

**Description:**

10Gigabit (10GBase-T) single port RJ45 right angle entry, mid-mount PCB platform with integrated magnetics connector, designed to support applications, such as embedded computing, NIC Cards, Low Profile Servers and switches



- Ⓢ RoHS peak wave solder temperature rating 260°C
- Ⓢ Side entry, mid-mount to minimize height above PCB to less than 9.6mm
- Ⓢ Meets IEEE 802.3 specification
- Ⓢ Matched to leading 10G Phys in the Market
- Ⓢ High performance for maximum EMI suppression
- Ⓢ Lead (Pb) and Halogen Free

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

| Part Number | LEDs <sup>1</sup> | OCL PHY side (MIN) (100KHz, 100V) | Number of Channels | Insertion Loss TX/RX (dB) | Return Loss (dB MIN) 100Ω (±15Ω) |           |         |         |             | Cross Talk (dB TYP) |             | Common Mode Rejection (dB TYP) |             |             | Hipot (MIN) @60Hz 1 MIN |
|-------------|-------------------|-----------------------------------|--------------------|---------------------------|----------------------------------|-----------|---------|---------|-------------|---------------------|-------------|--------------------------------|-------------|-------------|-------------------------|
|             |                   |                                   |                    |                           | 1-100 MHz                        | 1-100 MHz | 200 MHz | 300 MHz | 400-500 MHz | 1-100 MHz           | 200-500 MHz | 1-100 MHz                      | 100-300 MHz | 300-500 MHz |                         |
| JT3-1105HL  | G/G-Y             | 180uH                             | N/A                | -1.2                      | -2.2                             | -16       | -13     | -9      | -28         | -19                 | -38         | -30                            | -25         | 1500Vrms    |                         |
| JT3-1115HL  | G-Y/G             | 180uH                             | N/A                | -1.2                      | -2.2                             | -16       | -13     | -9      | -28         | -19                 | -38         | -30                            | -25         | 1500Vrms    |                         |
| JT3-1125HL  | G-Y/G             | 180uH                             | N/A                | -1.0                      | -2.2                             | -18       | -13     | -9      | -28         | -19                 | -38         | -30                            | -25         | 1500Vrms    |                         |
| JT3-1128HL  | None              | 180uH                             | N/A                | -1.0                      | -2.2                             | -18       | -13     | -9      | -28         | -19                 | -38         | -30                            | -25         | 1500Vrms    |                         |

Notes: 1. LEDs Left/Right G = green, Y = yellow

**RJ45 Durability Testing Rating**

| Part Number | Mating Force (MAX) | Unmating Force (MAX) | Durability     | Plug to Jack Retention (MIN) |
|-------------|--------------------|----------------------|----------------|------------------------------|
| JT3 Series  | 5 lbs./2.268 kgs.  | 5 lbs./2.268 kgs.    | 750 Insertions | 20 lbs./9.072 kgs.           |

**RJ45 Material Specification**

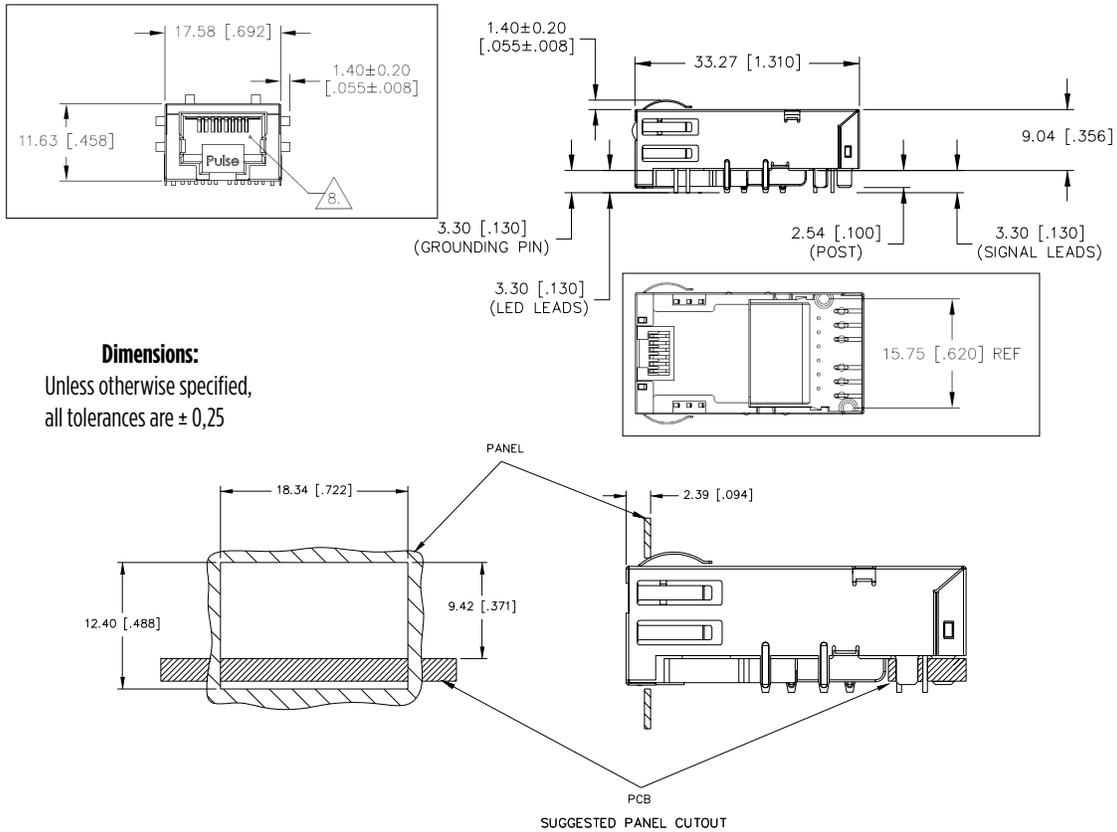
| Part Number | Shield   |                                       | Contact         |  |                              | Housing       |               | MSL <sup>2</sup> Rating |
|-------------|----------|---------------------------------------|-----------------|--|------------------------------|---------------|---------------|-------------------------|
|             | Material | Finish                                | Material        | Plating Area                           | Solder Area                  | Material      | Specification |                         |
| JT3 Series  | Brass    | 30-50μ inches thick nickel over brass | Phosphor Bronze | 30μ 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

### MECHANICALS

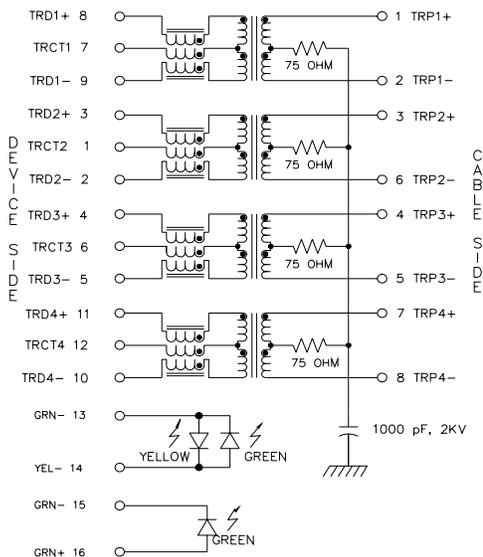
#### JXD2-0Z11NL/-0Z14NL



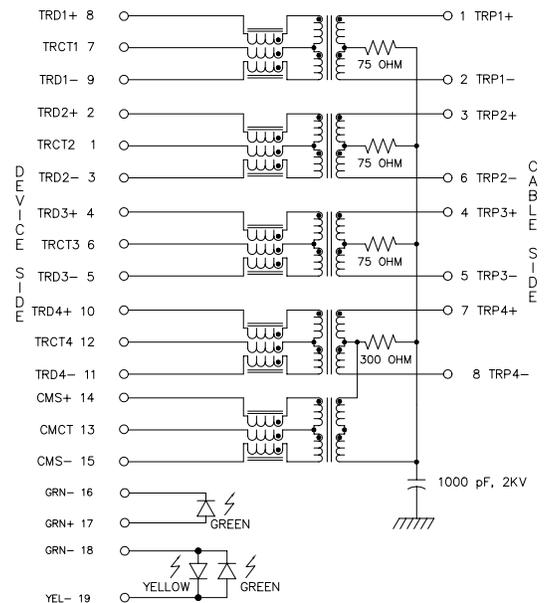
**Dimensions:**  
Unless otherwise specified,  
all tolerances are ± 0,25

### SCHEMATICS

#### JT3-1105NL

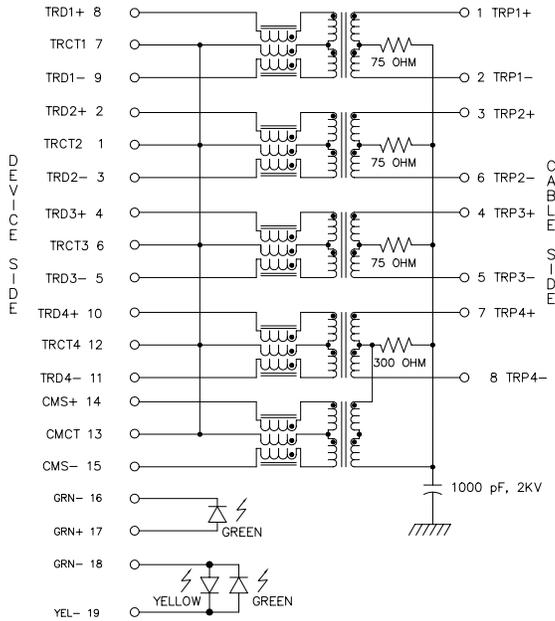


#### JT3-1115NL

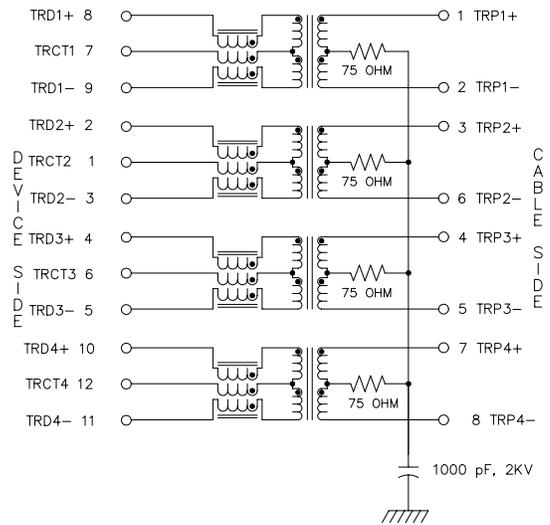


**SCHEMATICS**

**JT3-1125HL**

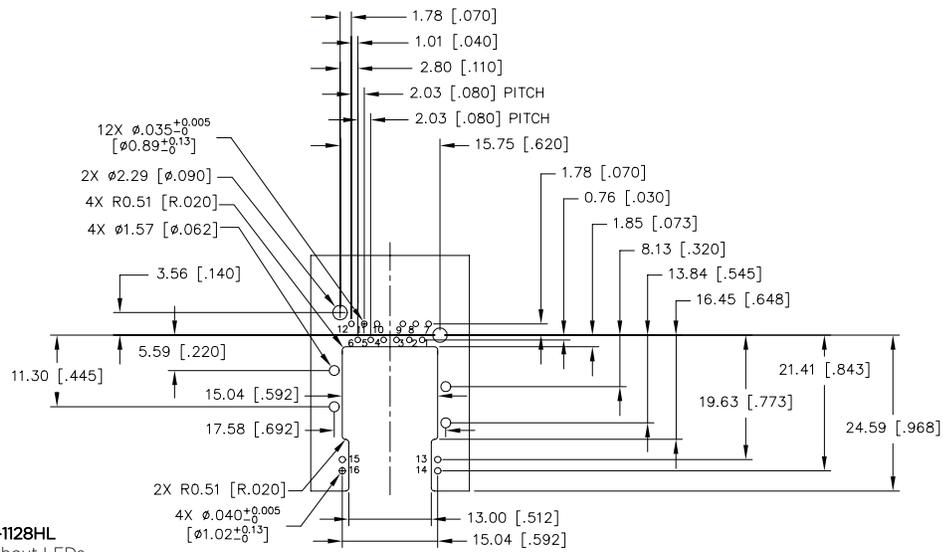


**JT3-1128HL**



**PCB LAYOUT**

**JT3-1105HL, JT3-1128HL - 4 Channel**

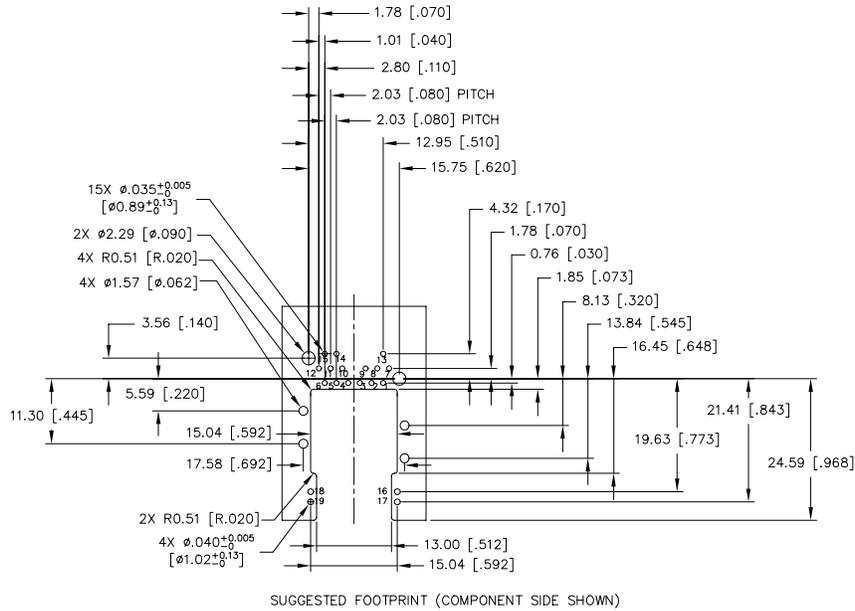


**NOTE: JT3-1128HL**  
-Option without LEDs  
OMIT PINS 13 - 15

SUGGESTED FOOTPRINT (COMPONENT SIDE SHOWN)

## PCB LAYOUT

### JT3-1115HL, JT3-1125HL - 5 Channel



## LED DETAILS

### JT3-11xxHL

| EMITTED COLOR                | GREEN      | YELLOW     |
|------------------------------|------------|------------|
| WAVELENGTH (nm)              | 565        | 590        |
| POWER DISSIPATION (Pd)       | 105 mW MAX | 105 mW MAX |
| DC FORWARD CURRENT           | 20 mA MAX  | 20 mA MAX  |
| FORWARD VOLTAGE (VF) @ 20 mA | 2.2V TYP   | 2.1V TYP   |

Note: Per Vendor Specification

### For More Information:

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