

PulseJack™

Low Profile 1x1 Tab-Up



Description:

100/1000Base-T RJ45 single port (1x1) Tab-UP integrated magnetics connector, designed to support applications such as Network Interface Cards (NIC), LAN-on-Motherboard (LOM), and PC applications.



Features and Benefits:

- Ⓜ Compliant with IEEE 802.3 standard
- Ⓜ 350µH minimum OCL with 8mA bias current
- Ⓜ High performance for maximum EMI suppression
- Ⓜ Low height and small footprint to minimize board space
- Ⓜ RoHS peak wave solder temperature rating 260°C

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

| Part Number | Speed | Side EMI Tabs | Insertion Loss TX/RX (dB) | Return Loss (dB TYP) 100Ω (±15Ω) | | | | | Crosstalk (dB TYP) | | | Common Mode Rejection (dB TYP) | Hipot (MIN) @ 60Hz 1 MIN |
|-------------|------------|---------------|---------------------------|-------------------------------------|----------|--------|-----------|------------|--------------------|-----------|------------|--------------------------------|--------------------------------|
| | | | | 1-100 MHz | 1-10 MHz | 30 MHz | 60-80 MHz | 80-100 MHz | 1-10 MHz | 32-65 MHz | 65-100 MHz | | |
| JOG-0001NL | 1000Base-T | Horizontal | -1.2 | -18 | -18 | -12 | -10 | -40 | -35 | -30 | -30 | 1500Vrms | |
| JOG-0003NL | 1000Base-T | No Tabs | -1.0 | -18 | -18 | -12 | -10 | -40 | -35 | -30 | -30 | 1500Vrms | |
| JOG-0007NL | 100Base-TX | Horizontal | -1.0 | -18 | -18 | -12 | -10 | -40 | -35 | -30 | -30 | 1500Vrms | |
| JOG-0009NL | 1000Base-T | Vertical | -1.0 | -18 | -18 | -12 | -10 | -40 | -35 | -30 | -30 | 1500Vrms | |

Notes:

1. LEDs Left/Right: **G** = green; **Y** = yellow; **Y-G** = Bicolor.
2. JOG-0003NL is supplied without EMI tabs; refer to mechanical drawing (page 5) for explanation of EMI tabs.

RJ45 Durability Test Rating

| Part Number | Mating Force (MAX) | Unmating Force (MAX) | Durability | Plug to Jack Retention (MIN) |
|-------------|--------------------|----------------------|----------------|------------------------------|
| JOG 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 | |
| JOG Series | Brass | 20-40µ inches thick nickel over brass | Phosphor Bronze | 15µ inches gold over 30-80µ 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 class limits = 1 to 5 (Highest: 1; Lowest: 5)

USA 858 674 8100

Germany 49 7032 7806 0

Singapore 65 6287 8998

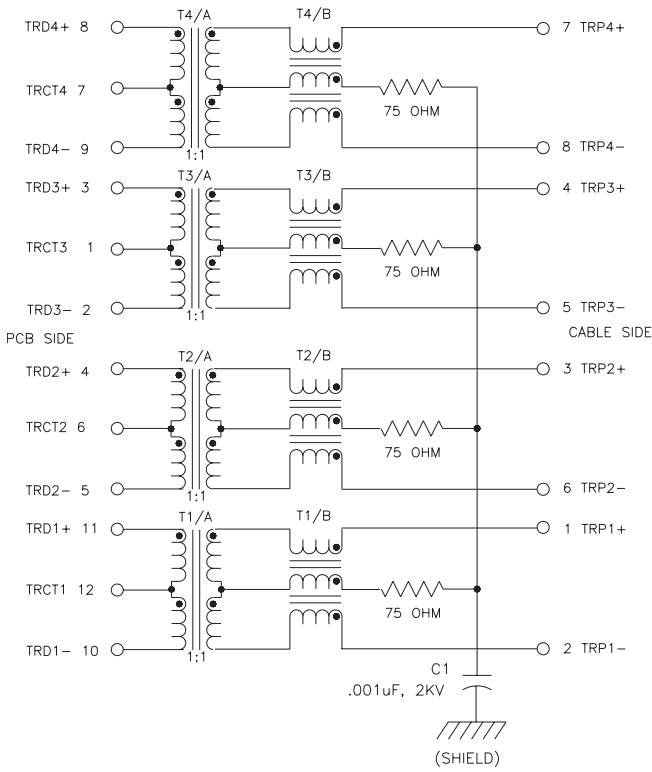
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China 86 755 33966678

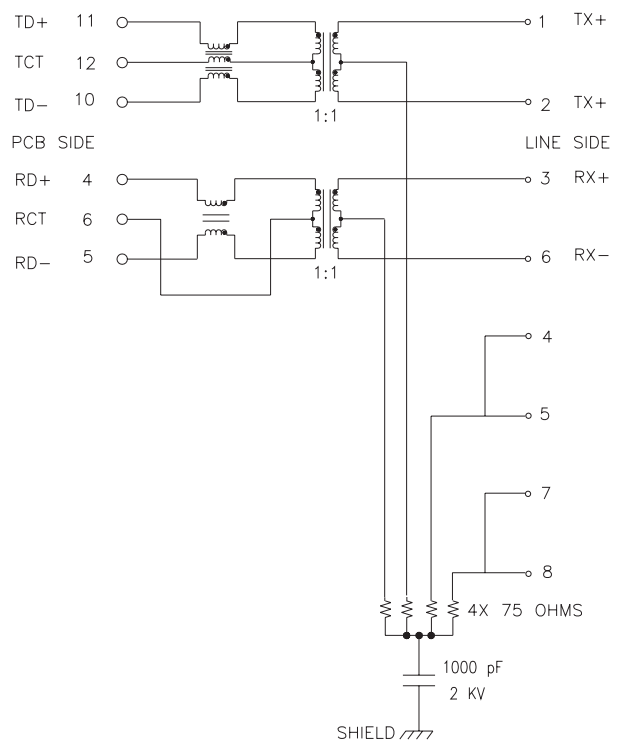
Taiwan 886 3 4356768

Schematics

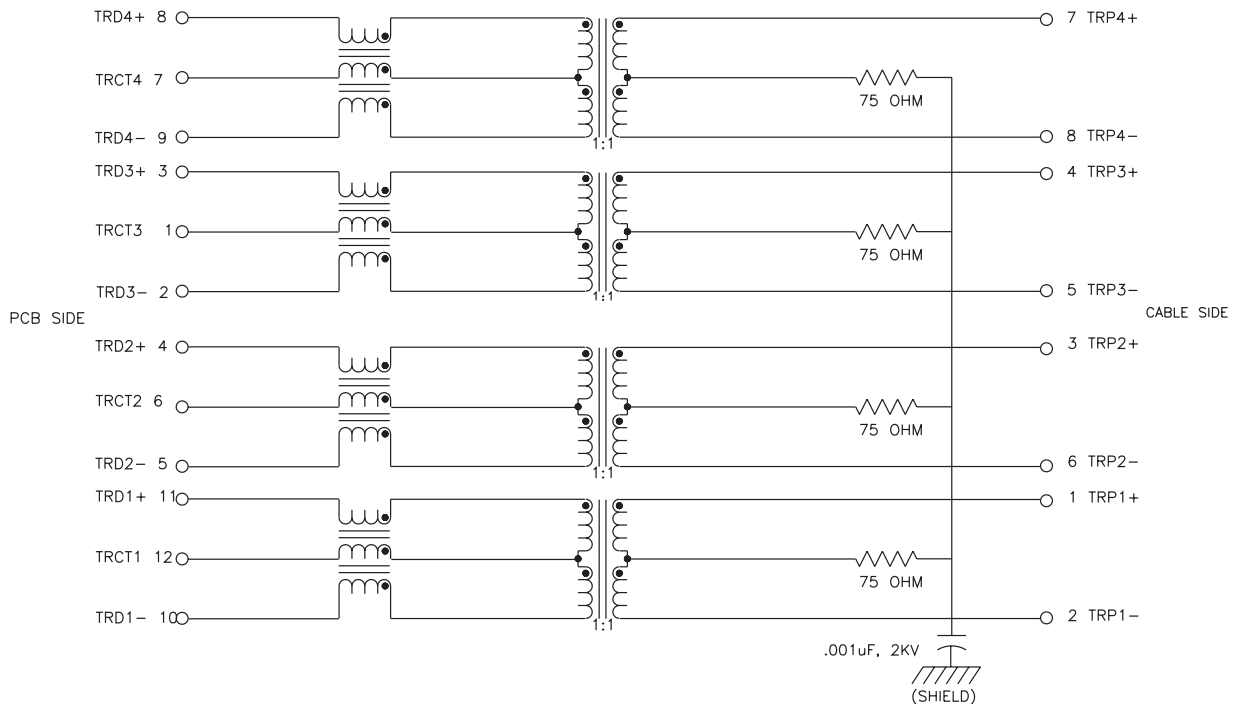
JOG-0001NL / JOG-0003NL



JOG-0007NL



JOG-0009NL

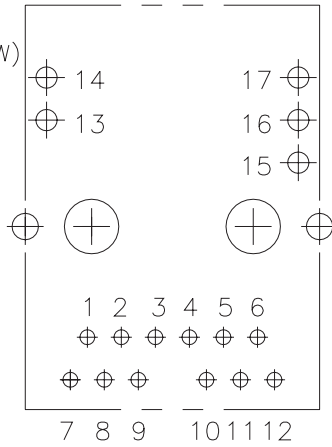


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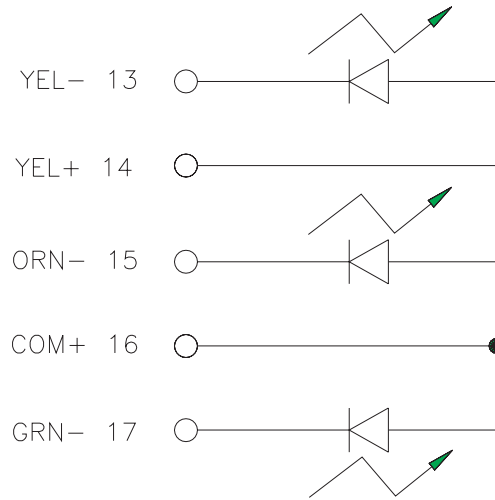


Pin Assignments

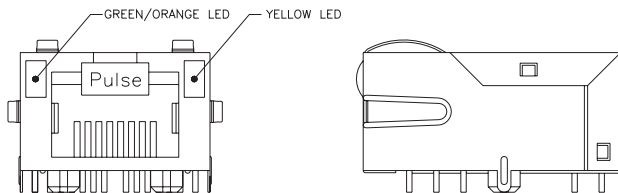
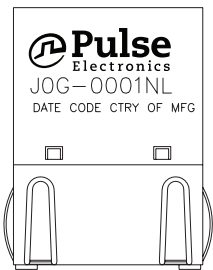
PIN ASSIGNMENTS
(COMPONENT SIDE VIEW)



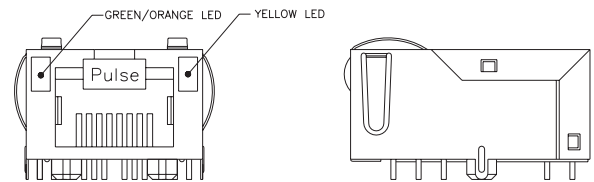
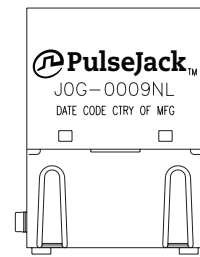
LED Configuration



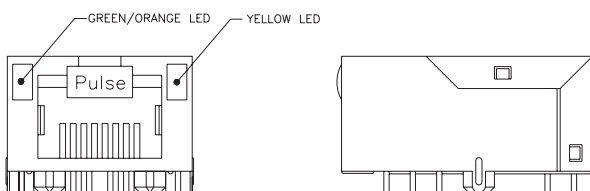
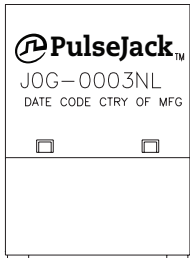
JOG-0001NL



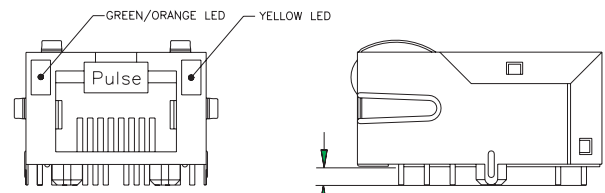
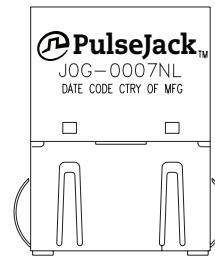
JOG-0009NL



JOG-0003NL



JOG-0007NL

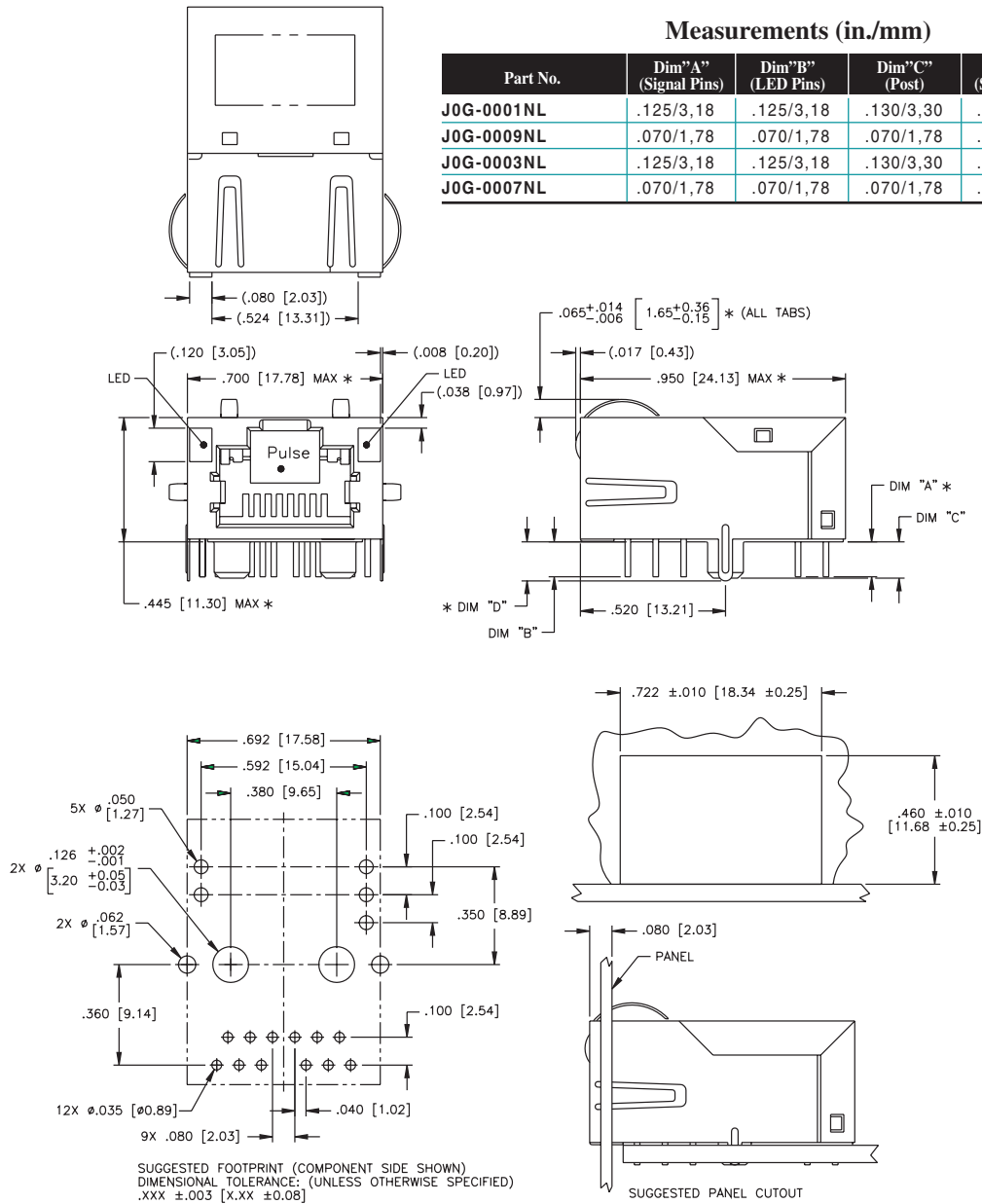


Mechanicals

JOG-0001NL / 0003NL / 0007NL / 0009NL

Measurements (in./mm)

| Part No. | Dim "A" (Signal Pins) | Dim "B" (LED Pins) | Dim "C" (Post) | Dim "D" (Shield Tab) | EMI Tab Config. |
|------------|--------------------------|-----------------------|-------------------|-------------------------|--------------------|
| JOG-0001NL | .125/3,18 | .125/3,18 | .130/3,30 | .140/3,56 | Fig.1 |
| JOG-0009NL | .070/1,78 | .070/1,78 | .070/1,78 | .070/1,78 | Fig.2 |
| JOG-0003NL | .125/3,18 | .125/3,18 | .130/3,30 | .140/3,56 | Fig.3 |
| JOG-0007NL | .070/1,78 | .070/1,78 | .070/1,78 | .070/1,78 | Fig.1 |



PulseJack™ 2xN PoE Gigstack

EMI Tabs Configuration

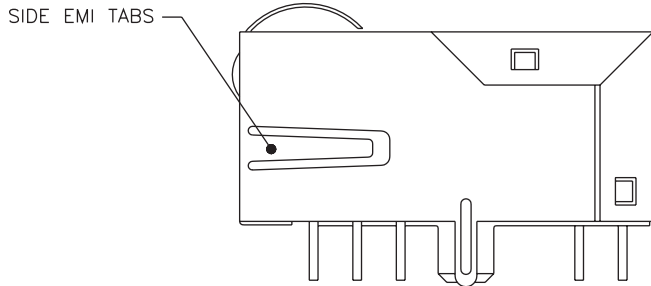


FIGURE 1 (HORIZONTAL SIDE EMI TABS)

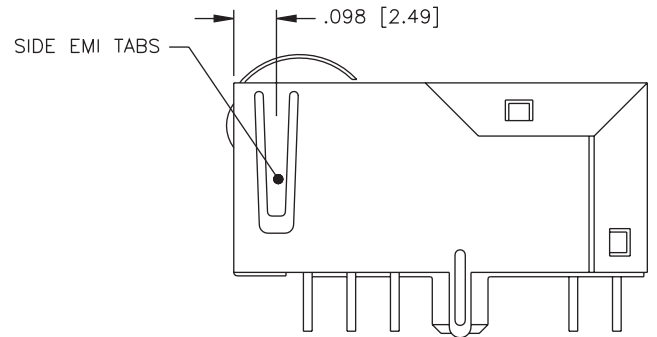


FIGURE 2 (VERTICAL SIDE EMI TABS)

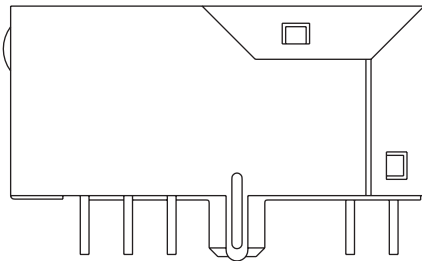


FIGURE 3 (NO EMI TABS)

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