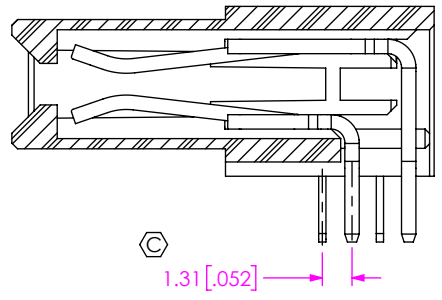



FIG 2
LPHS-04-24-X-RTX SHOWN
(DIFFERENT AS SHOWN,OTHERWISE SAME AS FIG 1)




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




SECTION "AE"-"AE"
(DIFFERENT AS SHOWN,
OTHERWISE SAME AS SECTION "D"-"D")


PROPRIETARY NOTE

THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.

DO NOT SCALE DRAWING

SHEET SCALE: 2:1



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

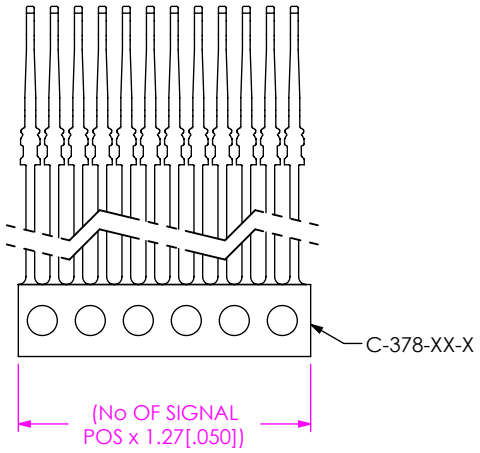

DESCRIPTION: LPHS-RA SOCKETASSEMBLY

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

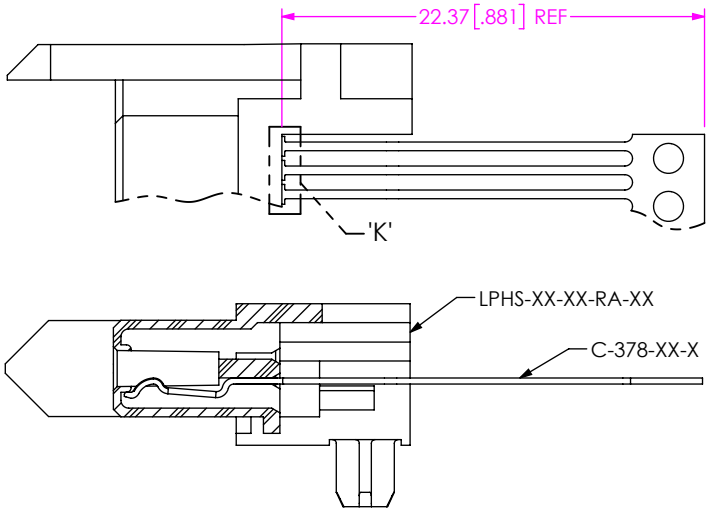
BY: ROY LUO 12/13/2011 SHEET 2 OF 7

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

REVISION K

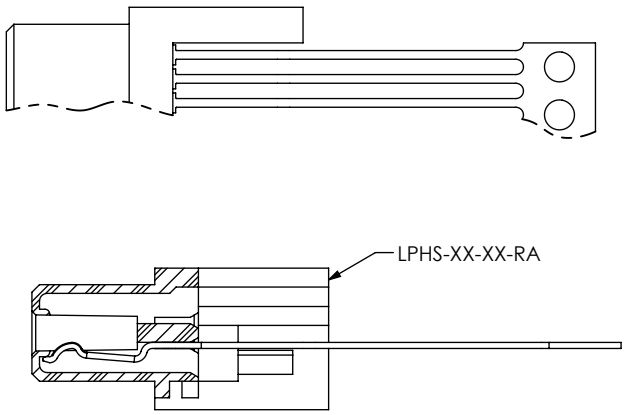



IN-PROCESS 1
CUT COMB & REMOVE TIE BARS FOR C-378-XX-X

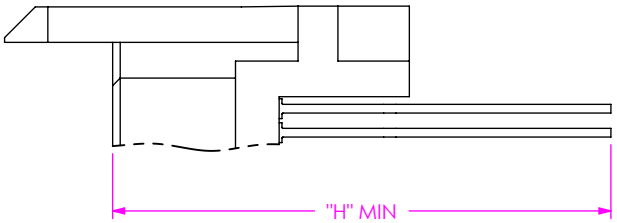


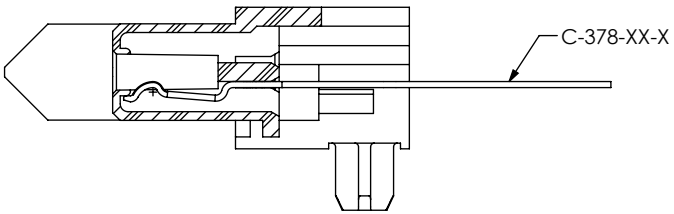

GP OPTION

IN-PROCESS 2
FILL SIGNAL BOTTOM ROW

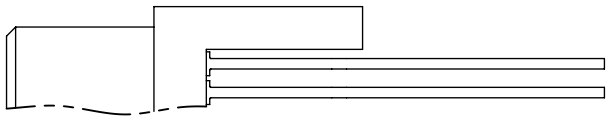


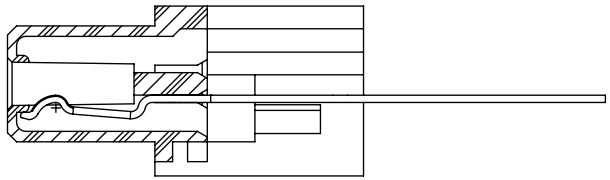

NO GP OPTION
(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION)



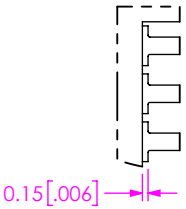




GP OPTION





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




DETAIL 'K'
SCALE 5 : 1

IN-PROCESS 3
CUT OFF CARRIER

| TABLE 5 | |
|---|---|
| TAIL | "H" |
| -RT1 | 19.36 [.762] |
| -RT2 | 20.06 [.790] |

* PROPRIETARY NOTE *
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.

DO NOT SCALE DRAWING

SHEET SCALE: 2.5:1

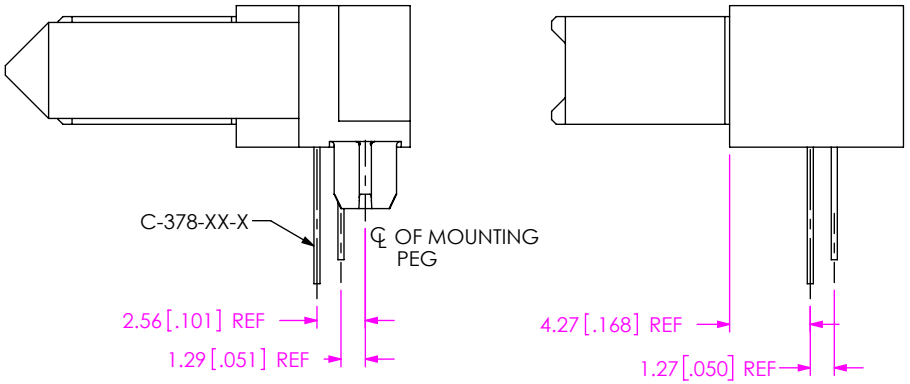
samtec
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail info@SAMTEC.com code 55322

DESCRIPTION:
LPHS-RA SOCKETASSEMBLY

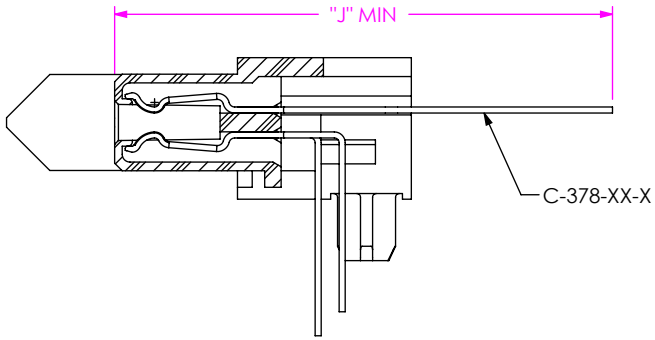
DWG. NO.
LPHS-XX-XX-X-RTX-XX

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

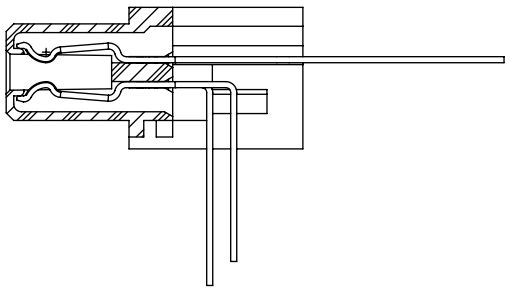
REVISION K




IN-PROCESS 4
FORM SIGNAL BOTTOM ROW

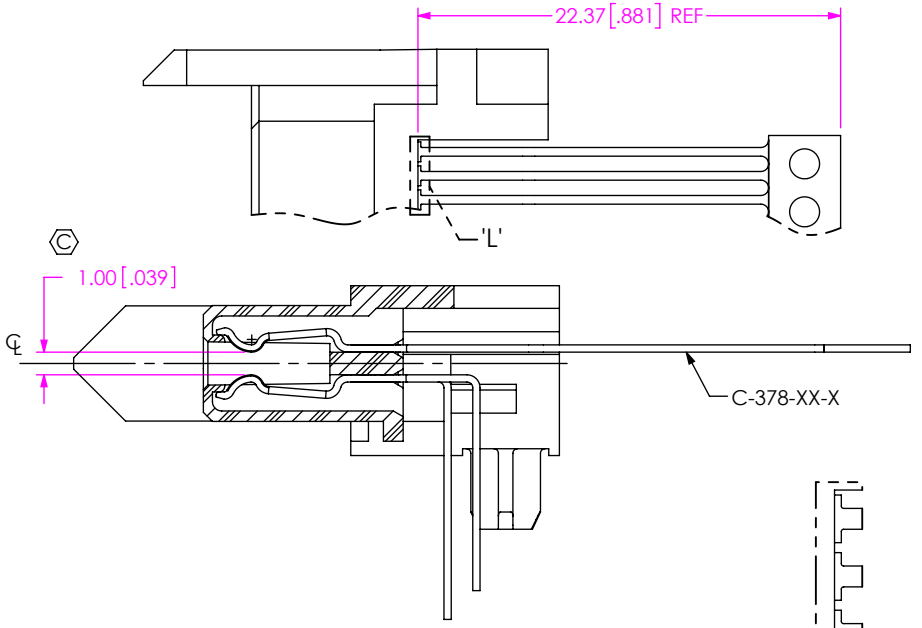



IN-PROCESS 6
(GP OPTION)
CUT OFF TOP ROW CARRIER



IN-PROCESS 6
(NO GP OPTION)
(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION)
CUT OFF TOP ROW CARRIER

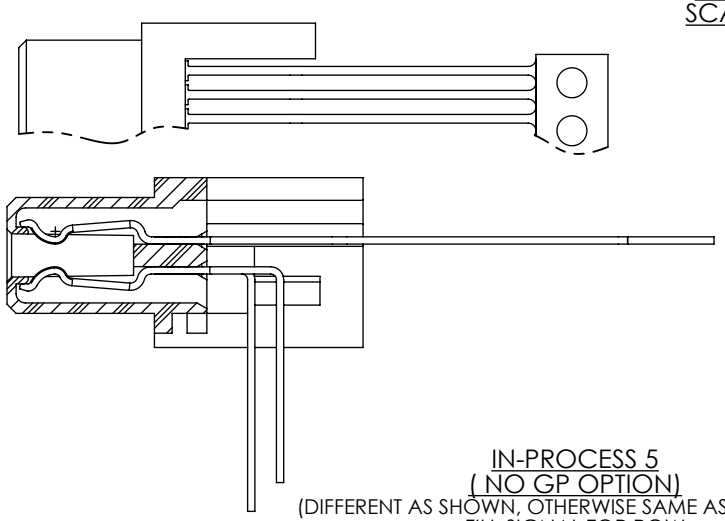
| TABLE 6 | |
|---|---|
| TAIL | "J" |
| -RT1 | 23.22 [.914] |
| -RT2 | 23.92 [.942] |




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




DETAIL 'L'
SCALE 6 : 1



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


* PROPRIETARY NOTE *

THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.


DO NOT SCALE DRAWING

SHEET SCALE: 2.5:1

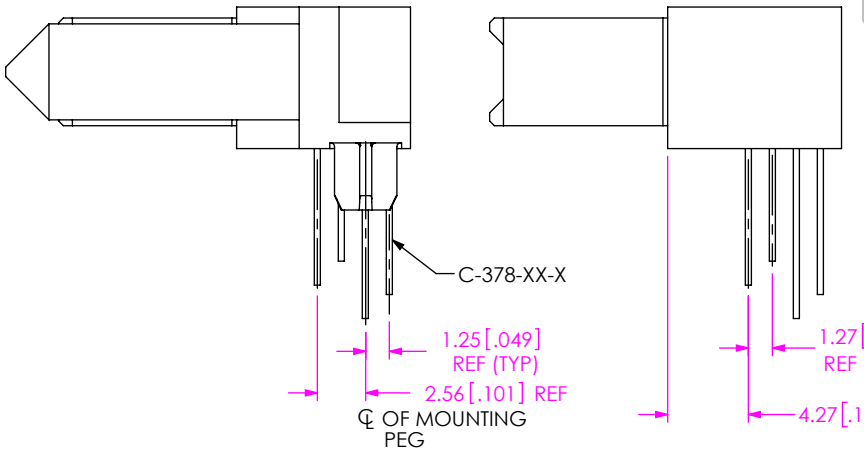

samtec
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail info@SAMTEC.com code 55322


DESCRIPTION: LPHS-RA SOCKETASSEMBLY

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

BY: ROY LUO 12/13/2011 SHEET 4 OF 7

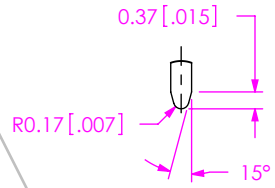
REVISION K



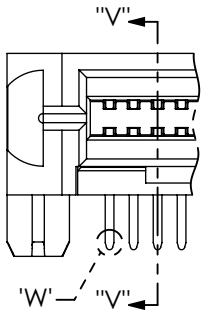

GP OPTION
FORM SIGNAL TOP ROW

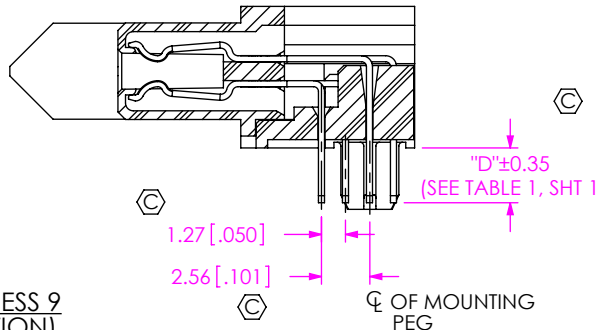
NO GP OPTION
(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION

IN-PROCESS 7
FORM SIGNAL TOP ROW



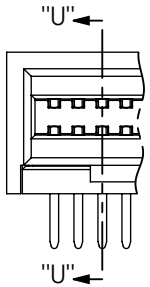

DETAIL 'W'
SCALE 6 : 1

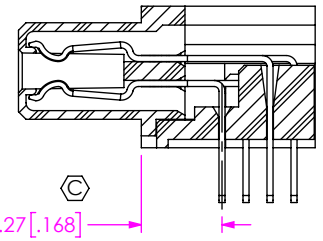



IN-PROCESS 9
(GP OPTION)
SHEAR TAIL & COIN PIN

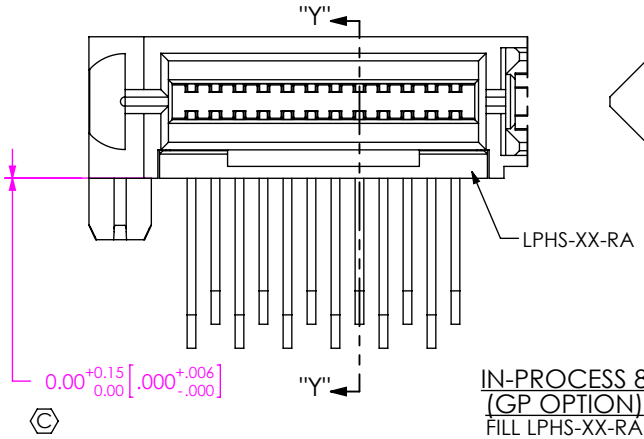
SECTION "V"-"V"



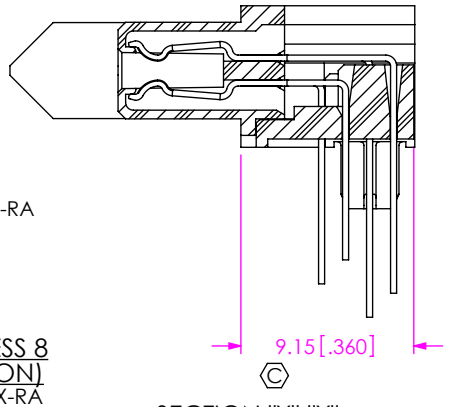




SECTION "U"-"U"

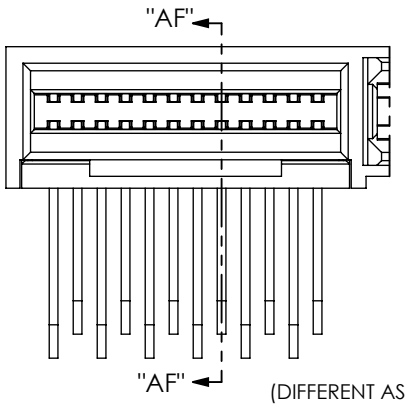
IN-PROCESS 9
(NO GP OPTION)
(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION)
SHEAR TAIL & COIN PIN

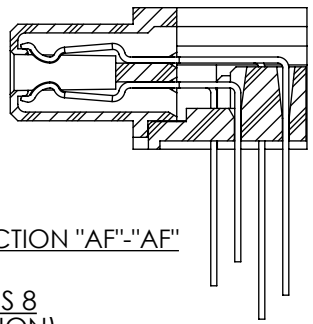



IN-PROCESS 8
(GP OPTION)
FILL LPHS-XX-RA



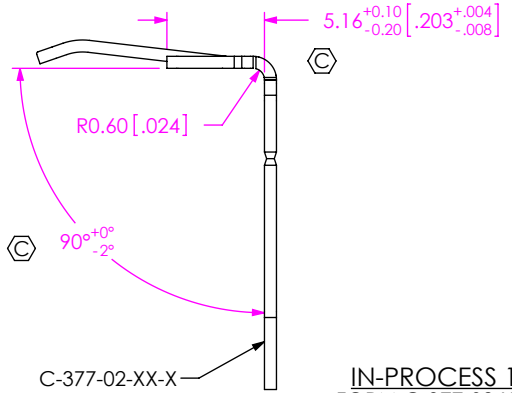

SECTION "Y"-"Y"

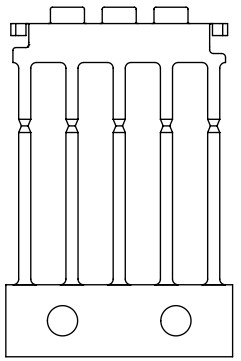


SECTION "AF"-"AF"

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



IN-PROCESS 10
FORM C-377-02-XX-X


PROPRIETARY NOTE

THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.


DO NOT SCALE DRAWING

SHEET SCALE: 2.5:1

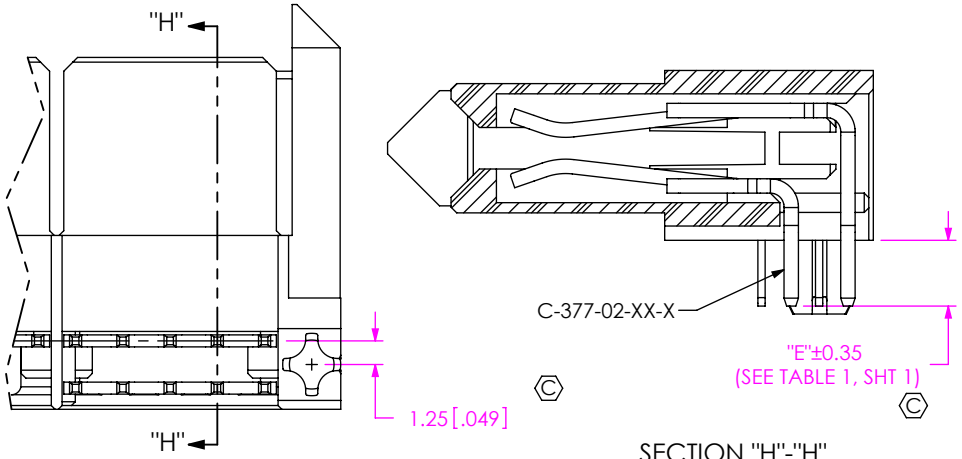

samtec
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail info@SAMTEC.com code 55322


DESCRIPTION: LPHS-RA SOCKETASSEMBLY

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

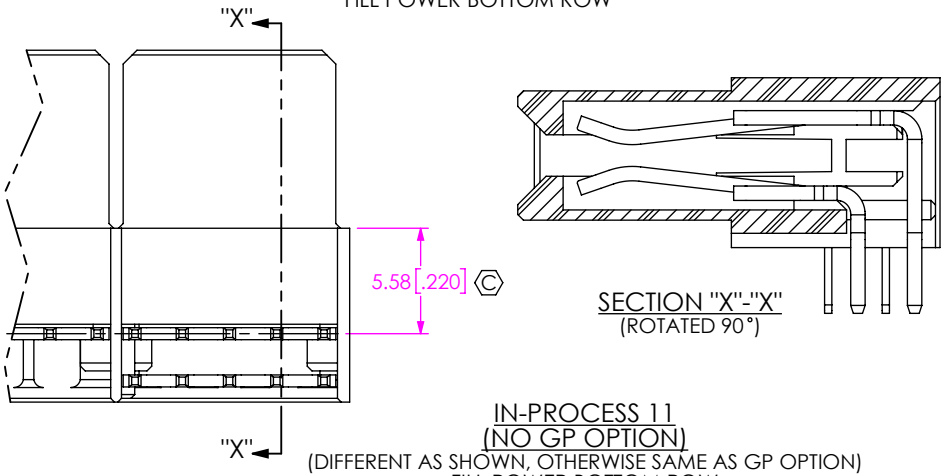
BY: ROY LUO 12/13/2011 SHEET 5 OF 7

REVISION K



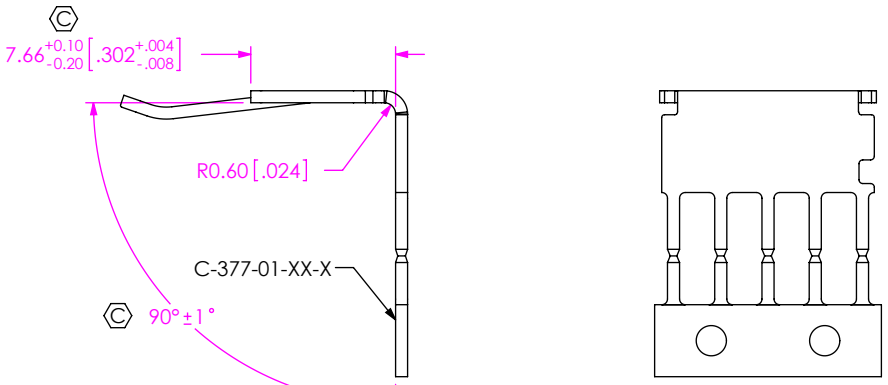

SECTION "H"-"H"
(ROTATED 90°)

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



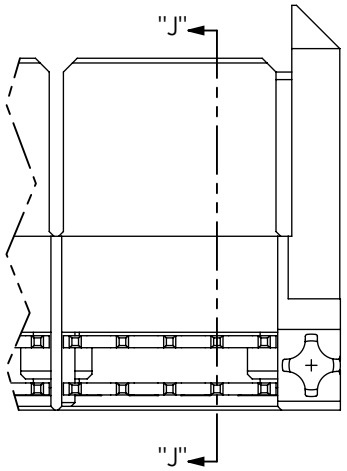

SECTION "X"-"X"
(ROTATED 90°)

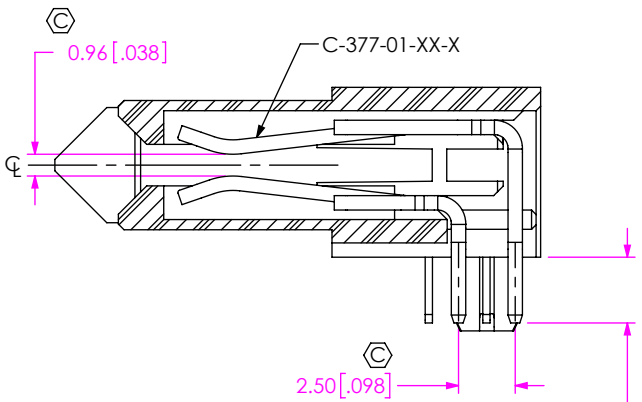
IN-PROCESS 11
(NO GP OPTION)
(DIFFERENT AS SHOWN, OTHERWISE SAME AS GP OPTION)
FILL POWER BOTTOM ROW




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

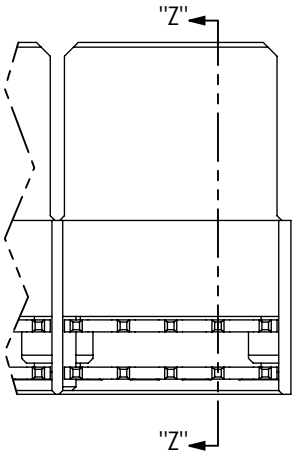


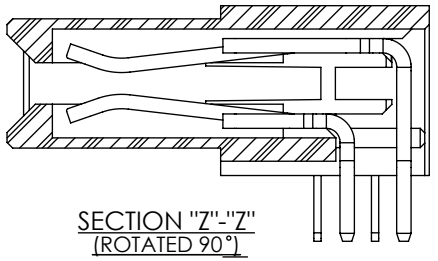



SECTION "J"-"J"
(ROTATED 90°)

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



SECTION "Z"-"Z"
(ROTATED 90°)

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


* PROPRIETARY NOTE *

THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.

DO NOT SCALE DRAWING

SHEET SCALE: 2.5:1



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 SOCKETASSEMBLY

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

BY: ROY LUO 12/13/2011 SHEET 6 OF 7

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

REVISION K

**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] |

**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] |

**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] |

**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] |

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

* PROPRIETARY NOTE *
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.

DO NOT SCALE DRAWING

SHEET SCALE: 2:1

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 SOCKETASSEMBLY

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

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