

PULSEJACK™

Low Profile 1x1 Tab-Up

Description:

10/100/1000 Base-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:

- RoHS “NL” peak solder 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	Magnetics/ Speed	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)
				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	8 core / T/C	10/100/1000BT	Horizontal	-1.2	-18	-18	-12	-10	-40	-35	-30	-30	1500Vrms	
J0G-0002NL	8 core / T/C	10/100/1000BT	Vertical	-1.0	-18	-18	-12	-10	-40	-35	-30	-30	1500Vrms	
J0G-0003NL	8 core / T/C	10/100/1000BT	No Tabs	-1.0	-18	-18	-12	-10	-40	-35	-30	-30	1500Vrms	
J0G-0007NL	4 core / C/T	10/100BT	Horizontal	-1.0	-18	-18	-12	-10	-40	-35	-30	-30	1500Vrms	
J0G-0009NL	8 core / C/T	10/100/1000BT	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. J0G-0003NL is supplied without EMI tabs; refer to mechanical drawing (page 5) for explanation of EMI tabs.

RJ45 Durability Testing Rating

Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
J0G Series	5 lbs./2.268 kgs.	5 lbs./2.268 kgs.	750 Insertions	20 lbs./9.072 kgs.

RJ45 Material Specification

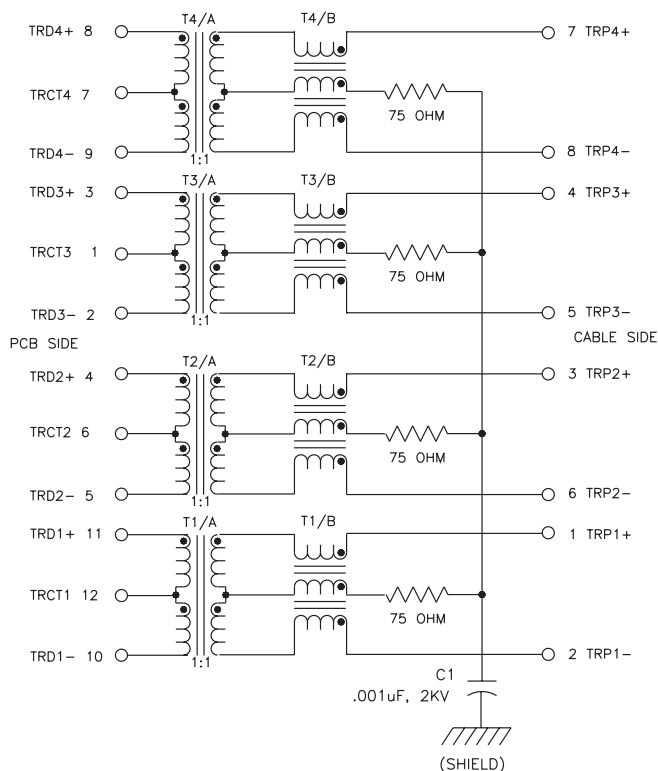
Part Number	Shield		Contact			Housing		MSL ² Rating
	Material	Finish	Material	Plating Area	Solder Area	Material	Specification	
J0G Series	Brass	20-40µ inches thick nickel over brass	Phosphor Bronze	15µ inches gold over 30-80µ inches nickel	Tin matte finish	Thermoplastic	UL 94 V-0	1

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

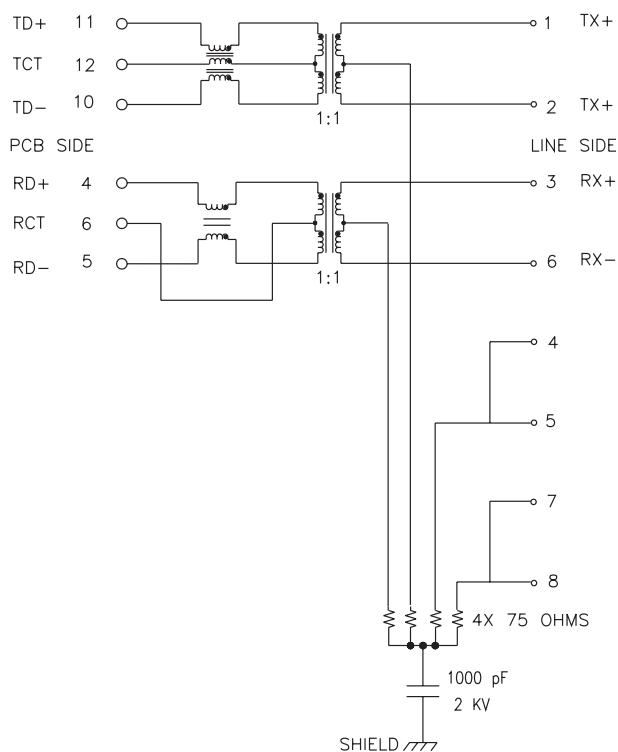
2. MSL - Moisture Sensitivity Level class limits = 1 to 5 (Highest: 1; Lowest: 5).

Schematics

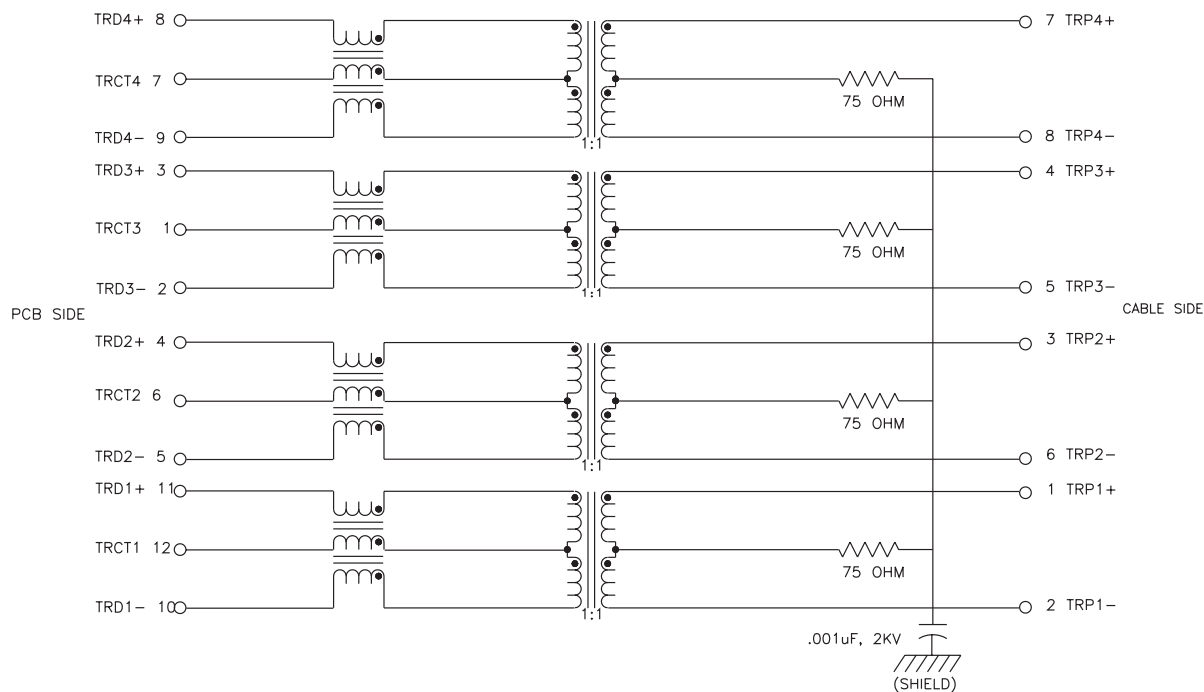
J0G-0001NL / J0G-0002NL / J0G-0003NL



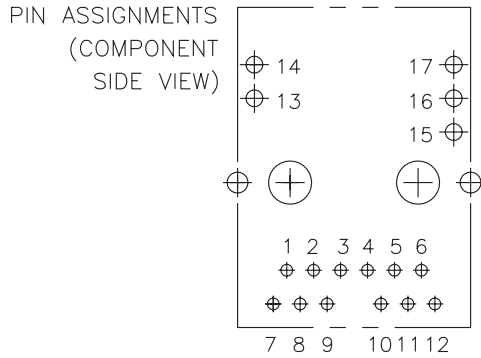
J0G-0007NL



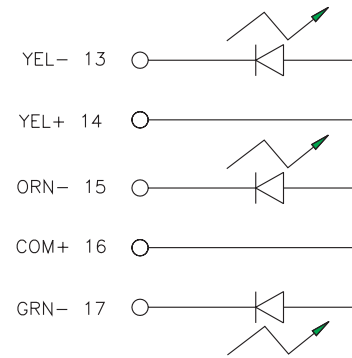
JOG-0009NL



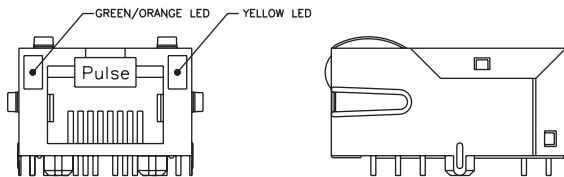
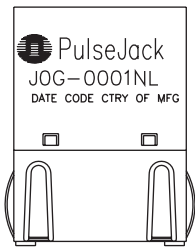
Pin Assignments



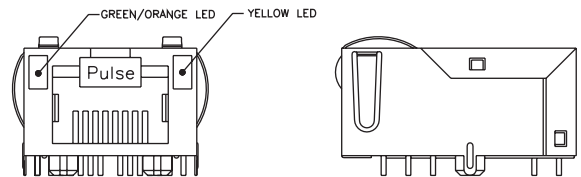
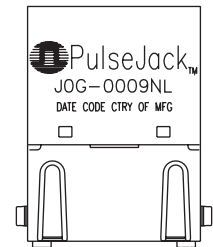
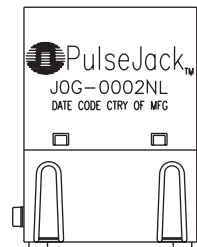
LED Configuration



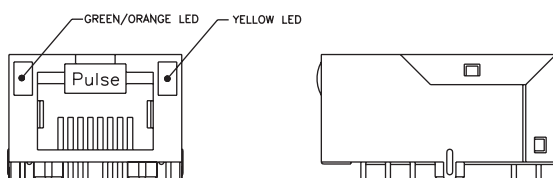
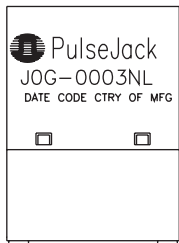
J0G-0001NL



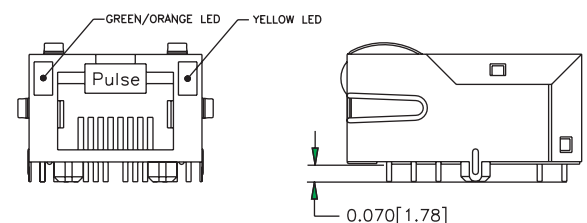
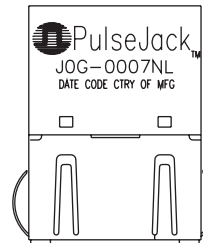
J0G-0002NL / J0G-0009NL



J0G-0003NL



J0G-0007NL

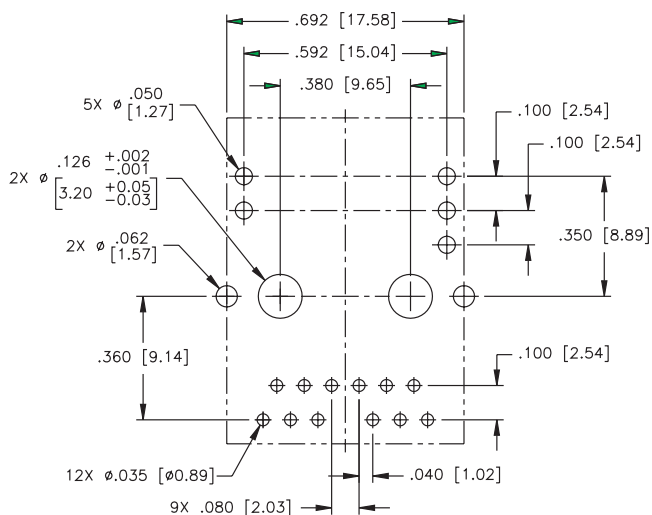
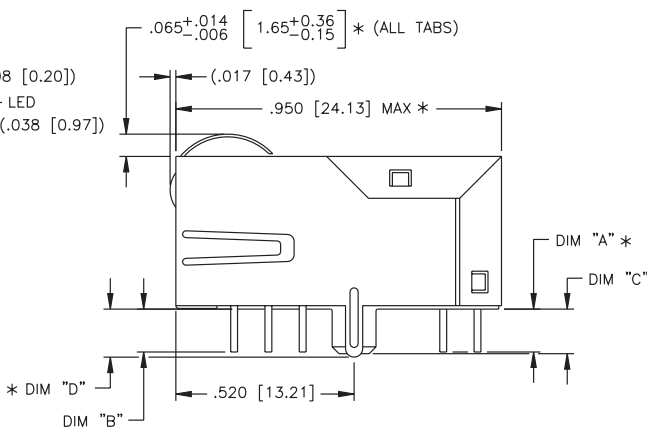
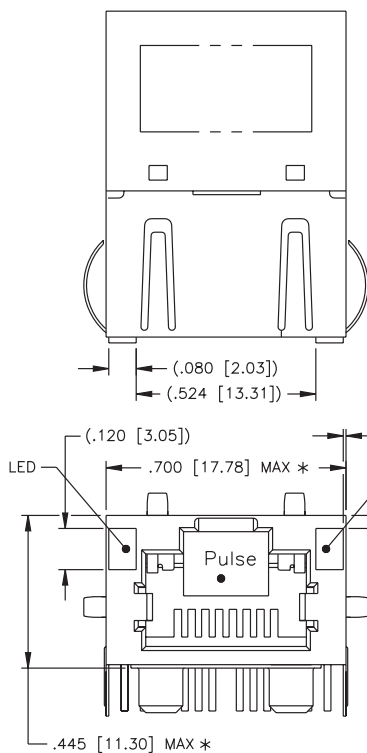


Mechanicals

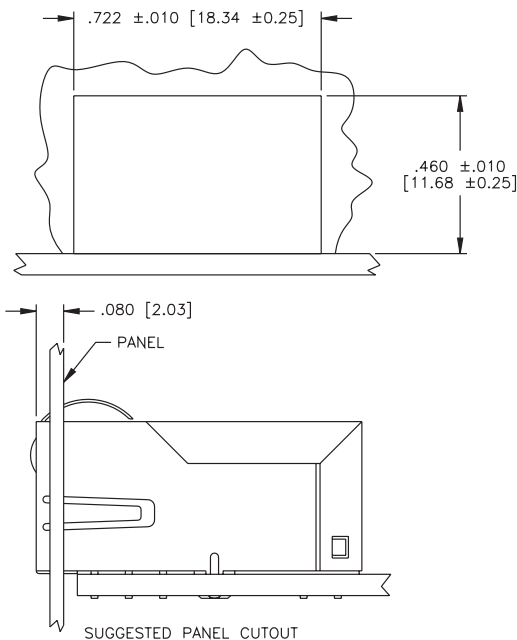
J0G-0001NL / 0002NL / 0003NL / 0007NL / 0009NL

Measurements (in./mm)

Part No.	Dim"A" (Signal Pins)	Dim"B" (LED Pins)	Dim"C" (Post)	Dim"D" (Shield Tab)	EMI Tab Config.
J0G-0001NL	.125/3,18	.125/3,18	.130/3,30	.140/3,56	Fig.1
J0G-0002NL/0009NL	.070/1,78	.070/1,78	.070/1,78	.070/1,78	Fig.2
J0G-0003NL	.125/3,18	.125/3,18	.130/3,30	.140/3,56	Fig.3
J0G-0007NL	.070/1,78	.070/1,78	.070/1,78	.070/1,78	Fig.1



SUGGESTED FOOTPRINT (COMPONENT SIDE SHOWN)
DIMENSIONAL TOLERANCE: (UNLESS OTHERWISE SPECIFIED)
.XXX ±.003 [X.XX ±0.08]



EMI Tabs Configuration

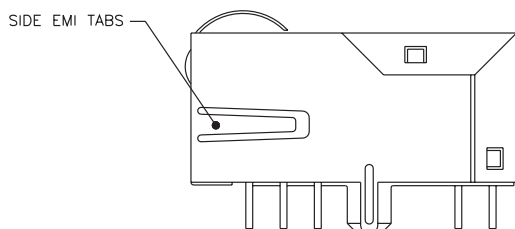


FIGURE 1 (HORIZONTAL SIDE EMI TABS)

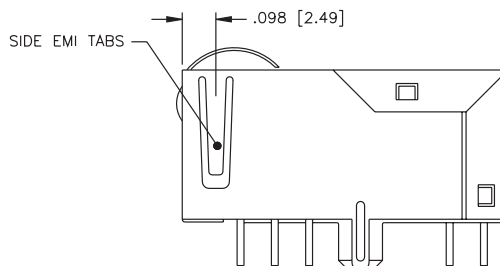


FIGURE 2 (VERTICAL SIDE EMI TABS)

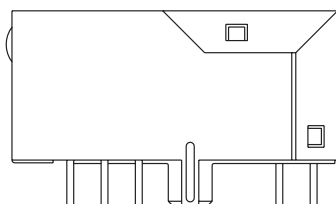


FIGURE 3 (NO EMI TABS)

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