

NOTES:

1. THIS COMPONENT CONFORMS TO UL60950. UL FILE NO. IS: E216117.

|                                                                                   |                                                                                                                                                                                                                                            |               |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
|  | <b>WARNING:</b> THIS COMPONENT IS RECOGNIZED BY ONE OR MORE SAFETY AGENCIES SUCH AS UL, VDE, CSA AND/OR TUV. ALL ENGINEERING CHANGES MUST HAVE PRIOR APPROVAL BY THE DESIGN CENTER PRODUCT SAFETY DEPARTMENT FOR SAFETY AGENCY COMPLIANCE. | ECN APPROVAL: |
|                                                                                   |                                                                                                                                                                                                                                            | QA APPROVAL:  |
|                                                                                   |                                                                                                                                                                                                                                            | DATE:         |

2. ROHS COMPLIANT

3. MATERIAL

- 3.1 PLASTIC HOUSING: THERMOPLASTIC, BLACK WITH FLAMMABILITY RATING UL 94V-0 OR BETTER.
- 3.2 CONTACTS BASE MATERIAL: PHOSPHOR BRONZE
- 3.3 UNDER PLATING: 50  $\mu$ INCHES NICKEL MINIMUM.
- 3.4 CONTACTS PLATING: 30 MICROINCHES GOLD PLATING.
- 3.5 SOLDER TAIL PLATING : 200~500  $\mu$ INCHES 100% TIN, MATTE FINISH.
- 3.6 METAL SHIELD: STAINLESS STEEL. (FRONT SHIELD)  
METAL SHIELD: NICKEL PLATING ON COPPER ALLOY.(REAR SHIELD)
- 3.7 SHIELD PIN: SOLDER WITH TIN

4. ELECTRICAL CHARACTERISTICS:

- 4.1 INSULATION RESISTANCE: 500 MEGAOHMS MINIMUM

5. MECHANICAL

- 5.1 DURABILITY (MATING/UNMATING): 750 CYCLES.
- 5.2 CONTACT RESISTANCE: INITIAL 30 mOHMS Max, CHANGE 20 mOHMS

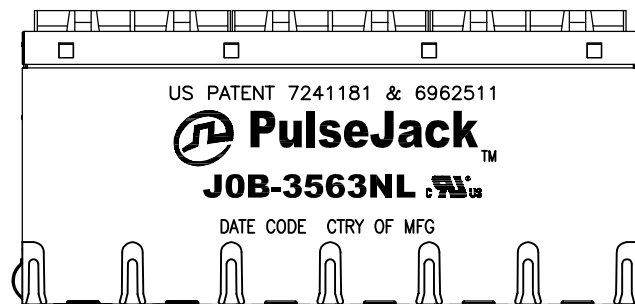
6. JACK CAVITY CONFORMS TO FCC PART 68 SUBPART F.

7. PCB PLATING: HASL (TOP PCB), ENIG (BOTTOM PCB)

8. STORAGE TEMPERATURE: -20°C TO +125°C

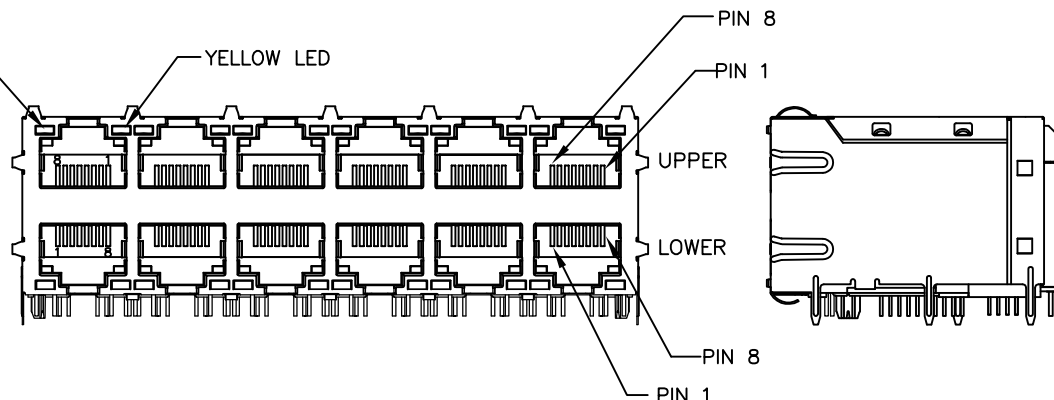
9. COMPLIANCE TO J-STD:

- A. J-STD-002: SOLDERABILITY AT 245°C DIP AND LOOK TEST
- B. J-STD-020: LEVEL 1, NO MOISTURE SENSITIVE
- C. J-STD-075: W2, 270°C MAXIMUM THROUGH WAVE SOLDER



GREEN LED

YELLOW LED

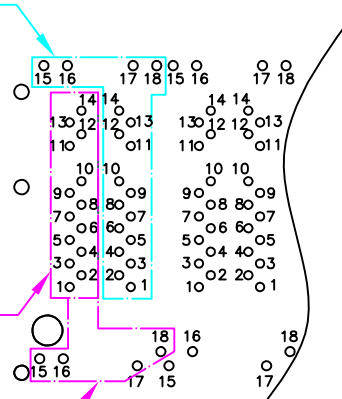


UPPER PORT PINS

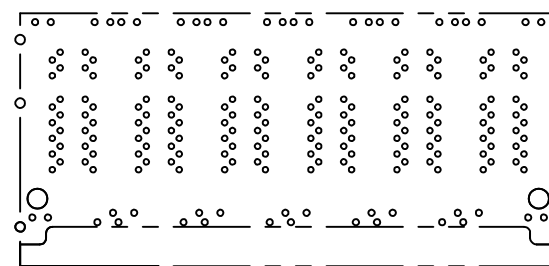
LOWER PORT PINS

LOWER PORT PINS

ENLARGED CUT-OUT VIEW



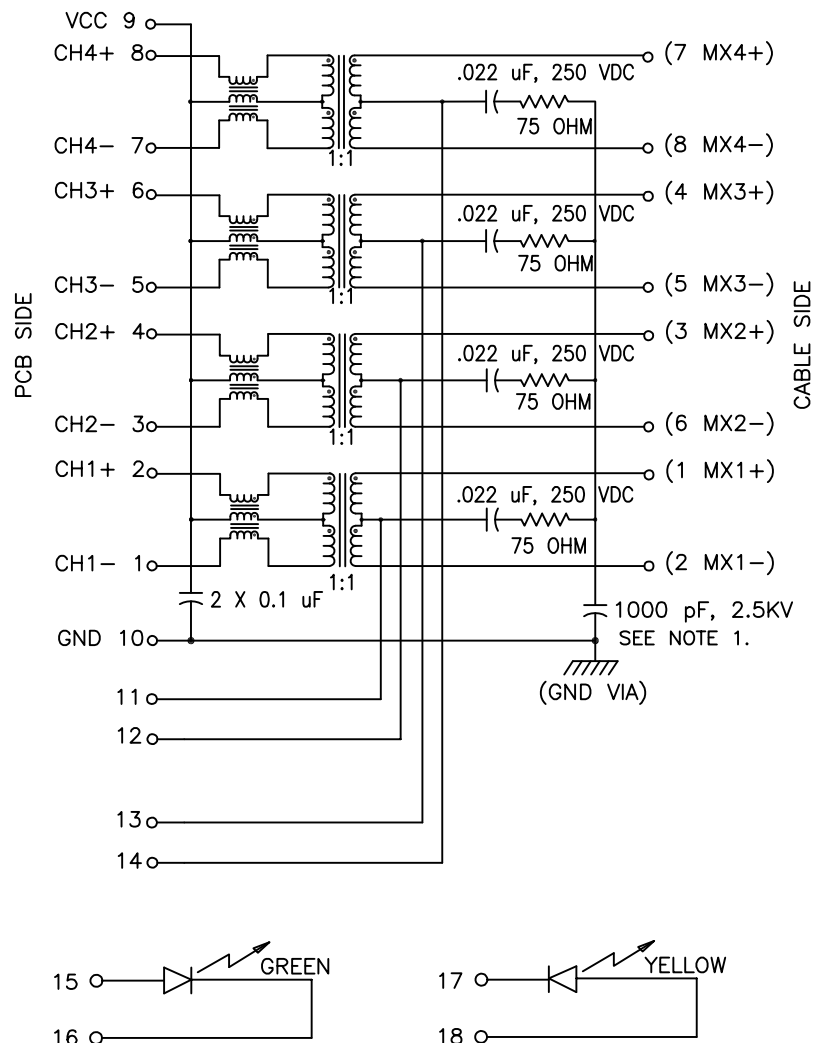
FINAL OUTLINE



PIN ASSIGNMENT (COMPONENT SIDE VIEW)

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| PRODUCT DESCRIPTION        | TLA DRAWING   | PS DRAWING    | SHEET  | PART NO.   | DATASHEET REV. |
|----------------------------|---------------|---------------|--------|------------|----------------|
| CONN,RJ45,2X6,1GPP,1:1,1TY | JOB-3563NL-10 | PS-2417.611-A | 1 OF 4 | JOB-3563NL | J              |



SCHEMATIC

NOTE 1: HIGH-VOLTAGE CAPACITOR IS COMMON FOR UPPER AND LOWER PORTS.

ELECTRICAL CHARACTERISTICS AT +25°C UNLESS OTHER SPECIFIED  
MEETS IEEE 802.3 SPECIFICATION

| PARAMETER                                                        | SPECIFICATIONS                       |                                            |                      |
|------------------------------------------------------------------|--------------------------------------|--------------------------------------------|----------------------|
| OPERATING TEMP                                                   | 0°C TO +70 °C                        |                                            |                      |
| URNS RATIO                                                       | 1 : 1 ±2%                            |                                            |                      |
| POLARITY                                                         | PER SCHEMATIC                        |                                            |                      |
| INSERTION LOSS                                                   | 100 KHz                              | 1–100 MHz                                  | 125 MHz              |
|                                                                  | –1.2 dB MAX                          | –0.2–0.002f <sup>1.4</sup> dB MAX          | –3.0 dB MAX          |
| RETURN LOSS<br>(Z OUT = 100 OHM ±15%)                            | .1–40 MHz                            | 40–100 MHz                                 |                      |
|                                                                  | –16 dB MIN                           | –10+20*LOG <sub>10</sub> (f/80 MHz) dB MIN |                      |
| INDUCTANCE (OCL)<br>AT 100 KHz, 100 mV<br>(MEDIA SIDE, 0°C~70°C) | WITH 0 mA DC BIAS                    |                                            | WITH 20.5 mA DC BIAS |
|                                                                  | 180 uH MIN                           |                                            | 150 uH MIN           |
| CROSSTALK, ADJACENT<br>CHANNELS                                  | 1 MHz                                | 10–100 MHz                                 |                      |
|                                                                  | –50 dB MIN                           | –52+22*LOG <sub>10</sub> (f/10) dB MIN     |                      |
| COMMON MODE<br>REJECTION RATIO                                   | 2 MHz                                | 30–200 MHz                                 |                      |
|                                                                  | –50 dB MIN                           | –15+20*LOG <sub>10</sub> (f/200) dB MIN    |                      |
| DC RESISTANCE,<br>1/2 WINDING                                    | .65 OHMS MAX                         |                                            |                      |
| DC RESISTANCE<br>IMBALANCE                                       | ±.065 OHMS MAX (CENTER TAP SYMMETRY) |                                            |                      |
| DC CURRENT/VOLTAGE<br>RATING – PSE PINS                          | 1.37A MAX, 57 V (CONTINUOUS)         |                                            |                      |
| INPUT – OUTPUT<br>ISOLATION                                      | 2250 VDC MINIMUM FOR 60 SECONDS      |                                            |                      |

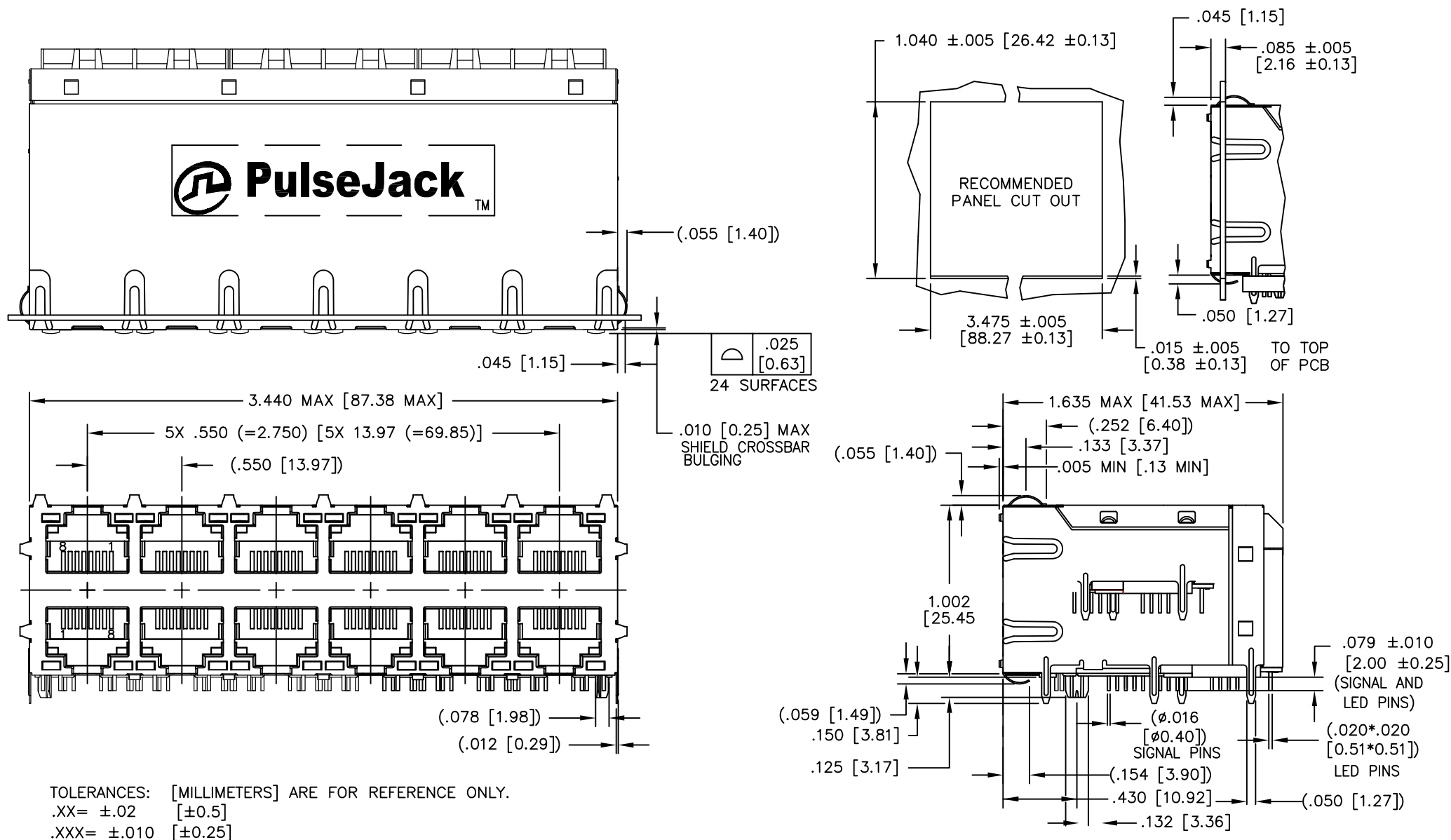
NOTE: f IS FREQUENCY IN MHz.

|                        |                              |                               |
|------------------------|------------------------------|-------------------------------|
| EMMITTED COLOR         | GREEN                        | YELLOW                        |
| WAVELENGTH (nm)        | 570 nm                       | 587 nm                        |
| BRIGHTNESS (mCD)       | 8 TYP.<br>AT 20 mA           | 6.5 TYP.<br>AT 20 mA          |
| VIEWING ANGLE          | 100°                         | 100°                          |
| POWER DISSIPATION (Pd) | 80 mW MAX                    | 80 mW MAX                     |
| FORWARD VOLTAGE (Vf)   | 2.0 TO 2.6 V<br>(UPPER PORT) | 2.1 TO 2.6 V<br>(UPPER PORT)  |
|                        | 2.2 TO 2.8 V<br>(LOWER PORT) | 2.15 TO 2.8 V<br>(LOWER PORT) |
| REVERSE VOLTAGE (Vr)   | 5.0 V MAX                    | 5.0 V MAX                     |

NOTE: PER VENDOR'S SPECIFICATIONS

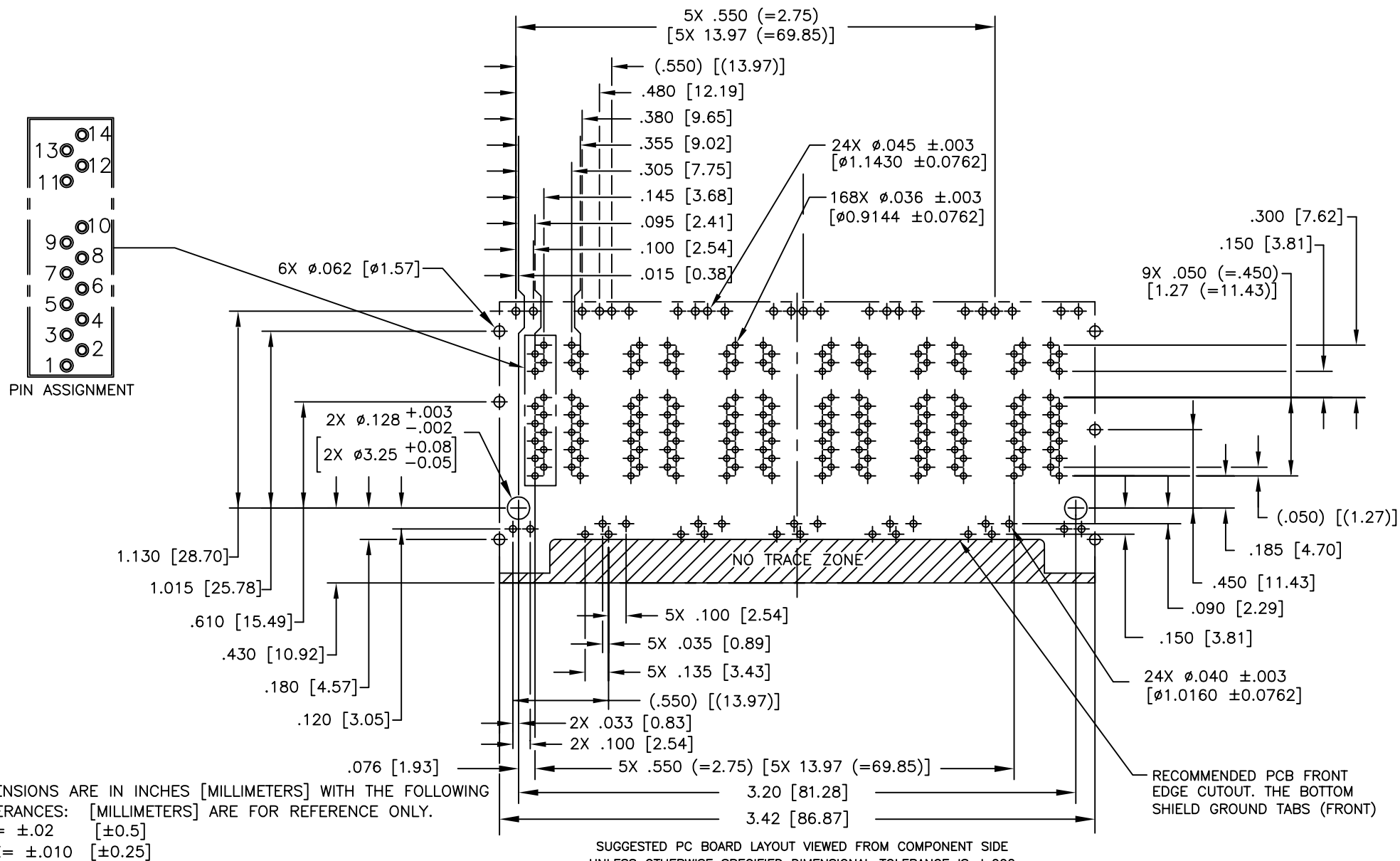
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