

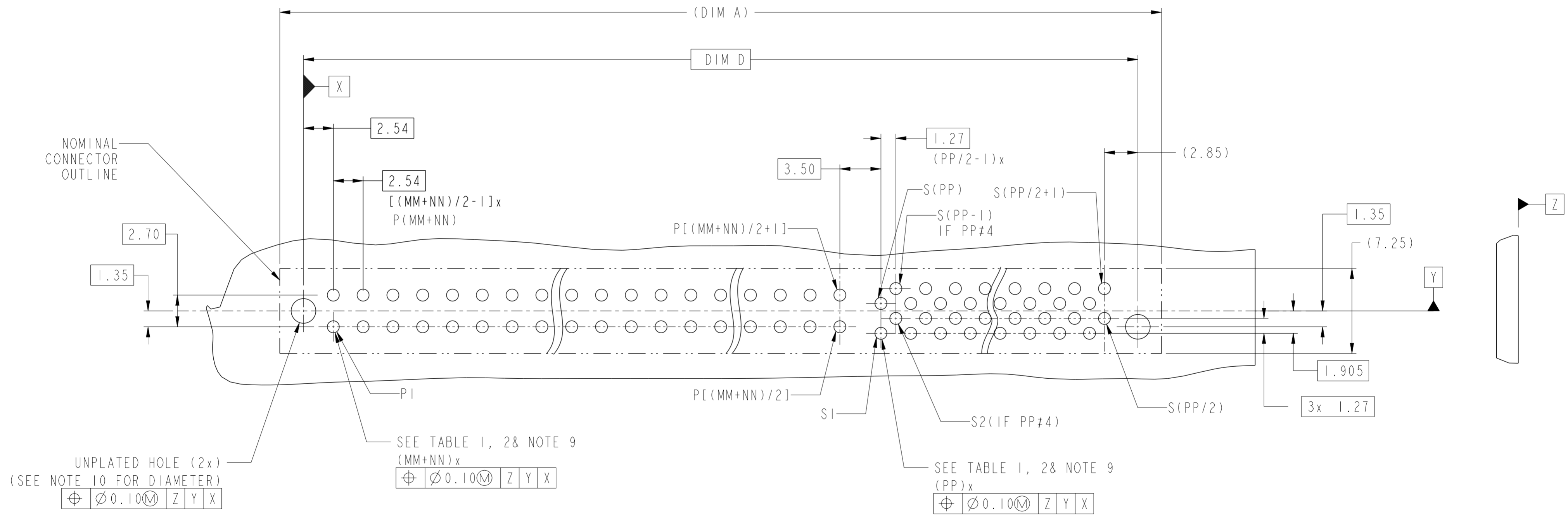
SECTION A-A
SCALE 4:1

SECTION B-B
SCALE 4:1

| | | | | | | | | |
|---------------------------------------|---------------------|---------|----------------|------------|---|-----------|----------|------|
| spec ref | - | dr | Wei-Long Zhang | 2012/06/14 | Amphenol Power Solutions A Division of Amphenol Corporation amphenol-hcc.com | MM | scale | size |
| tolerance std | ISO 406 ISO 1101 | eng | Zhi-Yi Cha | 2024/05/13 | | ec n no | 1:1 | A2 |
| TOLERANCES UNLESS OTHERWISE SPECIFIED | | r v w r | - | - | | rel level | Released | |
| surface | linear | 0.X | ±0.5 | projection | VERT REC WITH ENHANCED WALLS | dig no | 10121505 | rev |
| | | 0.XX | ±0.25 | | HIGH POWER CARD EDGE - UNIVERSAL DRAWING product family | cat. no. | | D |
| | angular | 0.XXX | ±0.10 | | | | | |
| ASME Y14.5 | | 0° | ±2° | | | | | |

| CONTACT TYPE | TOP LAYER DESCRIPTION | TABLE 1 (HPCE / SOLDER TAILS) 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 |

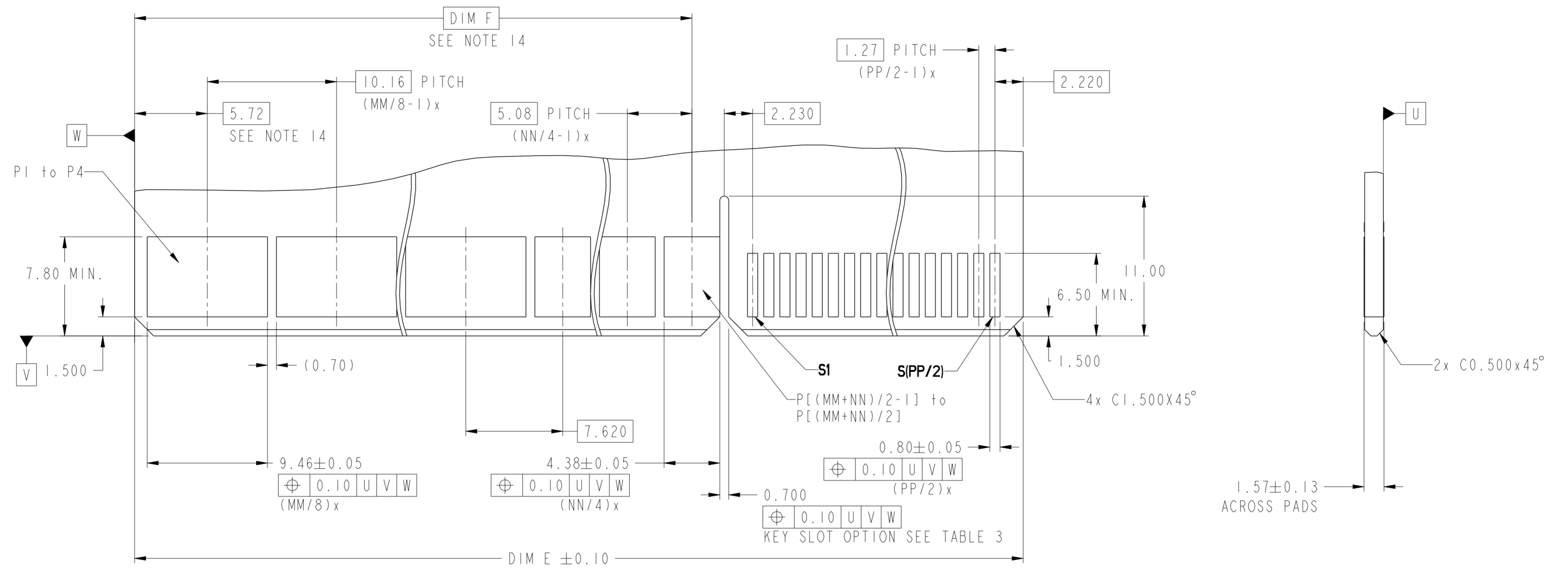
| CONTACT TYPE | TOP LAYER DESCRIPTION | TABLE 2 (HPCE / PRESS-FIT TAILS) PLATED THROUGH-HOLE REQUIREMENTS | | | | |
|----------------|-----------------------|--|------------------|--------------------|---------------|------------------------|
| | | DRILLED HOLE DIAMETER | COPPER THICKNESS | TIN-LEAD 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 Power Solutions

© 2021 Amphenol Corporation

| | | | | | | | | | | |
|---------------------------------------|---------------------|---------|----------------|------------|---|----------------|------------------------|--------------|----------|----|
| spec ref | - | dr | Wei-Long Zhang | 2012/06/14 | | MM | scale | 1:1 | size | A2 |
| tolerance std | ISO 406 ISO 1101 | eng | Zhi-Yi Cha | 2024/05/13 | | ec n no | ELX-DG-51492-1 | rel level | Released | |
| surface | ASME Y14.5 | proj | Zheng-Pei-Min | 2024/05/20 | | product family | Product - Customer Drw | sheet 2 of 4 | | |
| TOLERANCES UNLESS OTHERWISE SPECIFIED | | linear | 0.X | ±0.5 | Amphenol Power Solutions A Division of Amphenol Corporation amphenol-hcc.com | | cat. no. | 10121505 | rev | D |
| | | angular | 0° | ±2° | VERT REC WITH ENHANCED WALLS HIGH POWER CARD EDGE - UNIVERSAL DRAWING | | | | | |



| | | | | | | | | |
|---------------------------------------|---------------------------------------|------------|----------------|------------|---|--|----------|----------|
| spec ref | - | dr | Wei-Long Zhang | 2012/06/14 | Amphenol Power Solutions A Division of Amphenol Corporation amphenol-hcc.com | MM | scale | size |
| tolerance std | ISO 406 ISO 1101 | eng | Zhi-Yi Cha | 2024/05/13 | | ec n no | 1:1 | A2 |
| TOLERANCES UNLESS OTHERWISE SPECIFIED | | r v w r | - | - | | rel level | Released | |
| surface | ASME Y14.5 | appr | Zheng-Pei-Min | 2024/05/20 | product family | VERT REC WITH ENHANCED WALLS HIGH POWER CARD EDGE - UNIVERSAL DRAWING | cat. no. | 10121505 |
| linear | 0.X ±0.5 0.XX ±0.25 0.XXX ±0.10 | projection | | | Product - Customer Drw | sheet 3 of 4 | rev | D |
| angular | 0° ±2° | | | | | | | |

10121505 - MM NN PP LF

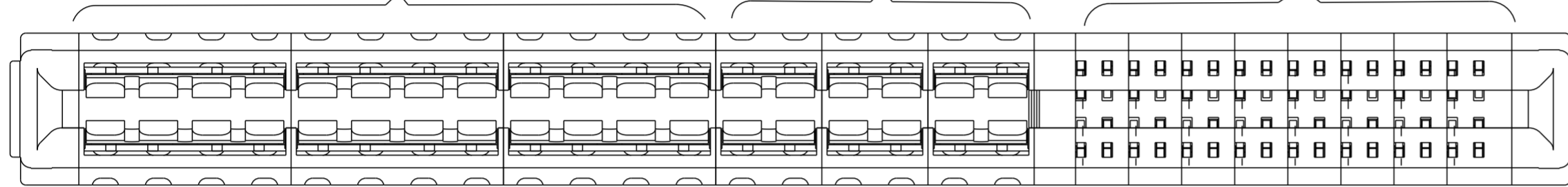
LEAD FREE

| NON-HALOGEN FREE | | | | HALOGEN FREE | | | |
|-------------------------|----|-----|----|-------------------|----|-----|----|
| A | B | C | D | 1 | 2 | 3 | 4 |
| Y | Y | N | N | Y | Y | N | N |
| Polarization Key Option | | | | Tail Type Note 12 | | | |
| STB | PF | STB | PF | STB | PF | STB | PF |

QUAD PWR BEAM QTY
(NEXT TO LEFT END)

DUAL PWR BEAM QTY
(NEXT TO SIGNAL)

SIGNAL CONTACT QTY



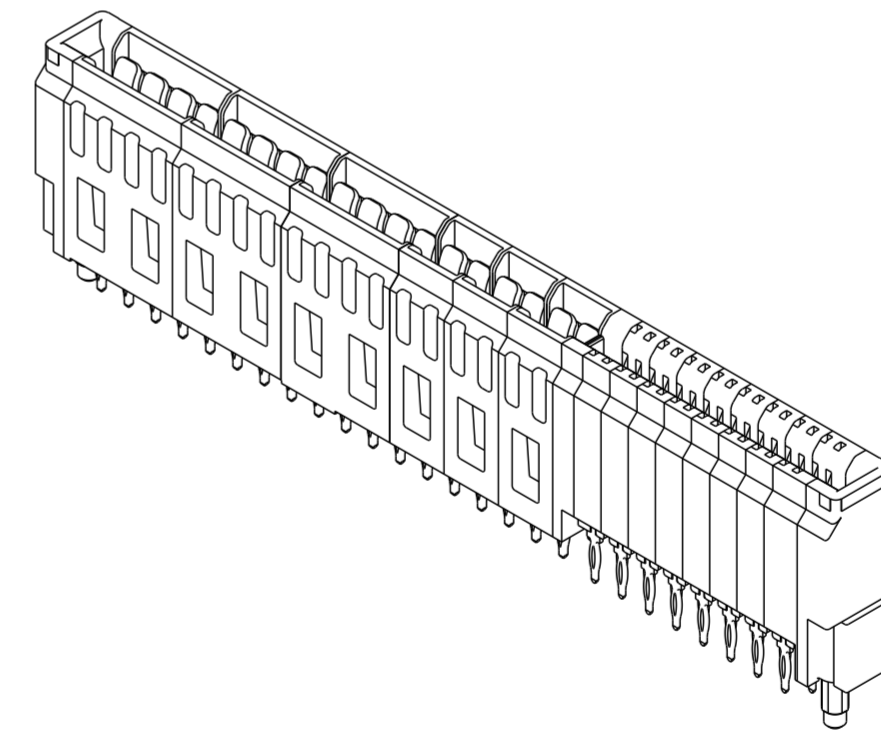
Example: The configuration above is 10121505-241232BLF
VERT Press fit 36P32S with polarization key. 24P is Quad beam contact, 12P is dual beam contact.

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

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 | TABLE 2. LENGTH FORMULAS. |
|-------|--|
| DIM A | (13) (MM/8)X10.16+ (NN/4)X5.08 + (PP/2)X1.27 + 9.12 |
| DIM B | DIM "A" - 5.00 |
| DIM C | DIM "A" - 0.94 |
| DIM D | DIM "A" - 4.04 |
| DIM E | DIM "A" - 5.30 |
| DIM F | (MM/8-1)x10.16 + (NN/4-1)x5.08 + 13.34 (WITH 4 BEAM CONTACT) |
| | 3.18 (WITHOUT 4 BEAM CONTACT) |



| | | | | | | | | |
|---------------------------------------|---------------------|---------|----------------|------------|---|--|--------------|----------|
| spec ref | - | dr | Wei-Long Zhang | 2012/06/14 | Amphenol Power Solutions A Division of Amphenol Corporation amphenol-hcc.com | MM | scale | size |
| tolerance std | ISO 406 ISO 1101 | eng | Zhi-Yi Cha | 2024/05/13 | | ec n no | 1:1 | A2 |
| TOLERANCES UNLESS OTHERWISE SPECIFIED | | r v w r | - | - | | rel level | Released | |
| surface | linear | 0.X | ±0.5 | projection | title | VERT REC WITH ENHANCED WALLS | cat. no. | 10121505 |
| | | 0.XX | ±0.25 | | product family | HIGH POWER CARD EDGE - UNIVERSAL DRAWING | rev | D |
| | | 0.XXX | ±0.10 | | Product - Customer Drw | | sheet 4 of 4 | |
| ASME Y14.5 | angular | 0° | ±2° | | | | | |