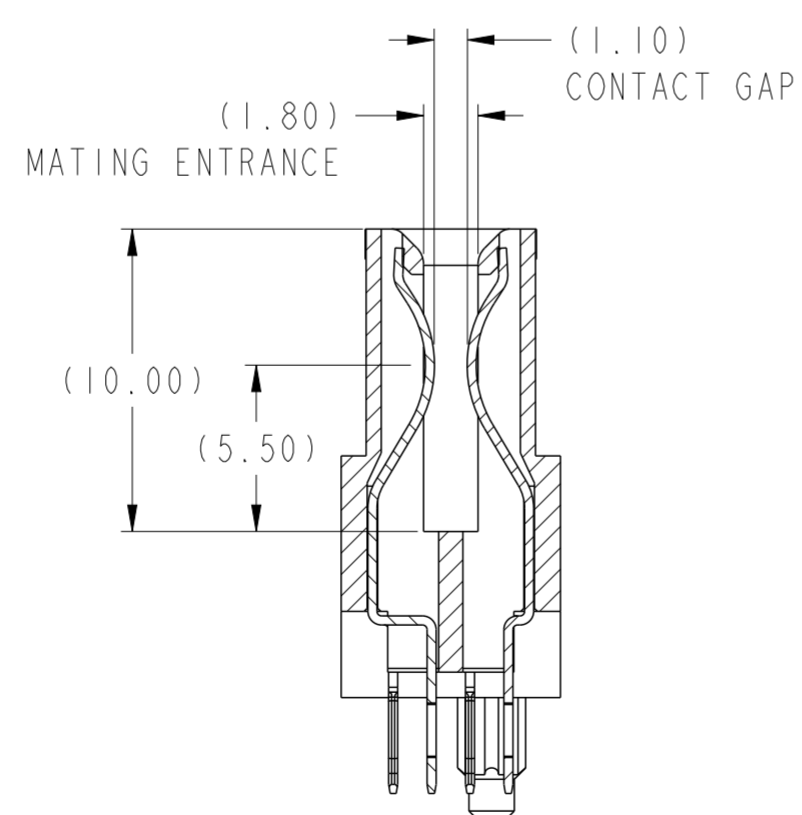


SECTION A-A  
SCALE 4:1



SECTION B-B  
SCALE 4:1

|                                       |                     |      |                |            |                      |    |                               |                |                    |          |
|---------------------------------------|---------------------|------|----------------|------------|----------------------|----|-------------------------------|----------------|--------------------|----------|
| spec ref                              | -                   | dr   | Wei-Long Zhang | 2012/07/05 | projection           | MM | size                          | A2             | scale              | 1:1      |
| tolerance std                         | ISO 406<br>ISO 1101 | eng  | Sunny2 Liu     | 2016/05/05 |                      |    | ecn no                        | ELX-DG-24036-1 | rel level          | Released |
| TOLERANCES UNLESS OTHERWISE SPECIFIED |                     | chr  | Terris Liu     | 2016/05/20 |                      |    |                               |                |                    |          |
| surface                               | linear              | 0.X  | ±0.3           |            | <b>Amphenol FCI</b>  |    | <b>STD VERT REC UNIVERSAL</b> |                | dwg no<br>10121506 | rev<br>C |
|                                       |                     | 0.XX | ±0.10          |            | HIGH POWER CARD EDGE |    | Product - Customer Drw        |                |                    |          |
|                                       | angular             | 0°   | ±2°            |            | cat. no.             |    | sheet 1 of 4                  |                |                    |          |

| CONTACT TYPE   | TOP LAYER DESCRIPTION | TABLE 1 (HPCE / SOLDER TAILS)<br>PLATED THROUGH-HOLE REQUIREMENTS |                  |                    |               |                        |
|----------------|-----------------------|---|------------------|--------------------|---------------|------------------------|
|                |                       | DRILLED HOLE DIAMETER   | COPPER THICKNESS | TIN-LEAD THICKNESS | TIN THICKNESS | FINISHED HOLE DIAMETER |
| POWER & SIGNAL | TIN-LEAD              | 1.10-1.16 (1.15 DRILL)  | 0.025 - 0.050    | 0.005 - 0.015      | --            | 0.94 - 1.10            |
|                | IMMERSION TIN         | 1.10-1.16 (1.15 DRILL)  | 0.025 - 0.050    | --                 | 0.9 - 1.5um   | 0.94 - 1.10            |
|                | COPPER (SEE NOTE 8)   | 1.10-1.16 (1.15 DRILL)  | 0.025 - 0.050    | --                 | --            | 0.94 - 1.10            |

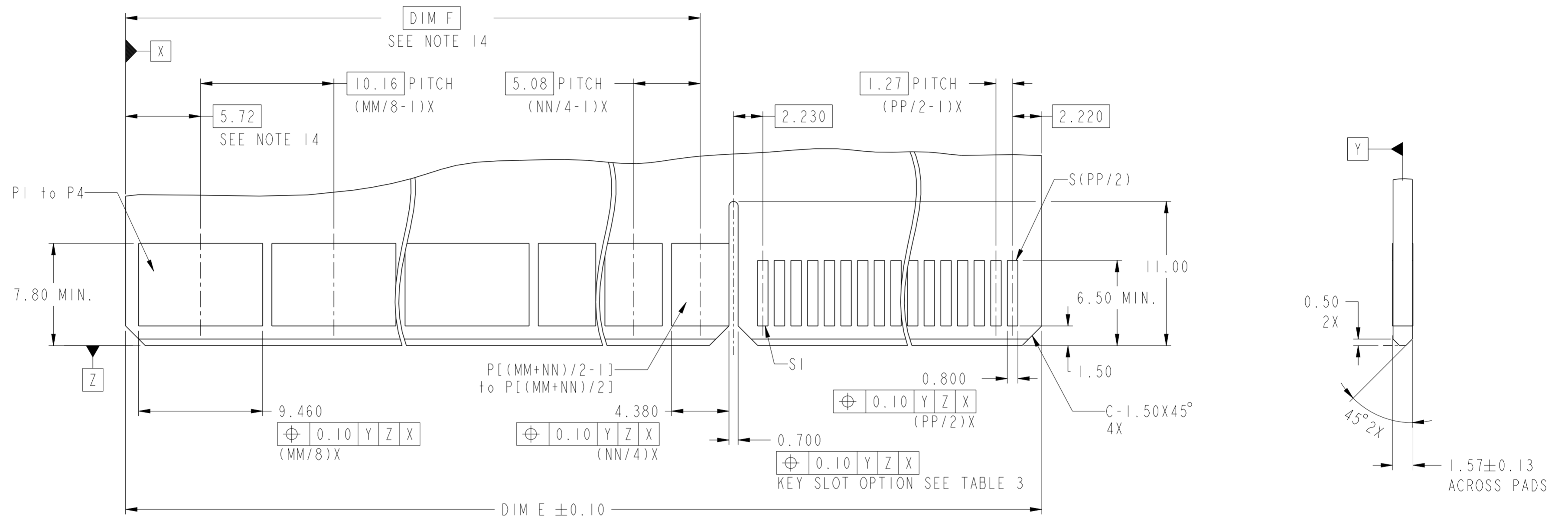
| CONTACT TYPE   | TOP LAYER DESCRIPTION | TABLE 2 (HPCE / PRESS-FIT TAILS)<br>PLATED THROUGH-HOLE REQUIREMENTS |                  |                    |               |                        |
|----------------|-----------------------|--|------------------|--------------------|---------------|------------------------|
|                |                       | DRILLED HOLE DIAMETER  | COPPER THICKNESS | TIN-LEAD THICKNESS | TIN THICKNESS | FINISHED HOLE DIAMETER |
| POWER & SIGNAL | TIN-LEAD              | 0.81-0.86 (0.85 DRILL)   | 0.025 - 0.050    | 0.005 - 0.015      | --            | 0.65 - 0.80            |
|                | IMMERSION TIN         | 0.81-0.86 (0.85 DRILL)   | 0.025 - 0.050    | --                 | 0.9 - 1.5um   | 0.70 - 0.80            |
|                | COPPER (SEE NOTE 8)   | 0.81-0.86 (0.85 DRILL)   | 0.025 - 0.050    | --                 | --            | 0.70 - 0.80            |



Amphenol FCI

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|                                       |                     |      |                |                     |   |    |   |                    |           |              |
|---------------------------------------|---------------------|------|----------------|---------------------|---|----|---|--------------------|-----------|--------------|
| spec ref                              | -                   | dr   | Wei-Long Zhang | 2012/07/05          | projection  | MM | size  | A2                 | scale     | 1:1          |
| tolerance std                         | ISO 406<br>ISO 1101 | eng  | Sunny2 Liu     | 2016/05/05          |   |    | ecn no  | ELX-DG-24036-1     | rel level | Released     |
| TOLERANCES UNLESS OTHERWISE SPECIFIED |                     | chr  | Teris Liu      | 2016/05/20          |   |    |   |                    |           |              |
|                                       |                     | appr | Pai-Ming Zheng | 2016/05/24          |   |    |   |                    |           |              |
| surface                               | linear              | 0.X  | ±0.3           | <b>Amphenol FCI</b> | product family  |    | title<br>STD VERT REC UNIVERSAL<br>HIGH POWER CARD EDGE | dwg no<br>10121506 | rev<br>C  |              |
|                                       |                     | 0.XX | ±0.10          |                     | cat. no.<br>Product - Customer Drw                      |    |   |                    |           | sheet 2 of 4 |
|                                       | angular             | 0°   | ±2°            |                     | PDS: Rev :C<br>STATUS:Released<br>Printed: May 24, 2016 |    |   |                    |           |              |



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|                                       |                     |         |                |            |            |    |                |                        |           |          |
|---------------------------------------|---------------------|---------|----------------|------------|------------|----|----------------|------------------------|-----------|----------|
| spec ref                              | -                   | dr      | Wei-Long Zhang | 2012/07/05 | projection | MM | size           | A2                     | scale     | 1:1      |
| tolerance std                         | ISO 406<br>ISO 1101 | eng     | Sunny2 Liu     | 2016/05/05 |            |    | ecn no         | ELX-DG-24036-1         | rel level | Released |
| TOLERANCES UNLESS OTHERWISE SPECIFIED |                     | chr     | Terris Liu     | 2016/05/20 |            |    |                |                        |           |          |
|                                       |                     | appr    | Pai-Ming Zheng | 2016/05/24 |            |    |                |                        |           |          |
| surface                               | ISO 1302            | linear  | 0.X            | ±0.3       |            |    | product family | STD VERT REC UNIVERSAL | dwg no    | 10121506 |
|                                       |                     | angular | 0°             | ±2°        |            |    | cat. no.       | Product - Customer Drw | rev       | C        |
| sheet 3 of 4                          |                     |         |                |            |            |    |                |                        |           |          |

10121506 - MM NN PP LF

LEAD FREE

Polarization Key Option

Tail Type  
Note 12

|     |    |     |    |
|-----|----|-----|----|
| A   | B  | C   | D  |
| Y   | Y  | N   | N  |
| STB | PF | STB | PF |

4 BEAM PWR CONTACT QTY  
(NEXT TO LEFT END)

2 BEAM PWR CONTACT QTY  
(NEXT TO SIGNAL)

SIGNAL CONTACT QTY



Example: The configuration above is 10121506-241232BLF  
STD VERT REC 36P32S with polarization key.  
24P is 4 beam contact, 12P is 2 beam contact.

TABLE 3. PART NUMBER CODE. HPCE STD VERT REC P+S CONFIG

| DIM        | TABLE 2. LENGTH FORMULAS.   |
|------------|---|
| DIM A (13) | $(MM/8) \times 10.16 + (NN/4) \times 5.08 + (PP/2) \times 1.27 + 9.12$  |
| DIM B      | DIM "A" - 5.00  |
| DIM C      | DIM "A" - 2.34  |
| DIM D      | DIM "A" - 4.04  |
| DIM E      | DIM "A" - 5.30  |
| DIM F (14) | $(MM/8-1) \times 10.16 + (NN/4-1) \times 5.08 + 13.34$ (WITH 4 BEAM CONTACT)<br>3.18 (WITHOUT 4 BEAM CONTACT) |



EXAMPLE: 10121506-241232BLF

NOTES:

- CONNECTOR MATERIALS:  
HOUSING: HIGH TEMPERATURE THERMAL PLASTIC, BLACK  
UL 94V-0 COMPLIANT  
CONTACTS: HIGH PERFORMANCE COPPER ALLOY.
- CONTACT FINISH REF. GS-12-604 SECTION 5.2.
- PRODUCT SPECIFICATION: GS-12-604.
- APPLICATION SPECIFICATION: GS-20-128.
- PRODUCT MARKING ON HOUSING IN AREA SHOWN MEETS AFCI SPECIFICATION: GS-24-007.
- PACKAGING MEETS FCI SPECIFICATION GS-14-937.
- HOUSING COMPONENT WILL WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR 60 SECONDS IN A CONVECTION, INFRA-RED, OR VAPOR PHASE REFLOW OVEN.
- COPPER PLATING THICKNESS IN CENTER OF VIA-HOLE CAN BE NO MORE THAN 0.003 LESS THAN OTHER AREAS.
- ALL HOLE SIZES ARE FINISHED HOLE SIZES.
- MOUNTING HOLES ARE UNPLATED  
Ø 2.40 +/- 0.1 FOR PRESS-FIT TAILS  
Ø 2.18 +/- 0.03 FOR SOLDER TAILS
- PRESS FIT APPLICATION TOOL DRAWING : 10119453.
- STB= SOLDER TO BOARD, 1.57-2.38mm PCB THICKNESS.  
PF = PRESS FIT, 1.57mm MINIMUM PCB THICKNESS.
- MAXIMUM OVERALL LENGTH IS 100mm.

- DIM IS NOT APPLICABLE IF NO 4 BEAM CONTACT OR 2 BEAM CONTACT.
- A  $\Delta$  SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

|                                       |                     |     |                |            |            |       |        |                |           |          |
|---------------------------------------|---------------------|-----|----------------|------------|------------|-------|--------|----------------|-----------|----------|
| spec ref                              | -                   | dr  | Wei-Long Zhang | 2012/07/05 | projection | MM    | size   | A2             | scale     | 1:1      |
| tolerance std                         | ISO 406<br>ISO 1101 | eng | Sunny2 Liu     | 2016/05/05 |            |       | ecn no | ELX-DG-24036-1 | rel level | Released |
| TOLERANCES UNLESS OTHERWISE SPECIFIED |                     | chr | Terris Liu     | 2016/05/20 |            |       |        |                |           |          |
| surface                               | linear              | 0.X | ±0.3           | 0.XX       | ±0.10      | 0.XXX | ±0.05  | angular        | 0°        | ±2°      |
| ISO 1302                              |                     |     |                |            |            |       |        |                |           |          |

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