

# PULSEJACK™

## 2XN Gigstack

### Description:

10/100/1000 Base-TX RJ45 2XN Integrated Magnetics Connector without LEDs, designed to support such applications as: LAN-on-Motherboard (LOM), Hub and Switches.



### Features and Benefits:

- RJ45 2XN Tab-UP 10-pin RJ45 with internal magnetics
- Options: 2X4, 2X6, and 2X8 10/100/1000 Base-TX
- Suitable for CAT 5 or 6 Fast Ethernet cable or better UTP
- Internal magnetics are 100% electrically tested for HI-POT and functionality

### Electrical Performance Summary:

- Internal magnetics options available
- Meets or exceeds IEEE 802.3ab standard for 1000Base-T
- 350  $\mu$ H minimum OCL with 8 mA bias current
- High performance for maximum EMI suppression
- Minimum 1500 Vrms isolation per IEEE 802.3 requirement

### Electrical Specifications @ 25°C — Operating Temperature 0°C to +70°C

| New <sup>3</sup><br>Part<br>Number<br>(Number of Ports) | (Replaces <sup>3</sup><br>Old Part<br>Number) | Insertion<br>Loss<br>TX/RX<br>(dB TYP) | Return Loss<br>(dB TYP)<br>100 Ω (±15 Ω) |             |           | Crosstalk<br>(dB TYP) |             |              | Common<br>Mode<br>Rejection<br>(dB TYP) |             | Hipot<br>(MIN) |
|---------------------------------------------------------|-----------------------------------------------|----------------------------------------|------------------------------------------|-------------|-----------|-----------------------|-------------|--------------|-----------------------------------------|-------------|----------------|
|                                                         |                                               |                                        | 1-125<br>MHz                             | 1-40<br>MHz | 60<br>MHz | 100<br>MHz            | 1-10<br>MHz | 30-60<br>MHz | 60-100<br>MHz                           | 1-50<br>MHz |                |
| JC0-0031 (2X4)                                          | (JC065H3A)                                    | -1.0                                   | -18                                      | -14         | -10       | -40                   | -35         | -30          | -30                                     | -20         | 1500 Vrms      |
| JC0-0032 (2X6)                                          | (JC065H3B)                                    | -1.0                                   | -18                                      | -14         | -10       | -40                   | -35         | -30          | -30                                     | -20         | 1500 Vrms      |
| JC0-0033 (2X8)                                          | (JC065H3C)                                    | -1.0                                   | -18                                      | -14         | -10       | -40                   | -35         | -30          | -30                                     | -20         | 1500 Vrms      |

#### NOTES:

- Both transmit and receive channels meet IEEE 802.3 specifications.
- Different electrical and mechanical specifications can be accommodated. Contact Pulse Applications Engineering.
- JC0-003X are replacement parts for existing products JC065H3X.

### RJ45 Durability Testing Rating

| Part Number | Mating Force<br>(MAX) | Unmating Force<br>(MAX) | Durability     | Plug to Jack<br>Retention (MIN) |
|-------------|-----------------------|-------------------------|----------------|---------------------------------|
| JC Series   | 5 lbs./2.268 kgs.     | 5 lbs./2.268 kgs.       | 750 Insertions | 20 lbs./9.072 kgs.              |

### RJ45 Material Specification

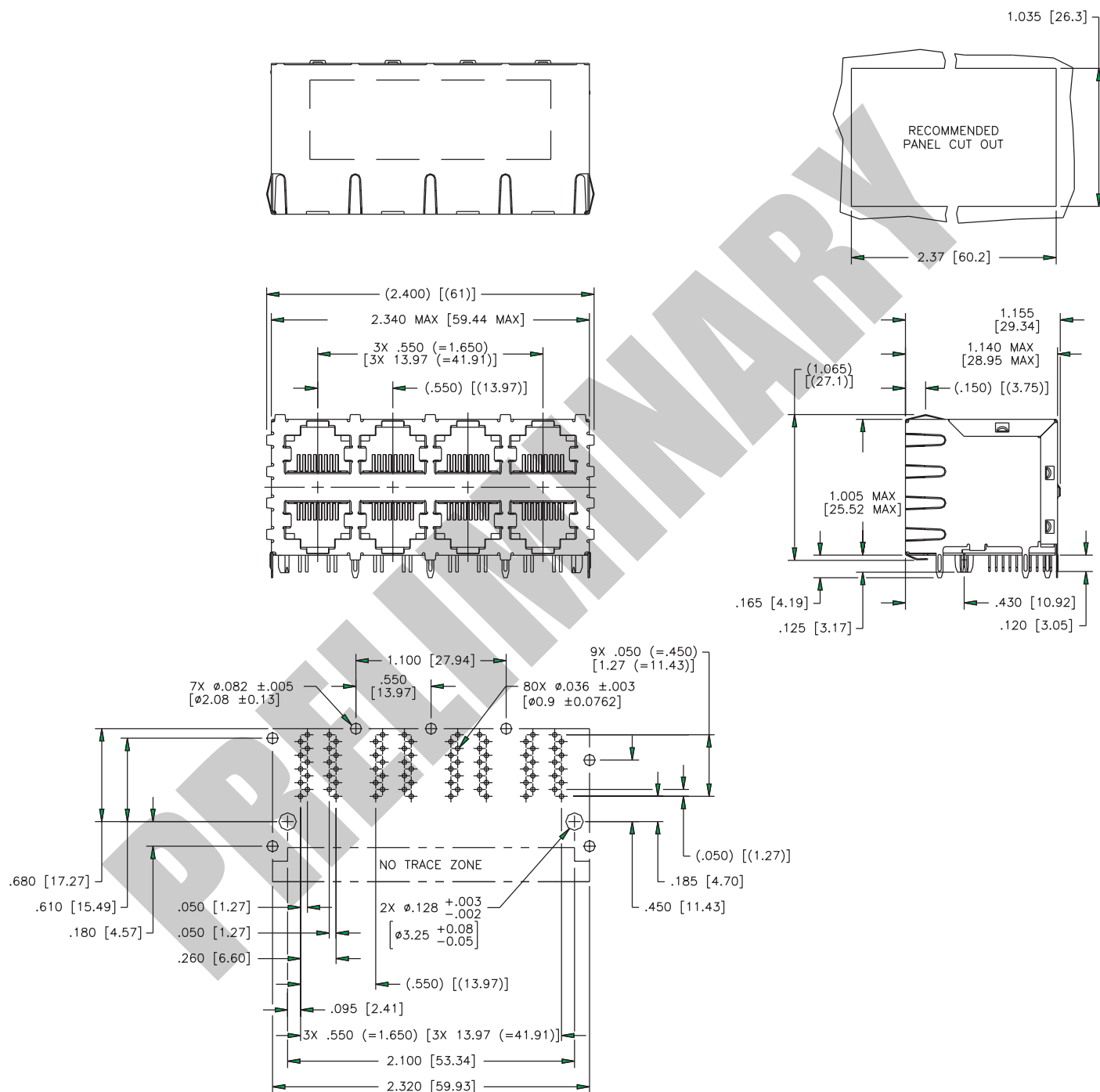
| Part<br>Number | Shield   |                                            | Contact         |                                                     |                                                              | Housing       |               |
|----------------|----------|--------------------------------------------|-----------------|-----------------------------------------------------|--------------------------------------------------------------|---------------|---------------|
|                | Material | Finish                                     | Material        | Plating Area                                        | Solder Area                                                  | Material      | Specification |
| JC Series      | Brass    | 20-40 $\mu$ inches thick nickel over brass | Phosphor Bronze | 15 $\mu$ inches gold over 30-80 $\mu$ inches nickel | 75-300 $\mu$ inches tin-lead over 50-100 $\mu$ inches nickel | Thermoplastic | UL 94 V-0     |

#### Notes:

- All connector part numbers starting with the series prefix JC comply to the above limits.
- Connector dimensions comply with FCC dimension requirements.

## Mechanicals

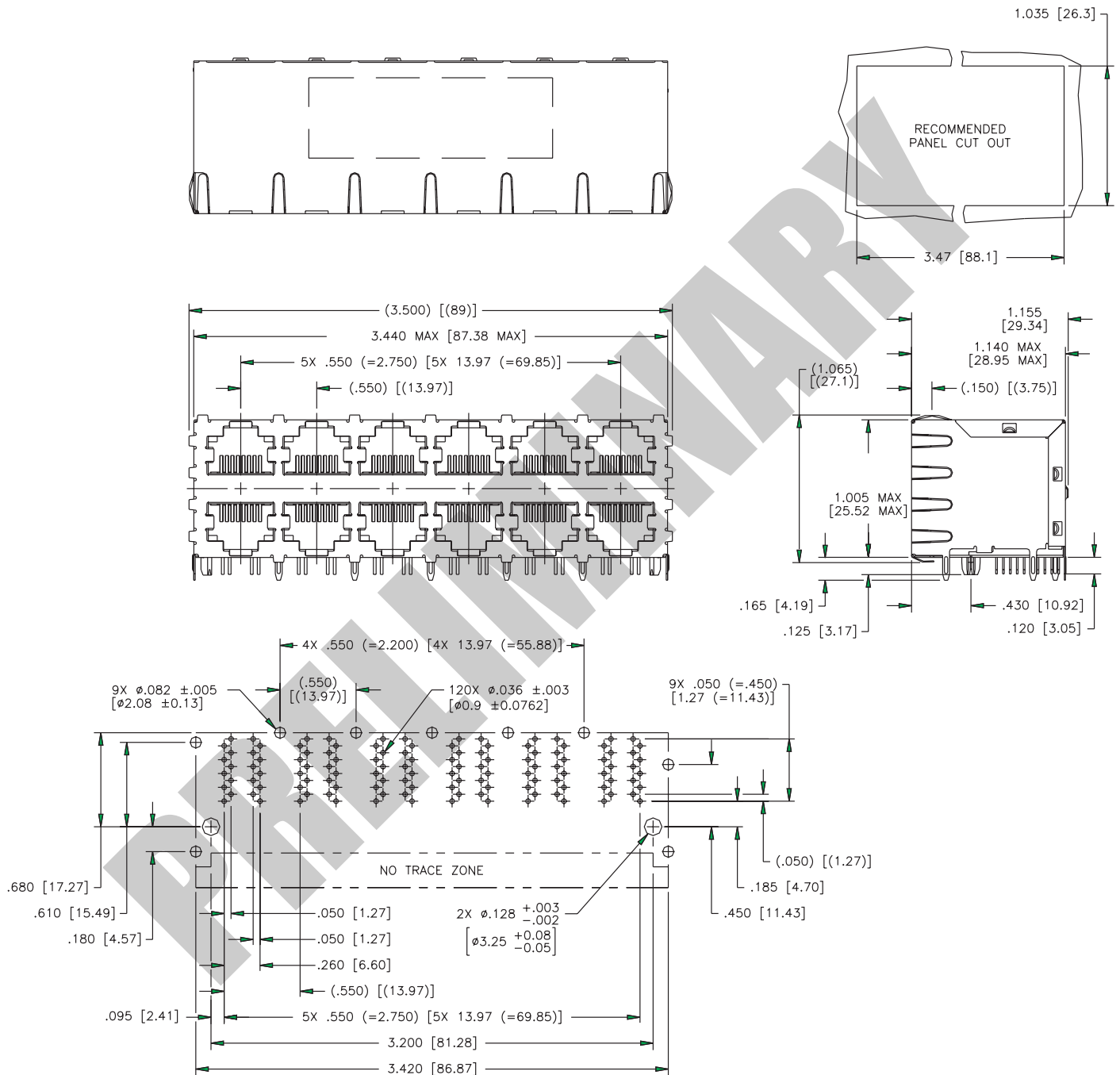
**JC0-0031**



SUGGESTED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE  
UNLESS OTHERWISE SPECIFIED DIMENSIONAL TOLERANCE IS  $\pm 0.002$

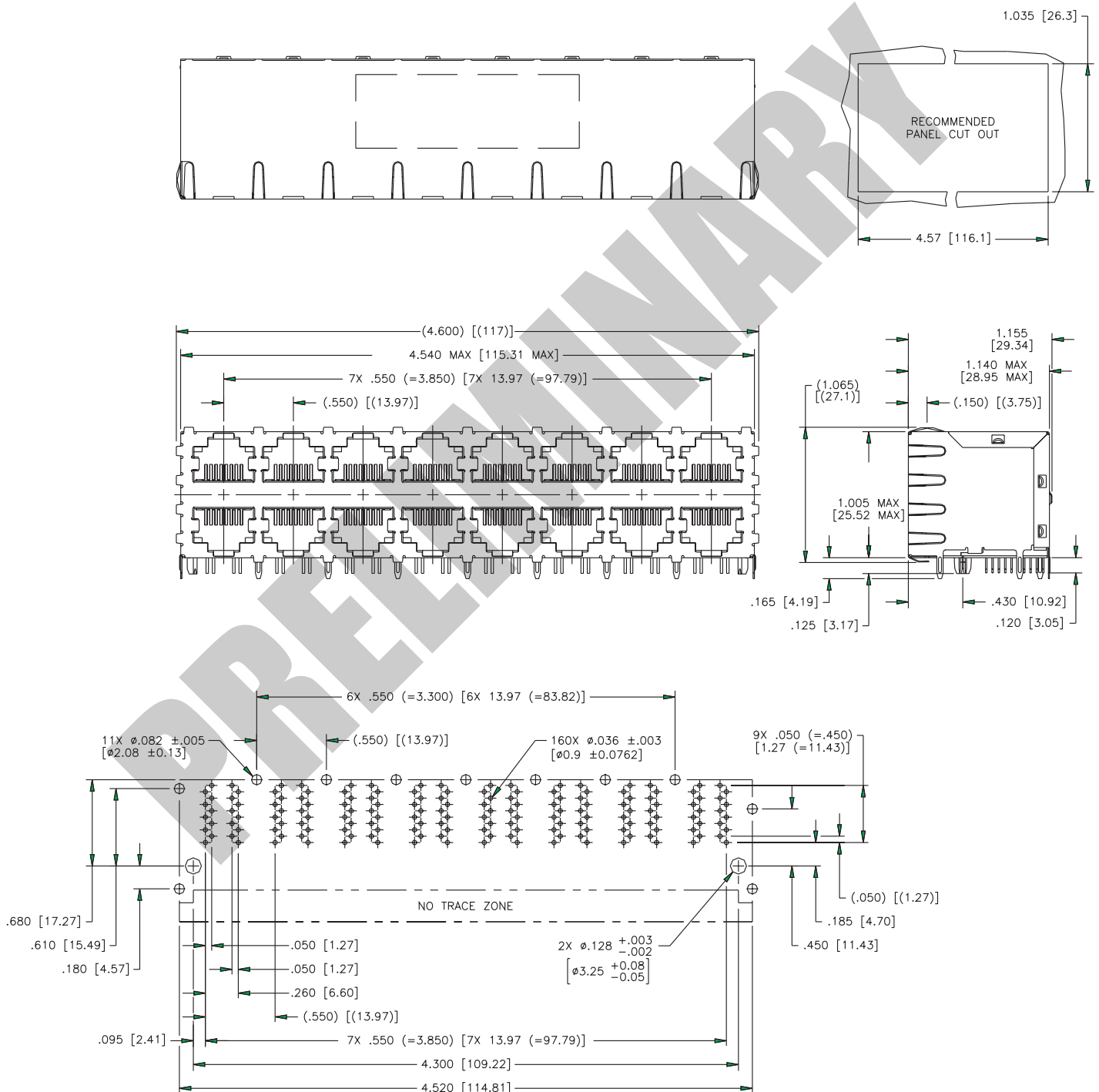
## Mechanicals

**JC0-0032**



SUGGESTED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE  
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**JC0-0033**

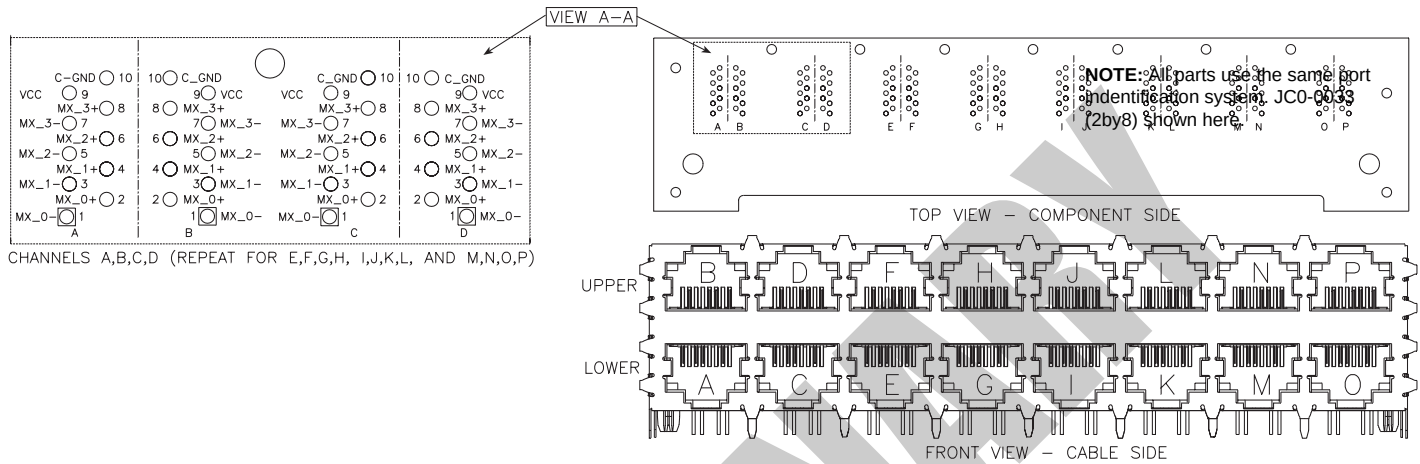


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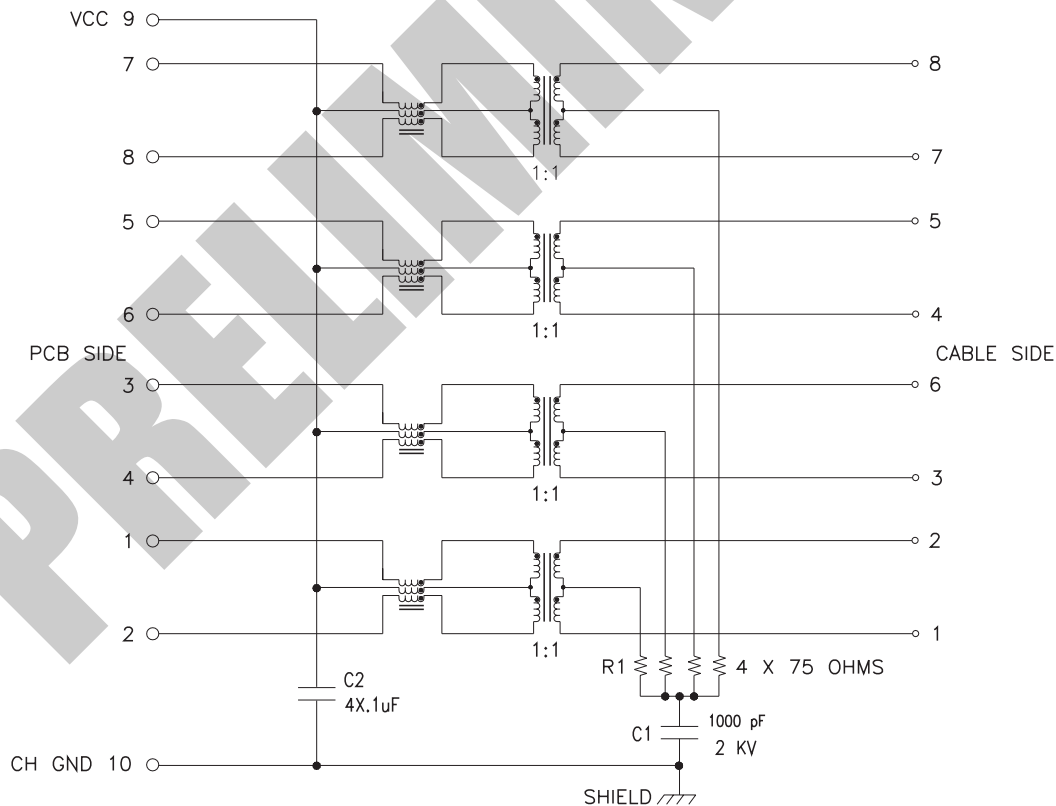
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### Mechanicals

JC0-0031/32/33



### Schematic



### For More Information :

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