

PULSEJACK™

Low Profile 1x2 Gigabit Tab-Up

Description:

Gigabit (10/100/1000Base-T) dual port RJ45 (1x2) Tab-UP integrated magnetics connector, designed to support applications, such as Servers, PCI-Express, and Switches.



Features and Benefits:

- RoHS peak wave solder temperature rating 260°C
- Low height and small footprint to minimize board space

Electrical Performance Summary:

- Meets IEEE 802.3 specification
- 350µH minimum OCL with 8mA bias current
- High performance for maximum EMI suppression

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

| Part Number | LEDs ¹ | Speed | EMI Tabs | Insertion Loss TX/RX (dB) | Return Loss (dB TYP) 100Ω (±15Ω) | | | | | Crosstalk (dB TYP) | | | Common Mode Rejection (dB TYP) | Hipot (MIN) |
|-------------|-------------------|---------------|----------|---------------------------|-------------------------------------|----------|--------|-----------|------------|--------------------|-----------|------------|--------------------------------|-------------|
| | | | | | 1-100 MHz | 1-10 MHz | 30 MHz | 60-80 MHz | 80-100 MHz | 1-10 MHz | 32-65 MHz | 65-100 MHz | | |
| JGL-0001NL | G/G | 10/100/1000BT | Yes | -1.2 | -18 | -18 | -12 | -10 | -40 | -35 | -30 | -30 | @60Hz 1 MIN | 1500Vrms |
| JGL-0004NL | G/G-A | 10/100/1000BT | Yes | -1.0 | -18 | -18 | -12 | -10 | -40 | -35 | -30 | -30 | | 1500Vrms |

Notes: 1. LEDs Left/Right: G = green, G-A = green-amber

RJ45 Durability Testing Rating

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

RJ45 Material Specification

| Part Number | Shield | | Contact | | | Housing | | MSL ² Rating |
|-------------|----------|---------------------------------------|-----------------|--|------------------------------|---------------|---------------|-------------------------|
| | Material | Finish | Material | Plating Area | Solder Area | Material | Specification | |
| JGL Series | Brass | 30-50µ inches thick nickel over brass | Phosphor Bronze | 50µ inches gold over 50µ inches nickel | Tin matte finish over nickel | Thermoplastic | UL 94 V-0 | 1 |

Notes: 1. Connector dimensions comply with FCC dimension requirements.

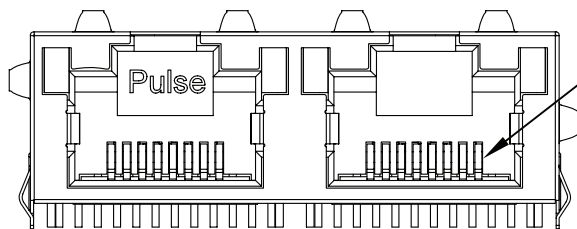
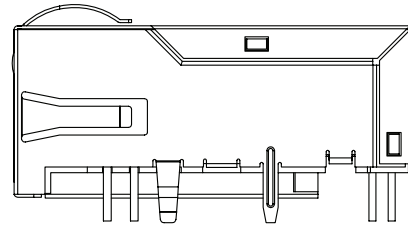
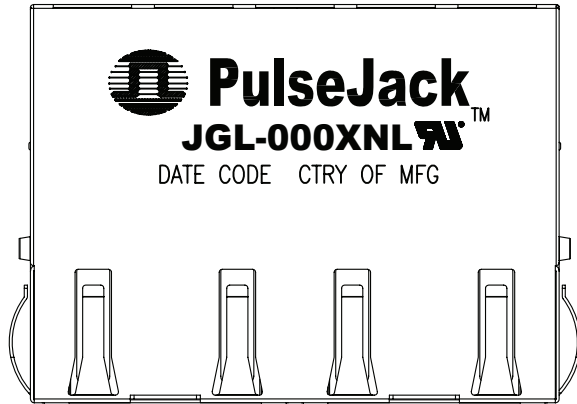
2. MSL - Moisture Sensitivity Level

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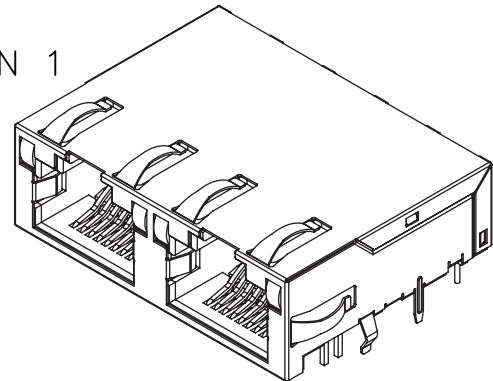
Low Profile 1x2 Gigabit Tab-Up

Mechanicals

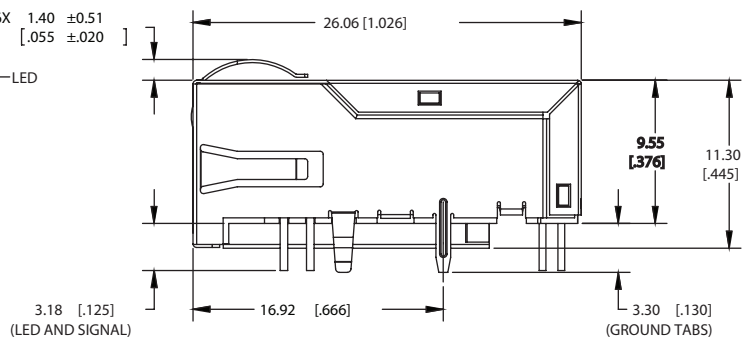
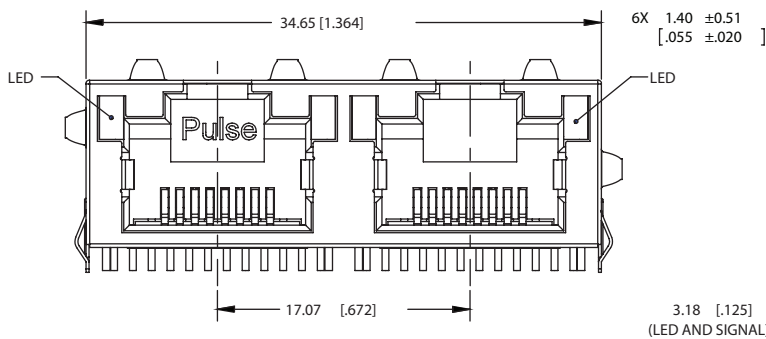
JGL-0001NL/-0004NL



PIN 1



ISOMETRIC VIEW
(FOR REFERENCE ONLY)



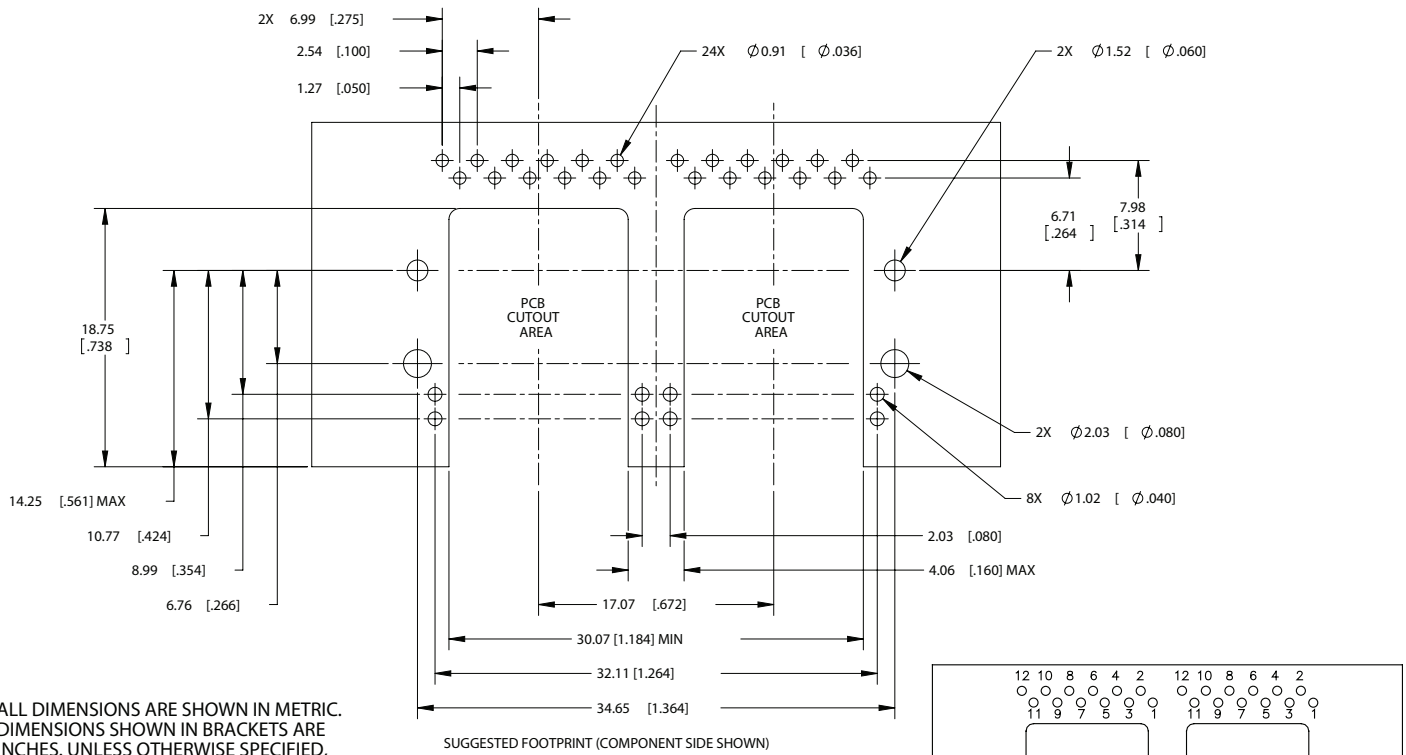
ALL DIMENSIONS ARE SHOWN IN METRIC.
DIMENSIONS SHOWN IN BRACKETS ARE
INCHES. UNLESS OTHERWISE SPECIFIED,
THE FOLLOWING TOLERANCE APPLY:

X.XX [XXX] = ±0.25 [±.010]

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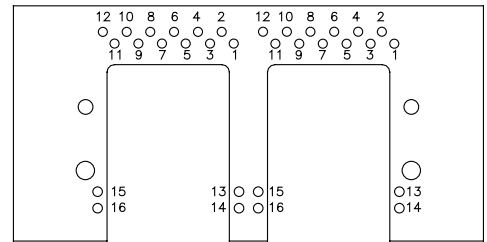
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Mechanicals (cont.)

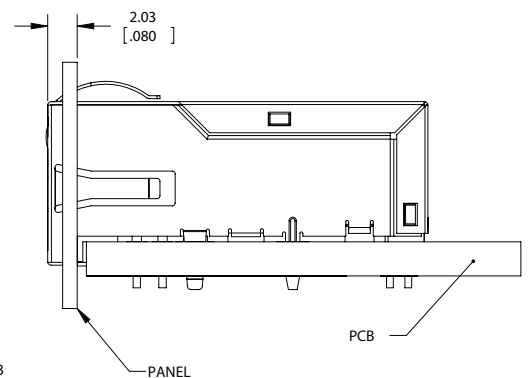
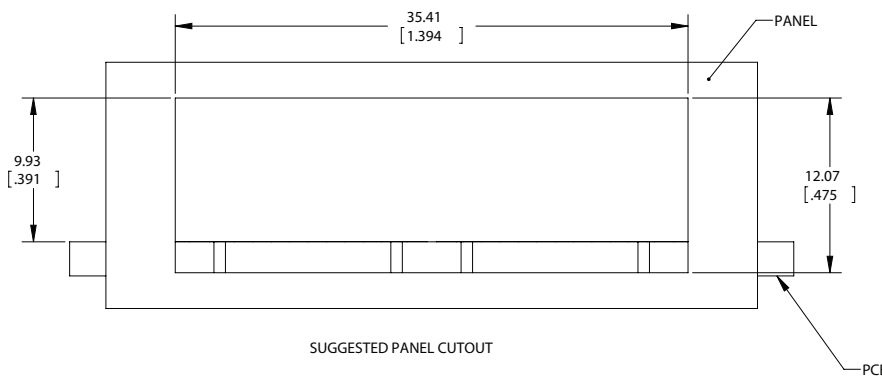


ALL DIMENSIONS ARE SHOWN IN METRIC.
 DIMENSIONS SHOWN IN BRACKETS ARE INCHES. UNLESS OTHERWISE SPECIFIED, THE FOLLOWING TOLERANCE APPLY:

X.XX [.XXX] = \pm 0.08 [\pm .003]



FRONT OF CONNECTOR
 PIN ASSIGNMENT (TOP VIEW)



ALL DIMENSIONS ARE SHOWN IN METRIC.
 DIMENSIONS SHOWN IN BRACKETS ARE INCHES. UNLESS OTHERWISE SPECIFIED, THE FOLLOWING TOLERANCE APPLY:

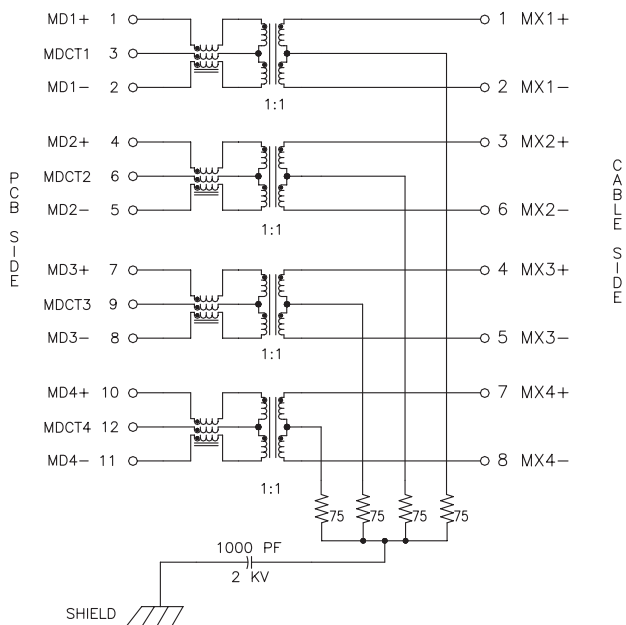
X.XX [.XXX] = \pm 0.10 [\pm .004]

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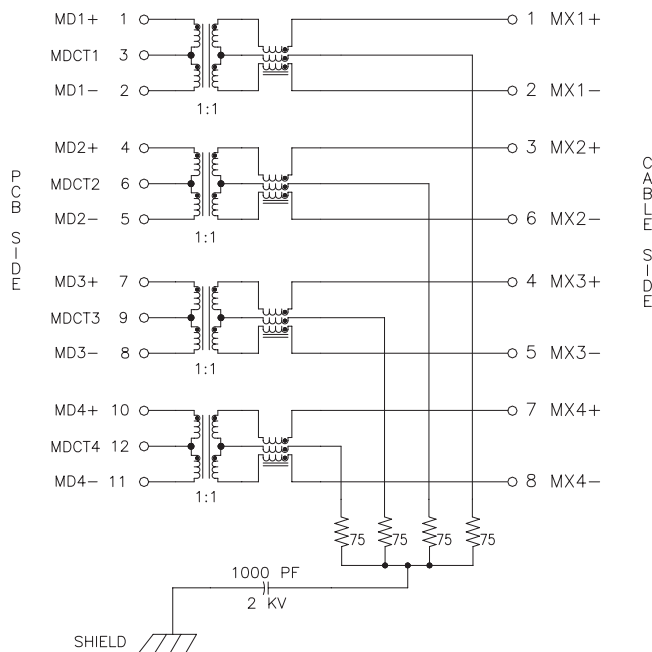
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Schematics

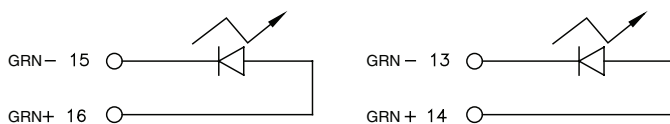
JGL-0001NL



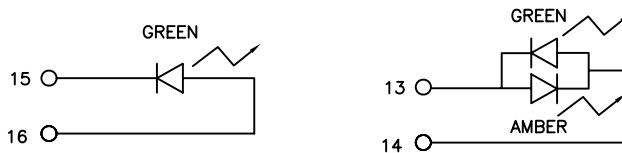
JGL-0004NL



JGL-0001NL LEDs



JGL-0004NL LEDs



| EMMITTED COLOR | GREEN |
|------------------------------|------------|
| WAVELENGTH (nm) | 565 |
| POWER DISSIPATION (Pd) | 105 mW MAX |
| DC FORWARD CURRENT | 25 mA MAX |
| FORWARD VOLTAGE (VF) @ 20 mA | 2.2V TYP |

NOTE: PER VENDOR'S SPECIFICATION

| EMMITTED COLOR | GREEN | AMBER | GREEN |
|------------------------------|------------|------------|------------|
| WAVELENGTH (nm) | 565 | 607 | 565 |
| POWER DISSIPATION (Pd) | 105 mW MAX | 105 mW MAX | 105 mW MAX |
| DC FORWARD CURRENT | 25 mA MAX | 30 mA MAX | 25 mA MAX |
| FORWARD VOLTAGE (VF) @ 20 mA | 2.2V TYP | 2.15V TYP | 2.2V TYP |

NOTE: PER VENDOR'S SPECIFICATION

BICOLOR

For More Information:

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