

# 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 <sup>2</sup> 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

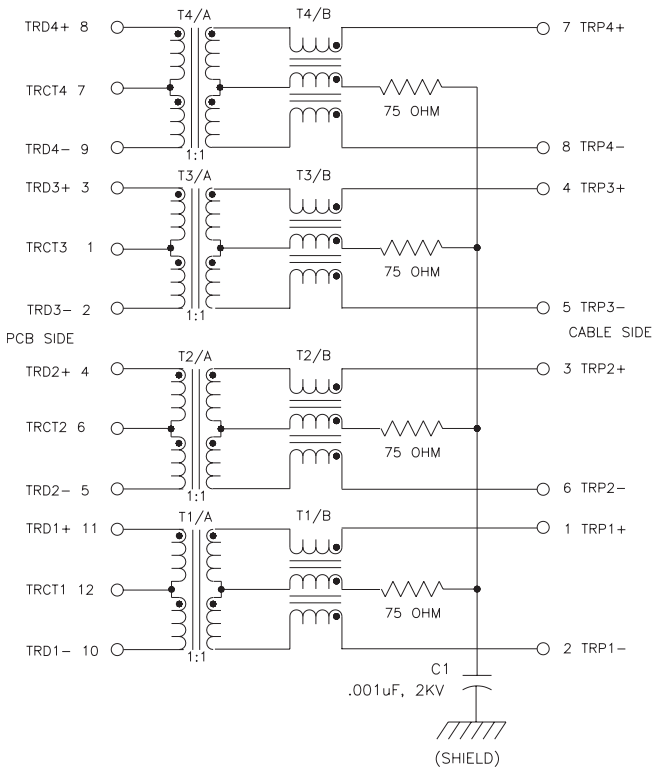
Shanghai 86 21 62787060

China 86 755 33966678

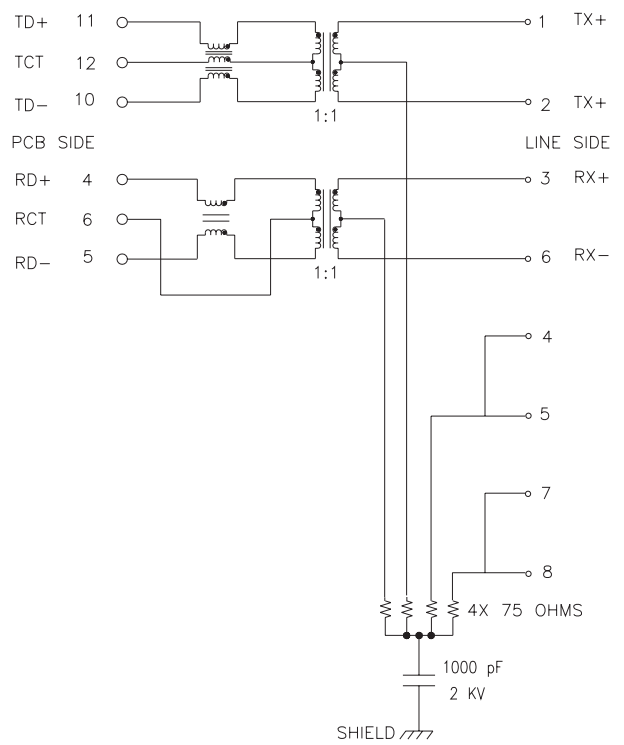
Taiwan 886 3 4356768

Schematics

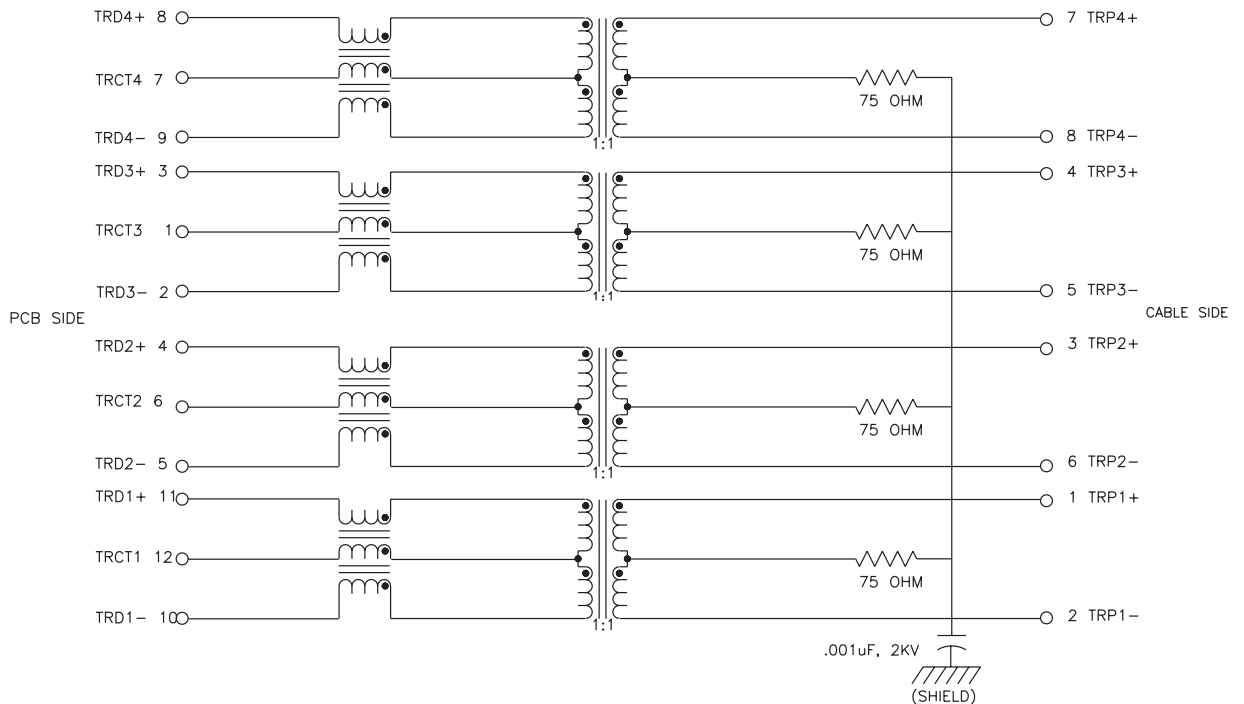
JOG-0001NL / JOG-0003NL



JOG-0007NL



JOG-0009NL

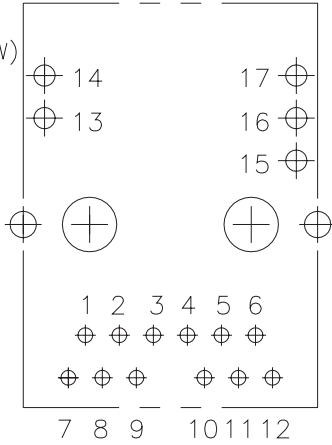


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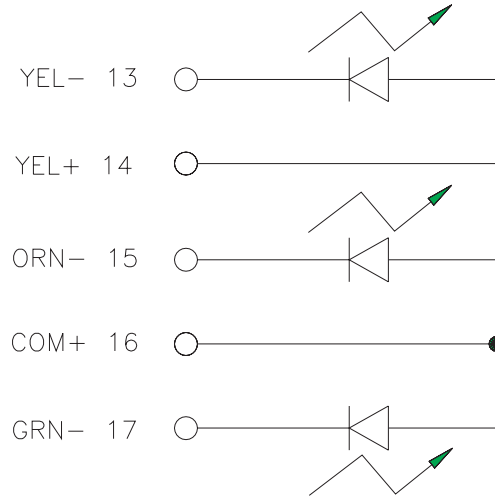


## Pin Assignments

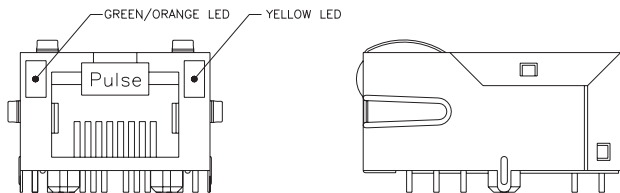
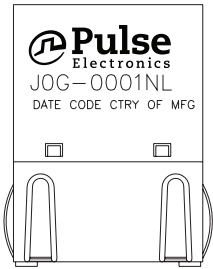
PIN ASSIGNMENTS  
(COMPONENT SIDE VIEW)



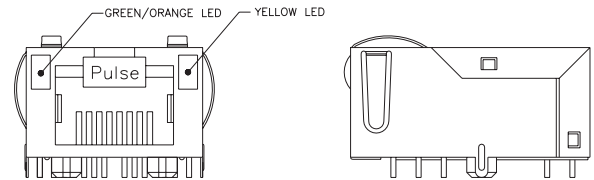
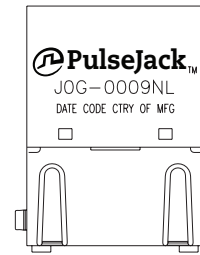
## LED Configuration



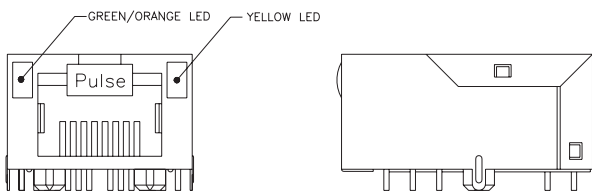
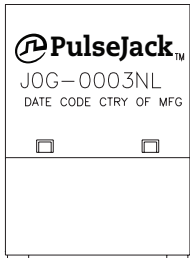
### JOG-0001NL



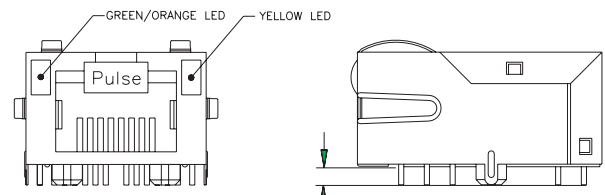
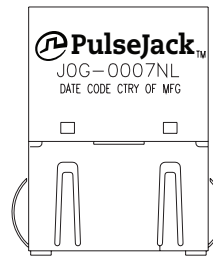
### JOG-0009NL



### JOG-0003NL



### JOG-0007NL

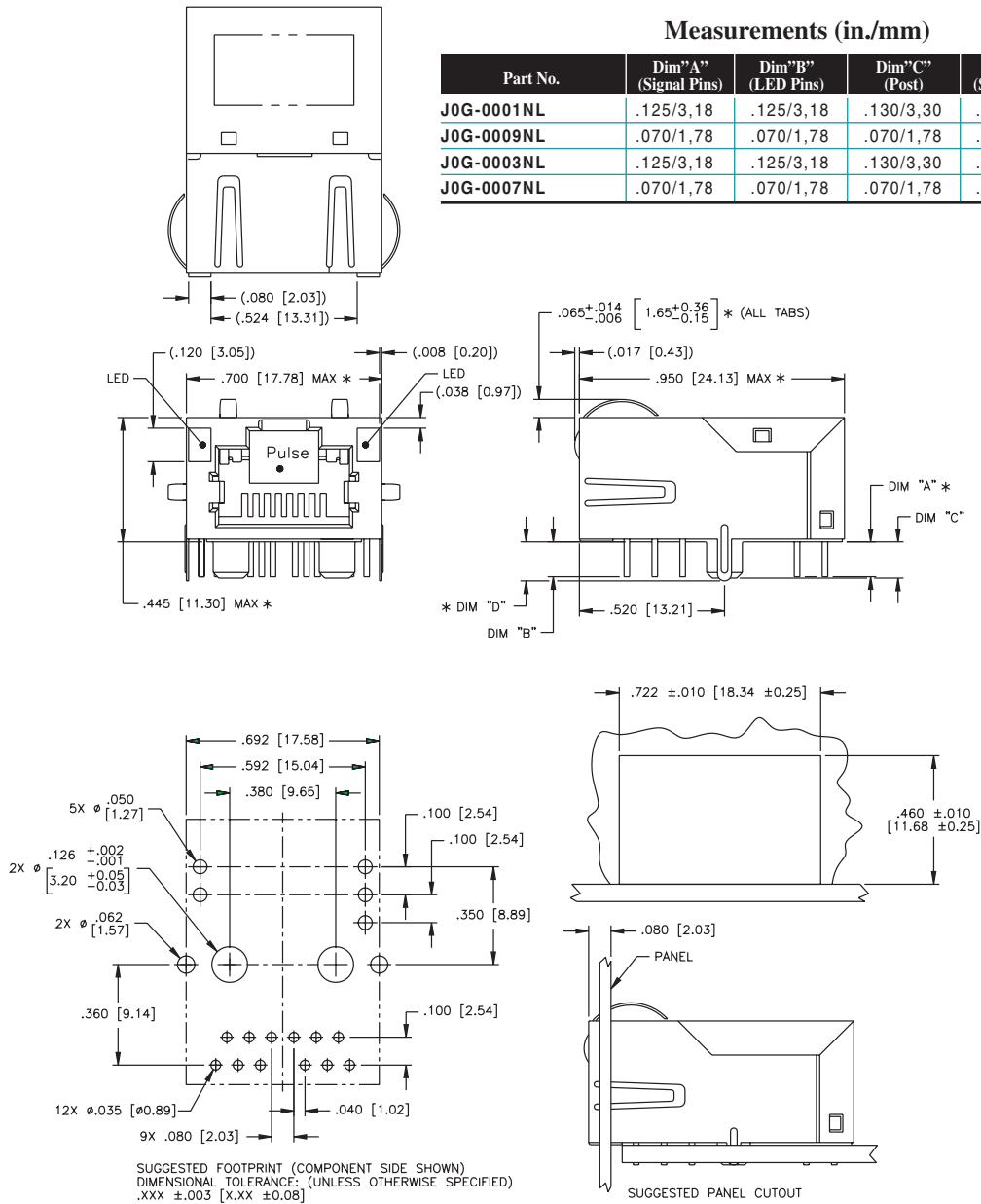


Mechanicals

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

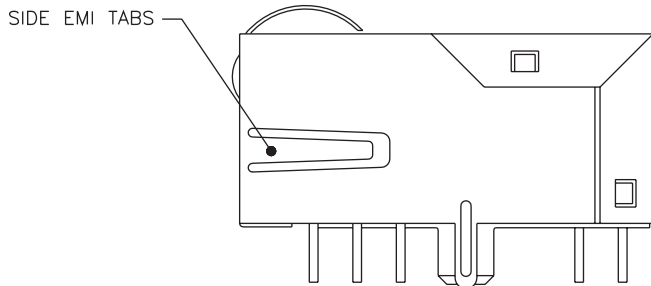


FIGURE 1 (HORIZONTAL SIDE EMI TABS)

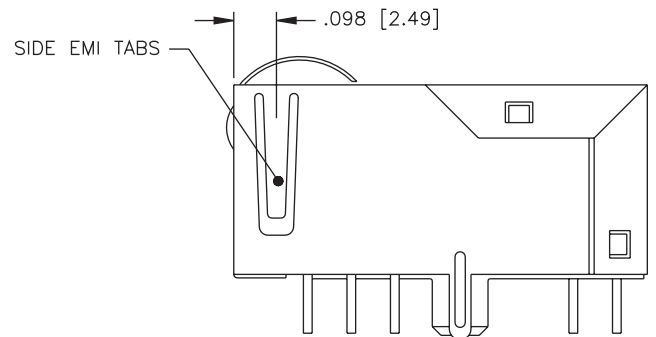


FIGURE 2 (VERTICAL SIDE EMI TABS)

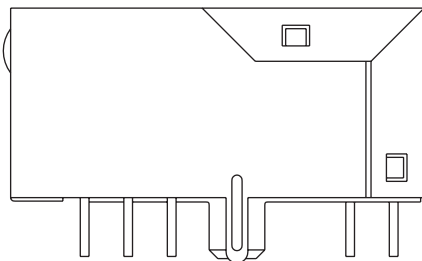


FIGURE 3 (NO EMI TABS)

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