

100 Base-TX RJ45 1X1 Tab-Down 8 pin Integrated Magnetics Connector, designed for industrial rated applications and is suitable for reflow solder mounting.





### Features and Benefits:

- High Temperature rated parts designed for use in Pin-in-Paste processing with 260°C max reflow temperature
- Meets IEEE802.3 specification
- 350µH minimum OCL with 8mA DC bias current
- Extended Temperature range from -40°C to 85°C

|                             |                |                     |                       | Electrical S                   | pecifications @ | 25°C - Operatin         | g Temperature · | -40°C to +85°C               |               |                |                 |           |
|-----------------------------|----------------|---------------------|-----------------------|--------------------------------|-----------------|-------------------------|-----------------|------------------------------|---------------|----------------|-----------------|-----------|
|                             |                |                     | Insertion<br>Loss     | <b>Return Loss</b><br>(dB TYP) |                 | <b>CCMR</b><br>(dB TYP) |                 | <b>Crosstalk</b><br>(db TYP) |               |                | Hipot           |           |
| Part<br>Number <sup>1</sup> | EMI<br>Fingers | <b>LED</b><br>(L/R) | 1 - 65MHz<br>(dB TYP) | 1 - 10<br>MHz                  | 30<br>MHz       | 60 - 80<br>MHz          | 1 - 50<br>MHz   | 50 - 130<br>MHz              | 1 - 10<br>MHz | 30 - 60<br>MHz | 60 - 100<br>MHz | 00 (Vrms) |
| JXR0-0001NL                 | YES            | -                   | -1.0                  | -20                            | -16             | -10                     | -30             | -20                          | -40           | -35            | -30             | 1500      |
| JXR0-0005NL                 | NO             | -                   | -1.0                  | -20                            | -16             | -10                     | -30             | -20                          | -40           | -35            | -30             | 1500      |
| JXR0-0011NL                 | YES            | G/Y                 | -1.0                  | -20                            | -16             | -10                     | -30             | -20                          | -40           | -35            | -30             | 1500      |
| JXRO-0015NL                 | NO             | G/Y                 | -1.0                  | -20                            | -16             | -10                     | -30             | -20                          | -40           | -35            | -30             | 1500      |

#### Notes:

1. When ordering JXR0-0011NL supplied in Tape and Reel, please add a "T" on the end of the part code - e.g. JXR0-0011NL becomes JXR0-0011NLT.

2. Maximum Reflow Solder Temperature: 2x SRP 260°C for 5 seconds with LEDs and 2x SRP 260°C for 10 seconds

| RJ45 Durability Testing Rating |                       |                         |                |                                 |  |  |  |
|--------------------------------|-----------------------|-------------------------|----------------|---------------------------------|--|--|--|
| Part Number                    | Mating Force<br>(MAX) | Unmating Force<br>(MAX) | Durability     | Plug to Jack<br>Retention (MIN) |  |  |  |
| rait nullipel                  | (INAA)                | (INAA)                  | νυιαμπιγ       |                                 |  |  |  |
| JXRO - Series                  | 5 lbs./2.268 kgs.     | 5 lbs./2.268 kgs.       | 750 Insertions | 20 lbs./9.072 kgs.              |  |  |  |

| RJ45 Material Specification |          |                           |          |  |                  |               |                  |        |
|-----------------------------|----------|---------------------------|----------|--|------------------|---------------|------------------|--------|
|                             |          | Shield                    |          | Contact                                | Housing          |               | MSL <sup>2</sup> |        |
| Part                        |          |                           |          |  |                  |               |                  |        |
| Number                      | Material | Finish                    | Material | Plating Area                           | Solder Area      | Material      | Specification    | Rating |
|                             |          | 10-20m inches Nickel over | Phosphor | Nickel underplating and                | Matte Tin finish |               |                  |        |
| JXRO - Series               | Brass    | 10-20m inches Brass       | Bronze   | selective gold plating 30 $\mu$ inches | oyer Nickel      | Thermoplastic | UL 94 V-0        | 1      |

Notes: 1. Connector dimensions comply with FCC dimension requirements. 2. MSL = Moisture Sensitivity Level rating from 1 to 5 (highest rating = 1, lowest rating = 5).



8100 Germany

1

Germany 49 7032 7806 0

Singapore 65 6287 8998

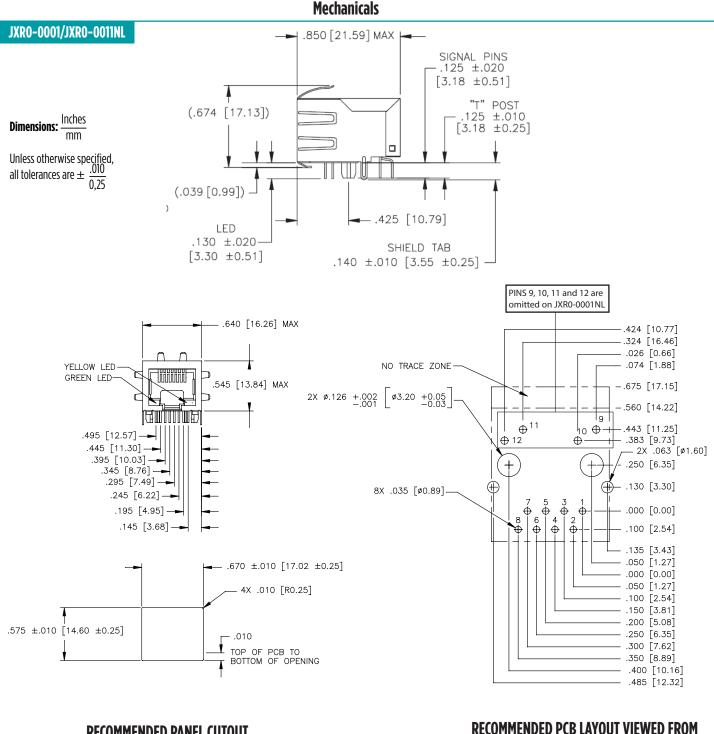
Shanghai 86 21 62787060

China 86 755 33966678

J436.E (09/17)

Pulse

100 Base-TX RJ45 1X1 Tab-Down 8 pin Integrated Magnetics Connector, designed for industrial rated applications and is suitable for reflow solder mounting.



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### **RECOMMENDED PCB LAYOUT VIEWED FROM COMPONENT SIDE**

PCB LAYOUT DIMENSIONS REFERENCED TO PIN#1 AND ±.003 UNLESS OTHERWISE SPECIFIED

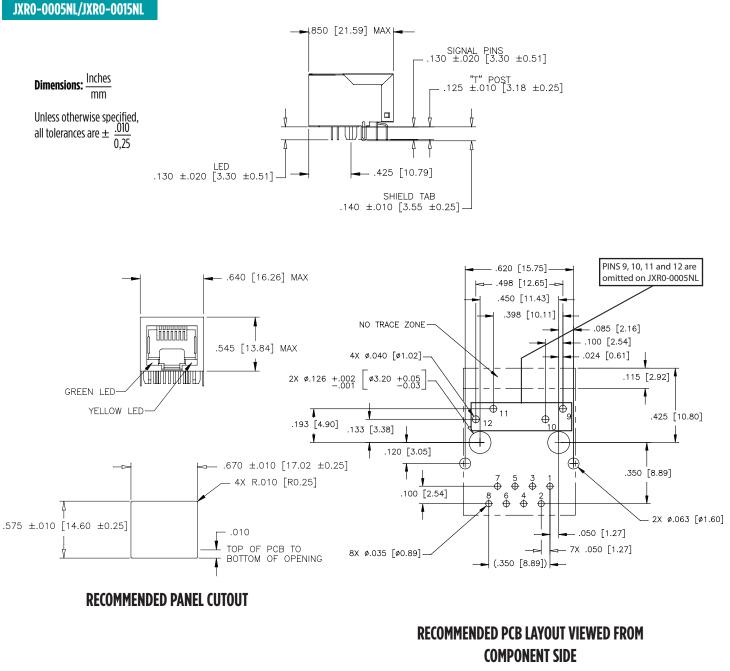
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### Mechanicals (continued)



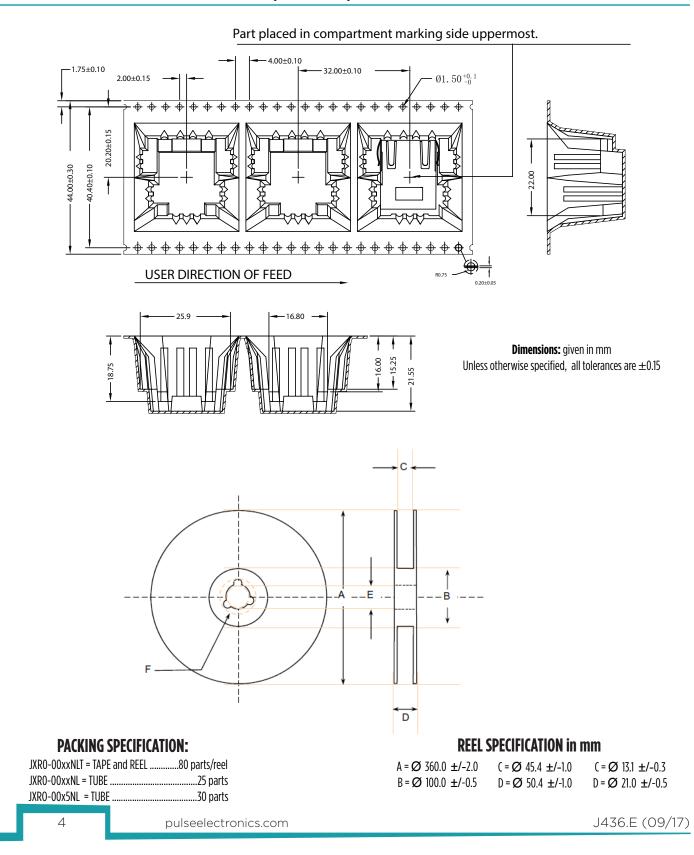
PCB LAYOUT DIMENSIONS REFERENCED TO PIN#1 AND ±.003 UNLESS OTHERWISE SPECIFIED

3

100 Base-TX RJ45 1X1 Tab-Down 8 pin Integrated Magnetics Connector, designed for industrial rated applications and is suitable for reflow solder mounting.

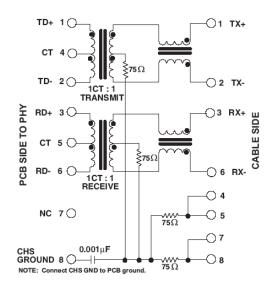
### **Tape and Reel Specification**

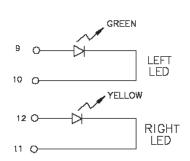
Pulse



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### **Electrical Schematic**





**LED Specification** 

| Standard LED | Wavelength | Forward* V(MAX) | (TYP) |
|--------------|------------|-----------------|-------|
| Yellow       | 585 nm     | 2.5 V           | 2.1 V |
| Green        | 565 nm     | 2.5 V           | 2.2 V |

\* Assumes bias current = 20mA

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