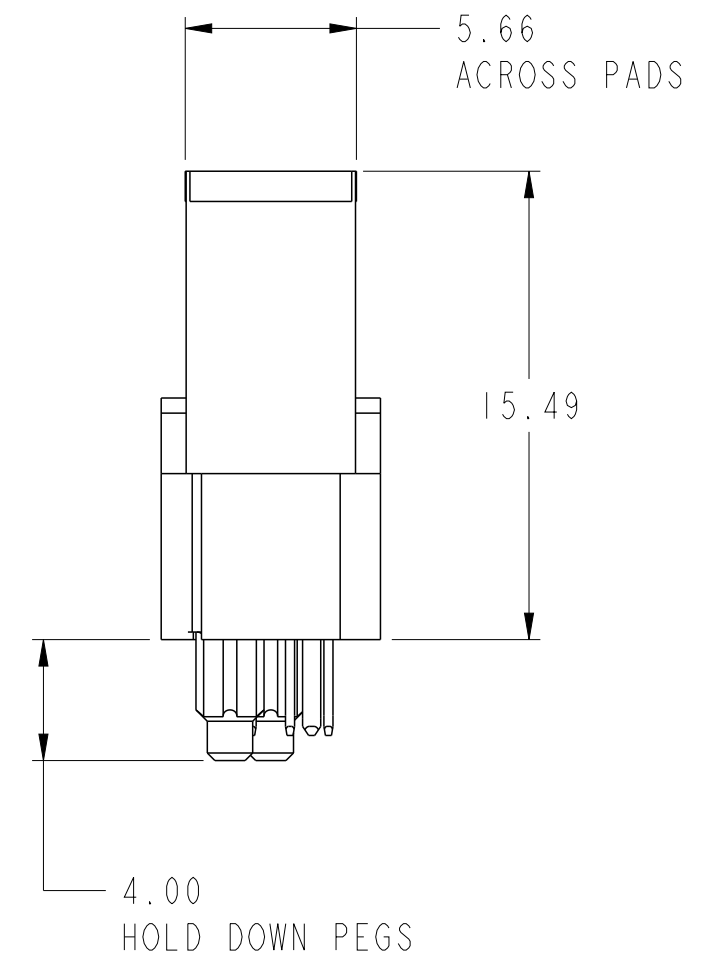
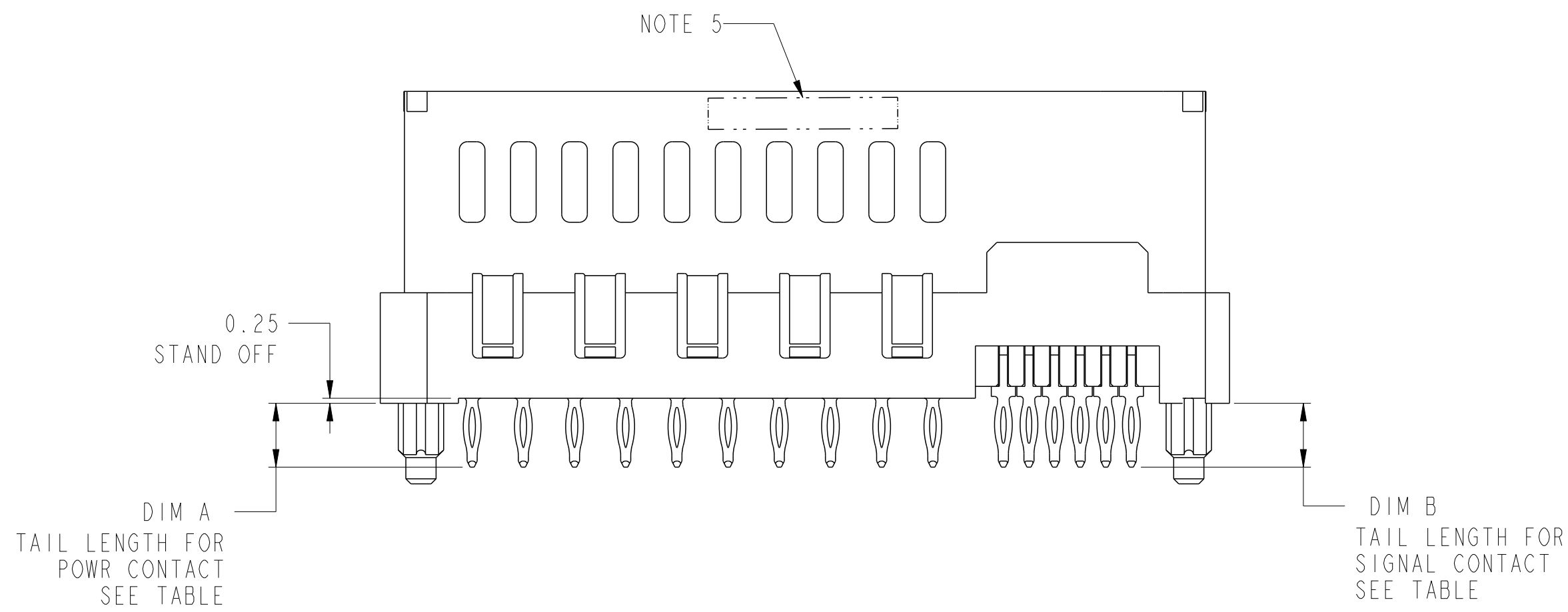
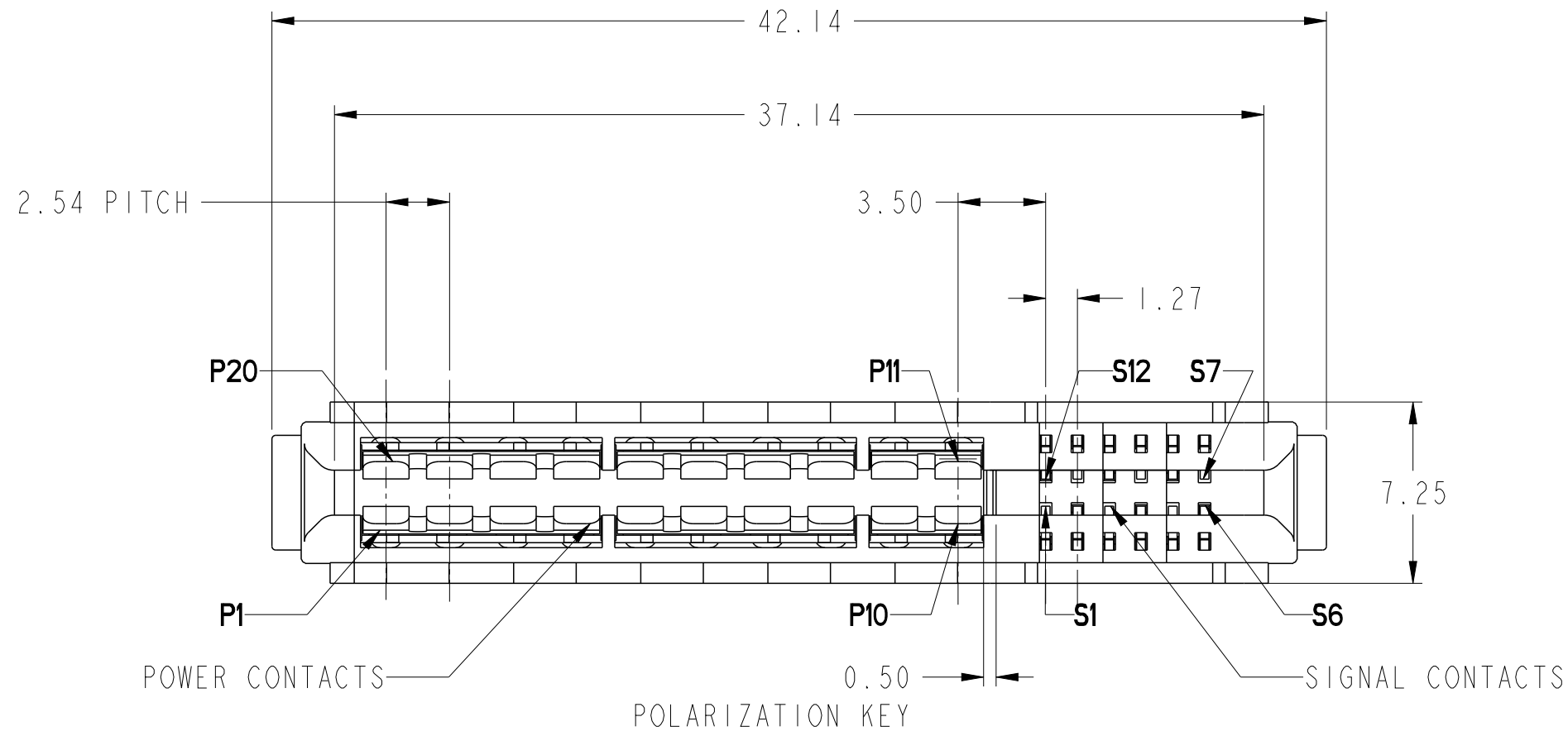
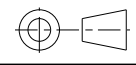
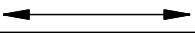




|               |  |                                                                                       |  |        |  |                |  |             |  |                                                                                       |  |                                                                                       |  |                      |  |                |  |          |  |     |  |   |  |
|---------------|--|---------------------------------------------------------------------------------------|--|--------|--|----------------|--|-------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|----------------------|--|----------------|--|----------|--|-----|--|---|--|
| spec ref      |  | -                                                                                     |  | dr     |  | Hai-Ling Liu   |  | 2015/07/10  |  | projection                                                                            |  | mm                                                                                    |  | size                 |  | A2             |  | scale    |  | 1:1 |  |   |  |
| tolerance std |  | TOLERANCES UNLESS OTHERWISE SPECIFIED                                                 |  | eng    |  | Hai-Ling Liu   |  | 2015/11/03  |  |  |  |  |  | ecn no               |  | ELX-DG-22374-1 |  | Released |  |     |  |   |  |
| ISO 406       |  |                                                                                       |  | chr    |  | Terris Liu     |  | 2015/11/11  |  |                                                                                       |  |                                                                                       |  | rel level            |  |                |  |          |  |     |  |   |  |
| ISO 1101      |  |                                                                                       |  | appr   |  | Pei-Ming Zheng |  | 2015/11/11  |  |                                                                                       |  |                                                                                       |  | product family       |  |                |  |          |  |     |  |   |  |
| surface       |  |  |  | linear |  | 0.X            |  | ±0.5        |  |  |  | title                                                                                 |  | HPCE VERTICAL RECEPT |  | dwg no         |  | 10136152 |  | rev |  | B |  |
|               |  |                                                                                       |  | 0.XX   |  | ±0.25          |  |             |  |                                                                                       |  |                                                                                       |  |                      |  |                |  |          |  |     |  |   |  |
|               |  |                                                                                       |  | 0.XXX  |  | ±0.10          |  |             |  |                                                                                       |  |                                                                                       |  |                      |  |                |  |          |  |     |  |   |  |
| ISO 1302      |  | angular                                                                               |  | 0°     |  | ±2°            |  | www.fci.com |  | cat. no.                                                                              |  | Product - Customer Drw                                                                |  | sheet 1 of 4         |  |                |  |          |  |     |  |   |  |

|                |                       |                                                                      |                        |                    |               |                        |   |             |
|----------------|-----------------------|----------------------------------------------------------------------|------------------------|--------------------|---------------|------------------------|---|-------------|
| 1              | 2                     | 3                                                                    | 4                      | 5                  | 6             | 7                      | 8 |             |
| 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 |   |             |
|                |                       | 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 |
| POWER & SIGNAL | 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 |   |             |
|                |                       | 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 |
| POWER & SIGNAL | COPPER (SEE NOTE 8)   | 0.81-0.86 (0.85 DRILL)                                               | 0.025 - 0.050          | --                 | --            | 0.70 - 0.80            |   |             |

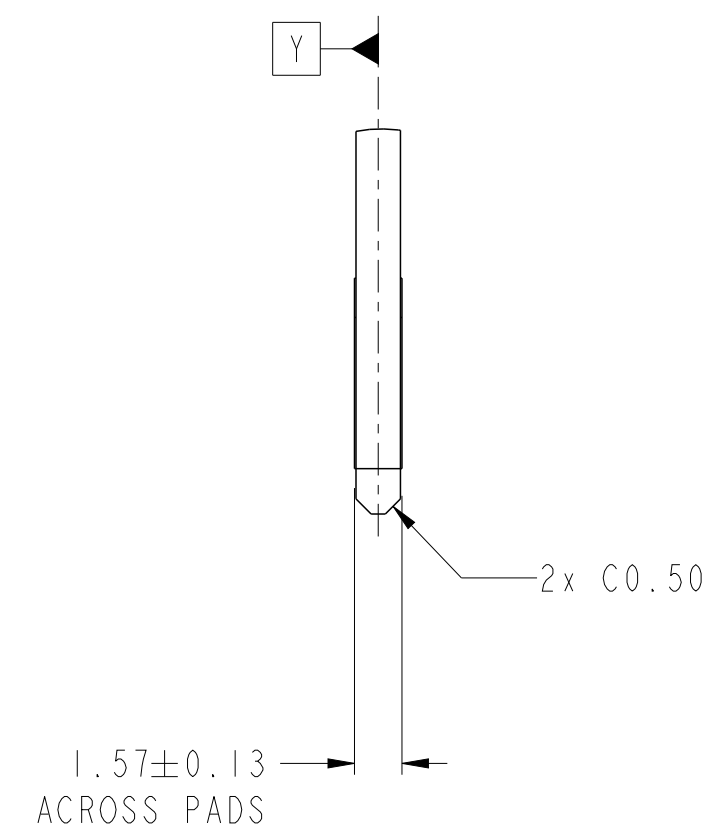
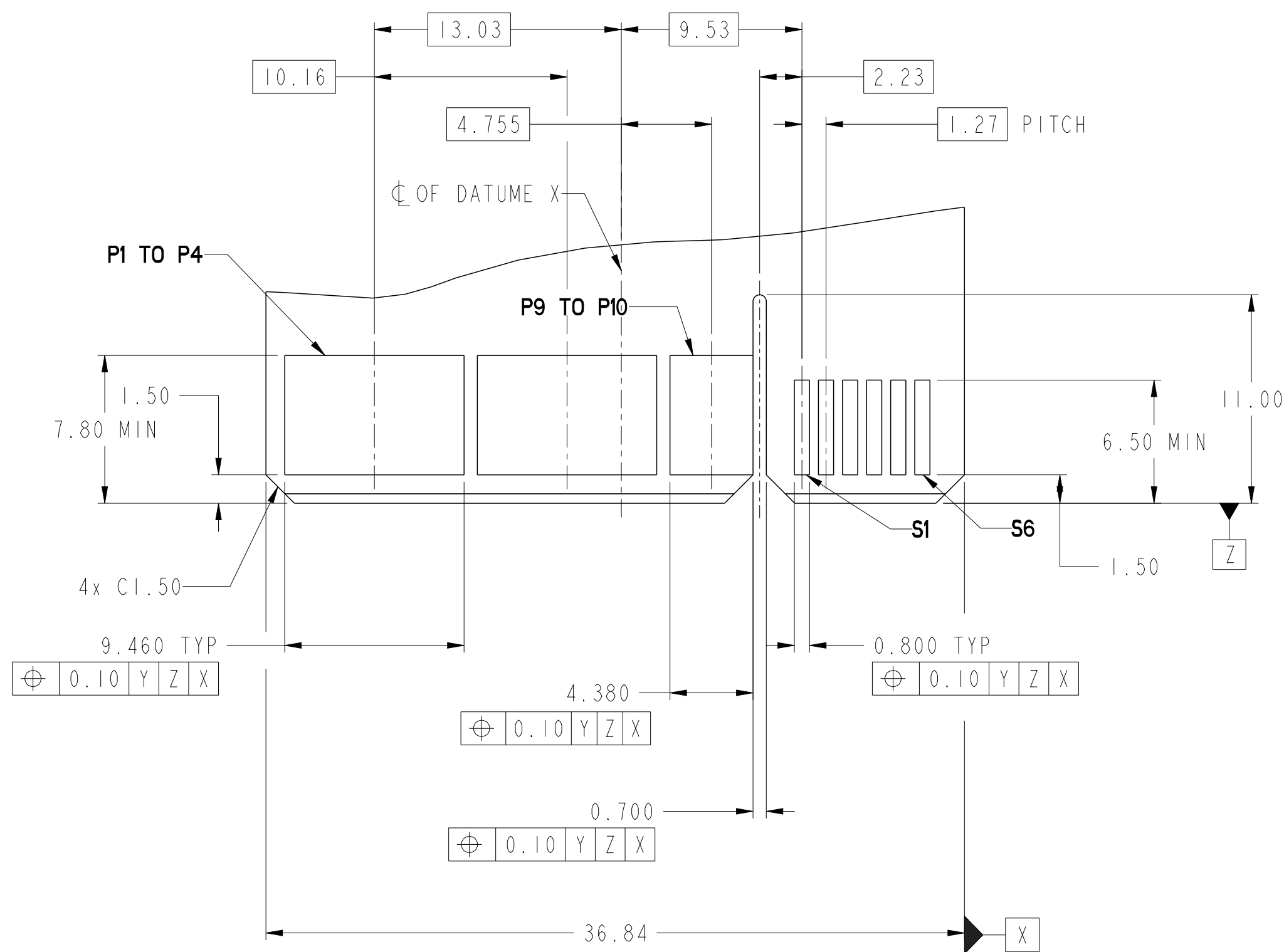
The drawing shows a top-down view of a vertical receptacle. Key dimensions include a total width of 42.14, a central width of 38.10, and a distance of 32.71 from the left edge to the center. A pitch of 2.54 is specified for the main array of holes. Individual hole diameters are 1.27, 1.35, and 1.905. Feature callouts include P1, P10, P11, P20, S1, S6, S7, and S12. Datum X is defined as the center of the main hole array. Unplated holes are specified as 0.10 diameter. The drawing is oriented with X, Y, and Z axes.

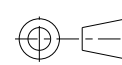
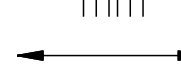
|               |                     |                                       |              |              |                      |           |            |                        |              |     |
|---------------|---------------------|---------------------------------------|--------------|--------------|----------------------|-----------|------------|------------------------|--------------|-----|
| spec ref      | -                   | dr                                    | Hai-Ling Liu | 2015/0710    | projection           | mm        | size       | A2                     | scale        | 1:1 |
| tolerance std | ISO 406<br>ISO 1101 | TOLERANCES UNLESS OTHERWISE SPECIFIED | eng          | Hai-Ling Liu | 2015/1103            |           | ecn no     | ELX-DG-22374-1         |              |     |
| surface       | linear              | 0.X                                   | ±0.5         | chr          | Terris Liu           |           | 2015/11/11 | rel level              | Released     |     |
|               |                     | 0.XX                                  | ±0.25        | appr         | Pei-Ming Zheng       |           | 2015/11/11 | product family         |              |     |
| ISO 1302      | angular             | 0°                                    | ±2°          | FCJ          | HPCE VERTICAL RECEPT | 4HP2LP12S | cat. no.   | Product - Customer Drw | sheet 2 of 4 | rev |
|               |                     |                                       |              |              | www.fci.com          |           |            |                        |              |     |

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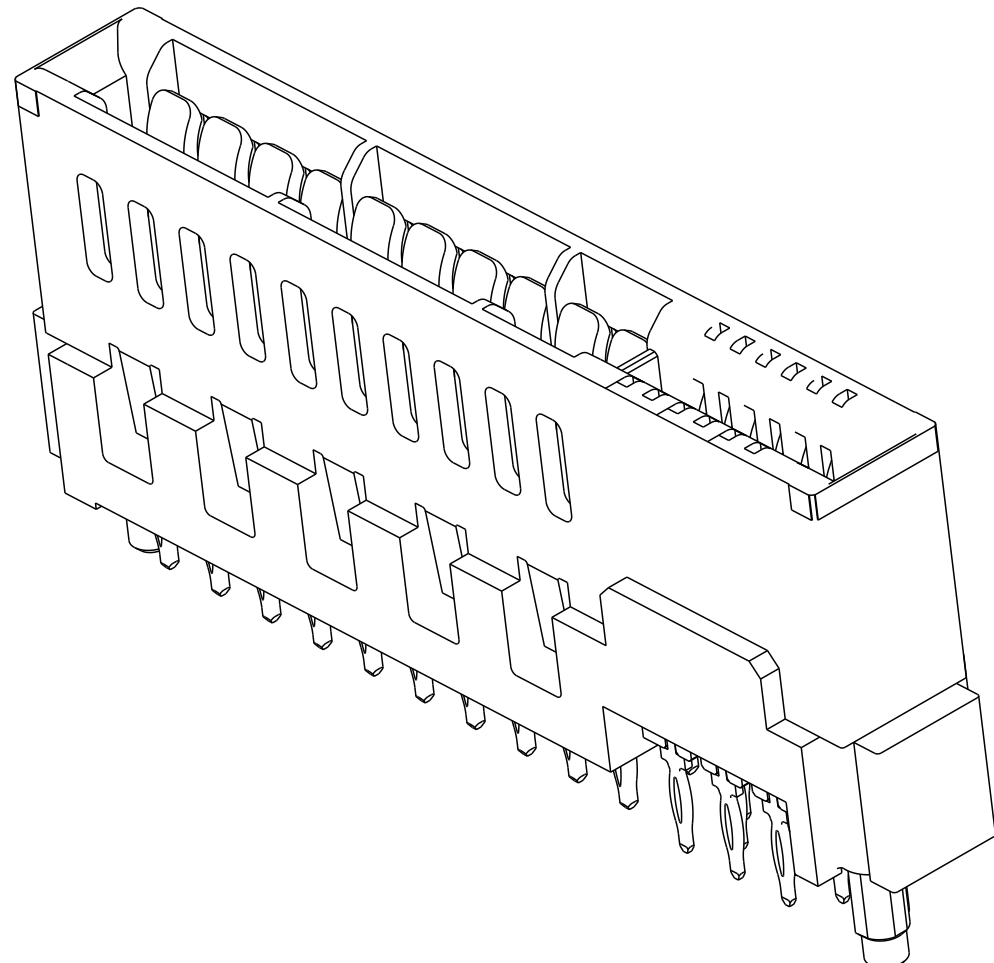
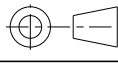


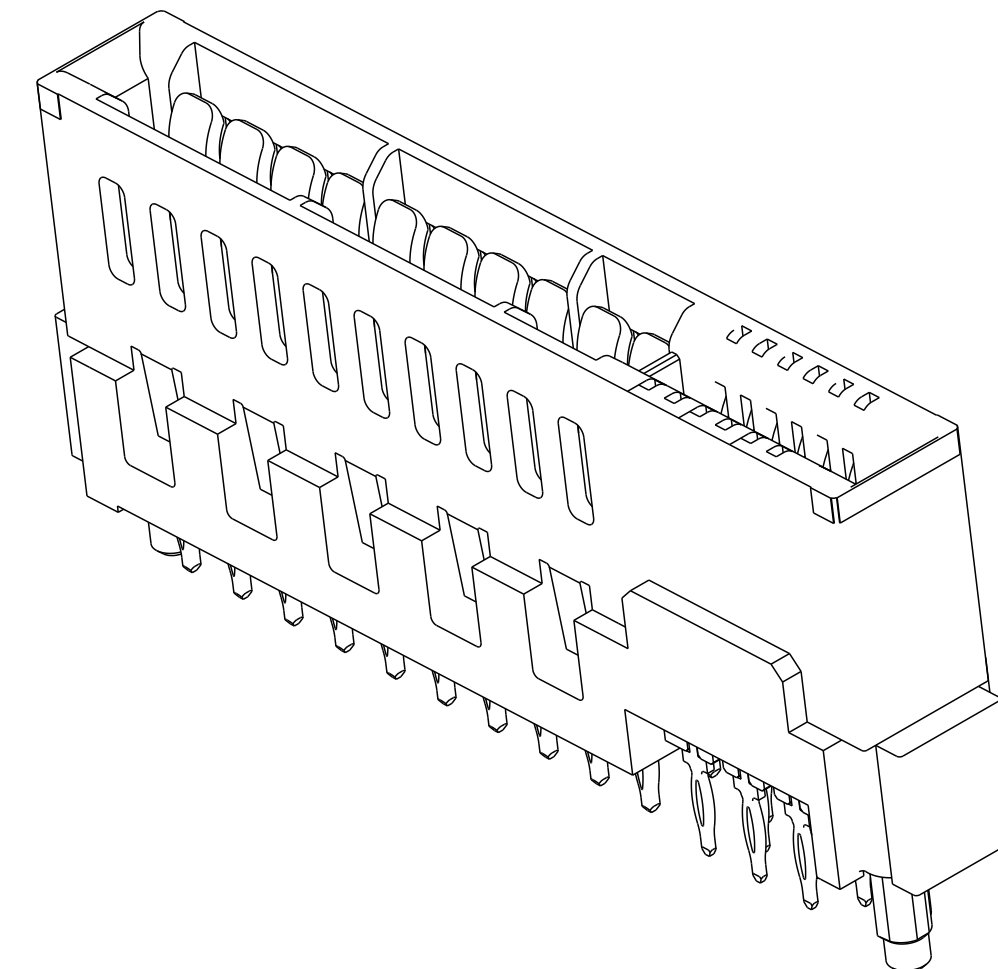
|               |  |                                                                                       |  |        |  |                                                                                       |  |            |  |                                                                                       |  |                                                                                       |  |                      |  |                |  |          |  |     |  |   |  |     |  |             |  |          |  |                        |  |              |  |
|---------------|--|---------------------------------------------------------------------------------------|--|--------|--|---------------------------------------------------------------------------------------|--|------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|----------------------|--|----------------|--|----------|--|-----|--|---|--|-----|--|-------------|--|----------|--|------------------------|--|--------------|--|
| spec ref      |  | -                                                                                     |  | dr     |  | Hai-Ling Liu                                                                          |  | 2015/07/10 |  | projection                                                                            |  | size                                                                                  |  | A2                   |  | scale          |  | 1:1      |  |     |  |   |  |     |  |             |  |          |  |                        |  |              |  |
| tolerance std |  | TOLERANCES UNLESS OTHERWISE SPECIFIED                                                 |  | eng    |  | Hai-Ling Liu                                                                          |  | 2015/11/03 |  |  |  |  |  | ecn no               |  | ELX-DG-22374-1 |  |          |  |     |  |   |  |     |  |             |  |          |  |                        |  |              |  |
| ISO 406       |  |                                                                                       |  | chr    |  | Terris Liu                                                                            |  | 2015/11/11 |  |                                                                                       |  |                                                                                       |  |                      |  |                |  |          |  |     |  |   |  |     |  |             |  |          |  |                        |  |              |  |
| ISO 1101      |  |                                                                                       |  | appr   |  | Pei-Ming Zheng                                                                        |  | 2015/11/11 |  |                                                                                       |  |                                                                                       |  | rel level            |  | Released       |  |          |  |     |  |   |  |     |  |             |  |          |  |                        |  |              |  |
| surface       |  |  |  | linear |  |  |  | title      |  |                                                                                       |  |                                                                                       |  | HPCE VERTICAL RECEPT |  | dwg no         |  | 10136152 |  | rev |  | B |  |     |  |             |  |          |  |                        |  |              |  |
| ISO 1302      |  |                                                                                       |  |        |  |                                                                                       |  |            |  | angular                                                                               |  | 0°                                                                                    |  |                      |  |                |  |          |  |     |  |   |  | ±2° |  | www.fci.com |  | cat. no. |  | Product - Customer Drw |  | sheet 3 of 4 |  |
|               |  |                                                                                       |  |        |  |                                                                                       |  |            |  |                                                                                       |  |                                                                                       |  |                      |  |                |  |          |  |     |  |   |  |     |  |             |  |          |  |                        |  |              |  |

PDS: Rev :B

STATUS:Released

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           |                 |                                               |                                                |                                                                                                                                                                                                                                                    |   |                       |                                     |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------|-----------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----------------------|-------------------------------------|------|------|-------|-------|-------|---------|----|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2         | 3               | 4                                             | 5                                              | 6                                                                                                                                                                                                                                                  | 7 | 8                     |                                     |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
| HPCE PART NUMBER (TABLE 3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |           |                 |                                               |                                                |                                                                                                                                                                |   |                       |                                     |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
| PART NUMBER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | TAIL TYPE | ORIENTATION KEY | DIM "A" TYPICAL TAIL LENGTH FOR POWER CONTACT | DIM "B" TYPICAL TAIL LENGTH FOR SIGNAL CONTACT |                                                                                                                                                                                                                                                    |   |                       | DIM "C" RECOMMENDED BOARD THICKNESS |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
| 10136152-001LF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SOLDER    | YES             | 3.17 ±0.25                                    | 3.17 ±0.25                                     |                                                                                                                                                                                                                                                    |   |                       | 2.36                                |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
| 10136152-002LF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SOLDER    | NO              |                                               |                                                |                                                                                                                                                                                                                                                    |   |                       |                                     |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
| 10136152-003LF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | PRESS-FIT | YES             | 3.17±0.25                                     | 3.17 ±0.25                                     |                                                                                                                                                                                                                                                    |   |                       | 1.57 MIN                            |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
| 10136152-004LF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | PRESS-FIT | NO              |                                               |                                                |                                                                                                                                                                                                                                                    |   |                       |                                     |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
| 10136152-005LF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SOLDER    | YES             | 4.05±0.25                                     | 3.75 ±0.25                                     |                                                                                                                                                                                                                                                    |   |                       | 3.20                                |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
| 10136152-006LF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SOLDER    | NO              |                                               |                                                |                                                                                                                                                                                                                                                    |   |                       |                                     |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
| <p>NOTES:</p> <p>1. CONNECTOR MATERIALS:</p> <p>HOUSING: HIGH TEMPERATURE THERMAL PLASTIC, BLACK<br/>UL 94V-0 COMPLIANT</p> <p>CONTACTS: HIGH PERFORMANCE COPPER ALLOY.</p> <p>2. CONTACT FINISH REF. GS-12-604 SECTION 5.2.</p> <p>3. PRODUCT SPECIFICATION: GS-12-604.</p> <p>4. APPLICATION SPECIFICATION: GS-20-128.</p> <p>5. PRODUCT MARKING ON HOUSING IN AREA SHOWN MEETS FCI SPECIFICATION GS-24-007</p> <p>6. PACKAGING MEETS FCI SPECIFICATION GS-14-937.</p> <p>7. ALL HOLE SIZES ARE FINISHED HOLE SIZES.</p> <p>8. MOUNTING HOLES ARE UNPLATED<br/>Ø 2.40 +/- 0.1 FOR PRESS-FIT TAILS<br/>Ø 2.18 +/- 0.03 FOR SOLDER TAILS</p> <p>9. PRESS FIT APPLICATION TOOL DRAWING : 10119453.</p> |           |                 |                                               |                                                |                                                                                                                                                                                                                                                    |   |                       |                                     |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
| <p>spec ref -</p> <p>tolerance std ISO 406 ISO 1101</p> <p>surface  ISO 1302</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |           |                 |                                               |                                                | <p>TOLERANCES UNLESS OTHERWISE SPECIFIED</p> <table><tr><td rowspan="3">linear</td><td>0.X</td><td>±0.5</td></tr><tr><td>0.XX</td><td>±0.25</td></tr><tr><td>0.XXX</td><td>±0.10</td></tr><tr><td>angular</td><td>0°</td><td>±2°</td></tr></table> |   | linear                | 0.X                                 | ±0.5 | 0.XX | ±0.25 | 0.XXX | ±0.10 | angular | 0° | ±2° | <p>dr Hai-Ling Liu 2015/07/10</p> <p>eng Hai-Ling Liu 2015/11/03</p> <p>chr Terris Liu 2015/11/11</p> <p>appr Pei-Ming Zheng 2015/11/11</p> <p> cat. no. www.fci.com</p> | <p>projection  mm</p> <p>product family</p> | <p>size A2</p> <p>scale 1:1</p> <p>ecn no ELX-DG-22374-1</p> <p>rel level Released</p> | <p>title HPCE VERTICAL RECEPT 4HP2LP12S</p> <p>dwg no 10136152</p> <p>rev B</p> |
| linear                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0.X       | ±0.5            |                                               |                                                |                                                                                                                                                                                                                                                    |   |                       |                                     |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.XX      | ±0.25           |                                               |                                                |                                                                                                                                                                                                                                                    |   |                       |                                     |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.XXX     | ±0.10           |                                               |                                                |                                                                                                                                                                                                                                                    |   |                       |                                     |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
| angular                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0°        | ±2°             |                                               |                                                |                                                                                                                                                                                                                                                    |   |                       |                                     |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |
| PDS: Rev :B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |           |                 |                                               |                                                | STATUS:Released                                                                                                                                                                                                                                    |   | Printed: Nov 12, 2015 |                                     |      |      |       |       |       |         |    |     |                                                                                                                                                                                                                                                               |                                                                                                                                  |                                                                                        |                                                                                 |



NOTES:

1. CONNECTOR MATERIALS:

HOUSING: HIGH TEMPERATURE THERMAL PLASTIC, BLACK  
UL 94V-0 COMPLIANT  
CONTACTS: HIGH PERFORMANCE COPPER ALLOY.

2. CONTACT FINISH REF. GS-12-604 SECTION 5.2.

3. PRODUCT SPECIFICATION: GS-12-604.

4. APPLICATION SPECIFICATION: GS-20-128.

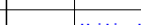
(5.) PRODUCT MARKING ON HOUSING IN AREA SHOWN MEETS FCI SPECIFICATION GS-24-007

6. PACKAGING MEETS FCI SPECIFICATION GS-14-937.

7. ALL HOLE SIZES ARE FINISHED HOLE SIZES.

⑧. MOUNTING HOLES ARE UNPLATED  
 $\varnothing$  2.40 +/- 0.1 FOR PRESS-FIT TAILS  
 $\varnothing$  2.18 +/- 0.03 FOR SOLDER TAILS

9. PRESS FIT APPLICATION TOOL DRAWING : 10119453.

|               |  |                                                                                       |  |        |  |                                                                                       |  |             |  |                                                                                       |  |                                                                                       |  |                        |  |              |  |       |  |       |  |
|---------------|--|---------------------------------------------------------------------------------------|--|--------|--|---------------------------------------------------------------------------------------|--|-------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|------------------------|--|--------------|--|-------|--|-------|--|
| spec ref      |  | -                                                                                     |  | dr     |  | Hai-Ling Liu                                                                          |  | 2015/07/10  |  | projection                                                                            |  |  |  | size                   |  | A2           |  | scale |  | 1:1   |  |
| tolerance std |  | TOLERANCES UNLESS OTHERWISE SPECIFIED                                                 |  | eng    |  | Hai-Ling Liu                                                                          |  | 2015/11/03  |  |  |  | ecn no                                                                                |  | ELX-DG-22374-1         |  |              |  |       |  |       |  |
| ISO 406       |  |                                                                                       |  | chr    |  | Terris Liu                                                                            |  | 2015/11/11  |  |                                                                                       |  | rel level                                                                             |  | Released               |  |              |  |       |  |       |  |
| ISO 1101      |  |                                                                                       |  | appr   |  | Pei-Ming Zheng                                                                        |  | 2015/11/11  |  |                                                                                       |  | product family                                                                        |  |                        |  |              |  |       |  |       |  |
| surface       |  |  |  | linear |  |  |  | title       |  | HPCE VERTICAL RECEPT                                                                  |  | dwg no                                                                                |  | 10136152               |  | rev          |  | B     |  |       |  |
|               |  |                                                                                       |  | 0.X    |  |                                                                                       |  |             |  |                                                                                       |  |                                                                                       |  |                        |  |              |  |       |  | ±0.5  |  |
|               |  |                                                                                       |  | 0.XX   |  |                                                                                       |  |             |  |                                                                                       |  |                                                                                       |  |                        |  |              |  |       |  | ±0.25 |  |
| ISO 1302      |  | angular                                                                               |  | 0°     |  | ±0.10                                                                                 |  | www.fci.com |  | cat. no.                                                                              |  | 4HP2LP12S                                                                             |  | Product - Customer Drw |  | sheet 4 of 4 |  |       |  |       |  |

**PDS: Rev :B**

**STATUS<sup>7</sup>:Released**

Printed: Nov 12, 2015