

#### **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) $100\Omega$ ( $\pm15\Omega$ )				<b>Crosstalk</b> (dB TYP)			Common Mode Rejection (dB TYP)	<b>Hipot</b> (MIN)
			1-100 MHz	1-10 MHz	30 MHz	60-80 MHz	80-100 MHz	1-10 MHz	32-65 MHz	65-100 MHz	1-125 MHz	@ 60Hz 1 MIN
J0G-0001NL	1000Base-T	Horizontal	-1.2	-18	-18	-12	-10	-40	-35	-30	-30	1500Vrms
J0G-0003NL	1000Base-T	No Tabs	-1.0	-18	-18	-12	-10	-40	-35	-30	-30	1500Vrms
J0G-0007NL	100Base-TX	Horizontal	-1.0	-18	-18	-12	-10	-40	-35	-30	-30	1500Vrms
J0G-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		Shield		Contact	Housing		MSL <sup>2</sup> Rating		
Number	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	

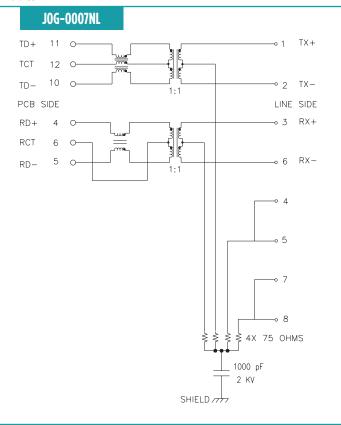
### Notes:

**1.** Connector dimensions comply with FCC dimension requirements.

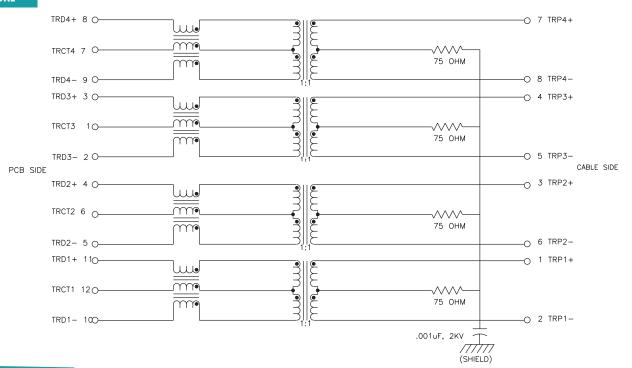
2. MSL - Moisture Sensitivity Level class limits = 1 to 5 (Highest: 1; Lowest: 5)

# **Schematics**

#### JOG-0001NL / JOG-0003NL T4/A T4/B -○ 7 TRP4+ ..... $\gamma$ **////** TRCT4 7 M -○ 8 TRP4-TRD4- 9 O T3/B T3/A TRD3+ 3 O -○ 4 TRP3+ فسا M. \\\\\ TRCT3 1 O-75 OHM $\overline{\gamma}$ -○ 5 TRP3-TRD3- 2 O CABLE SIDE PCB SIDE T2/A T2/B -○ 3 TRP2+ TRD2+ 4 O w M-TRCT2 6 75 OHM -○ 6 TRP2-TRD2- 5 O T1/B T1/A -O 1 TRP1+ TRD1+ 11 () اسلا $\gamma \gamma \gamma \gamma_{0}$ TRCT1 12 O 75 OHM $\overline{\gamma}$ —○ 2 TRP1-TRD1- 10 O-C1 \_\_\_\_ .001uF, 2KV T (SHIELD)

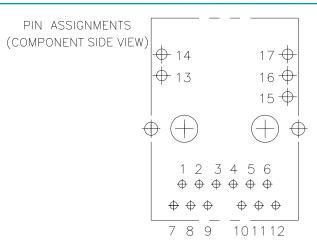


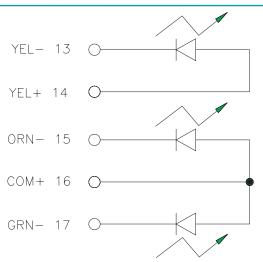
### JOG-0009NL



# **Pin Assignments**

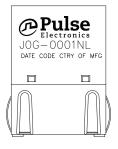
# **LED Configuration**

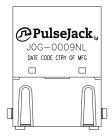


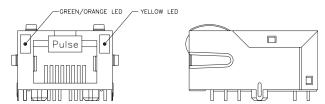


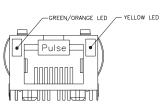
### J0G-0001NL

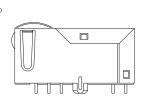
JOG-0009NL







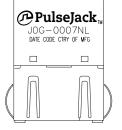


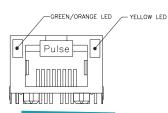


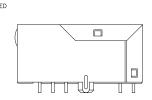
### JOG-0003NL

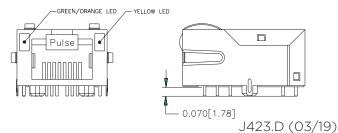
JOG-0007NL





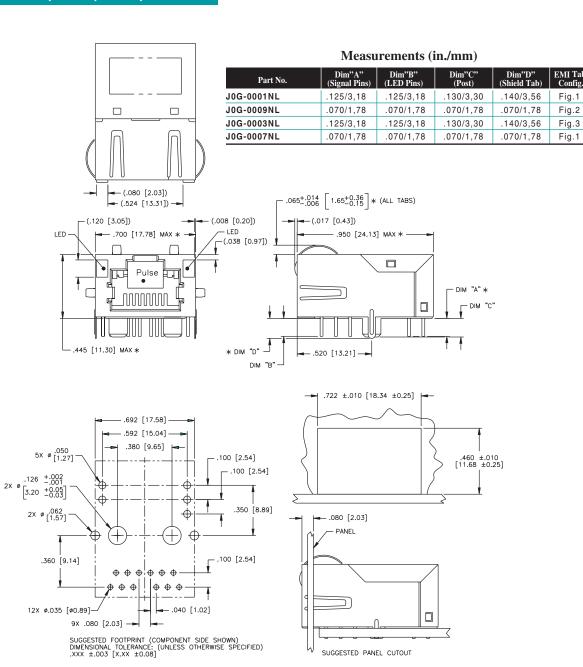






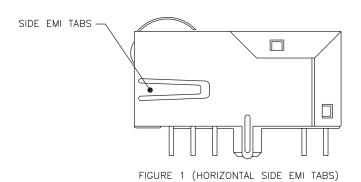
# **Mechanicals**

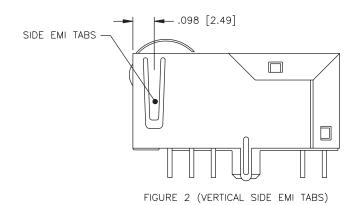
# JOG-0001NL / 0003NL / 0007NL / 0009NL

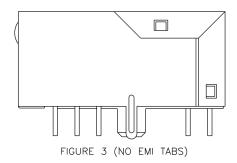


# PulseJack™ 2xN PoE Gigstack

# **EMI Tabs Configuration**







### For More Information:

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