

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				
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.

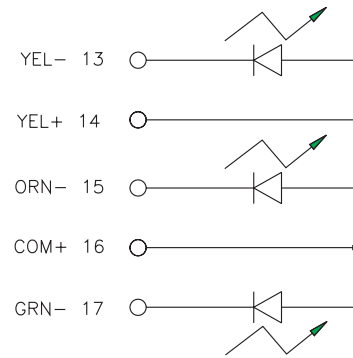
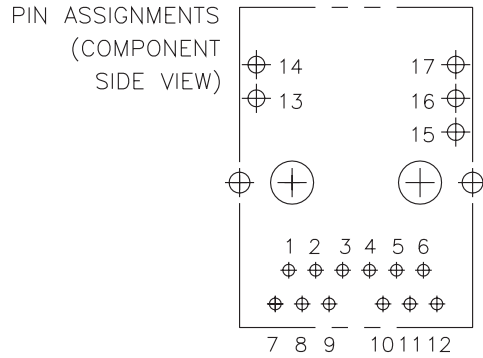
RJ45 Material Specification

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

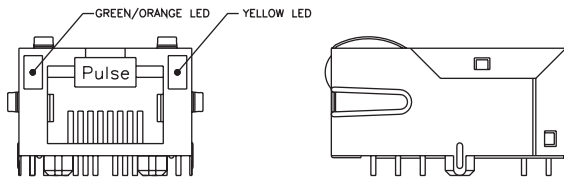
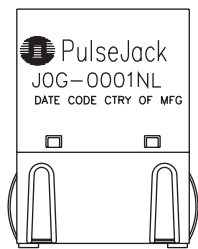
Notes: 1. Connector dimensions comply with FCC dimension requirements.
2. MSL - Moisture Sensitivity Level class limits = 1 to 5 (Highest: 1; Lowest: 5).

Pin Assignments

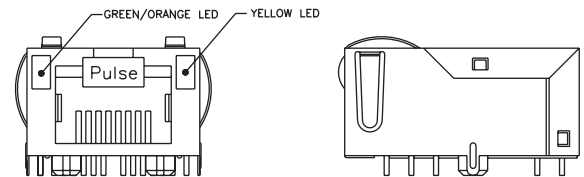
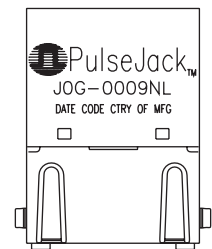
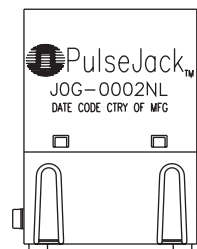
LED Configuration



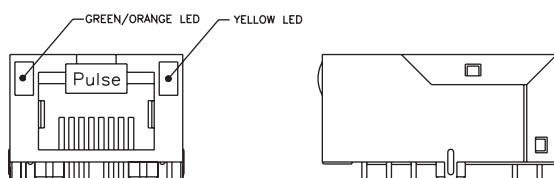
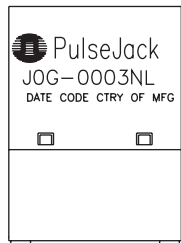
JOG-0001NL



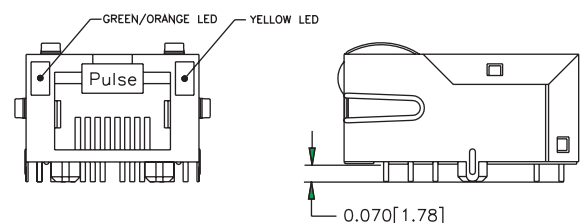
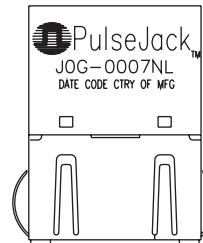
JOG-0002NL / JOG-0009NL



JOG-0003NL

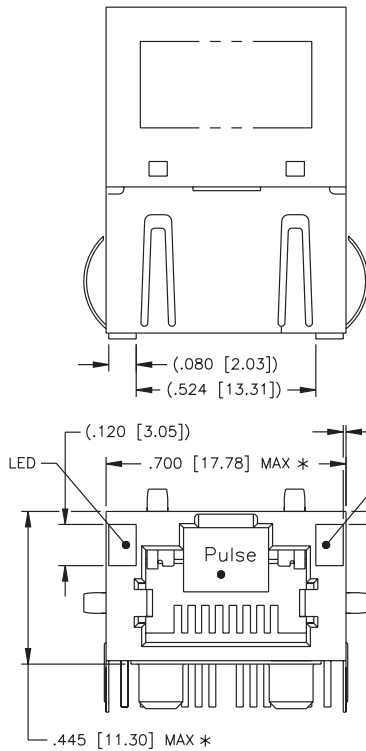


JOG-0007NL



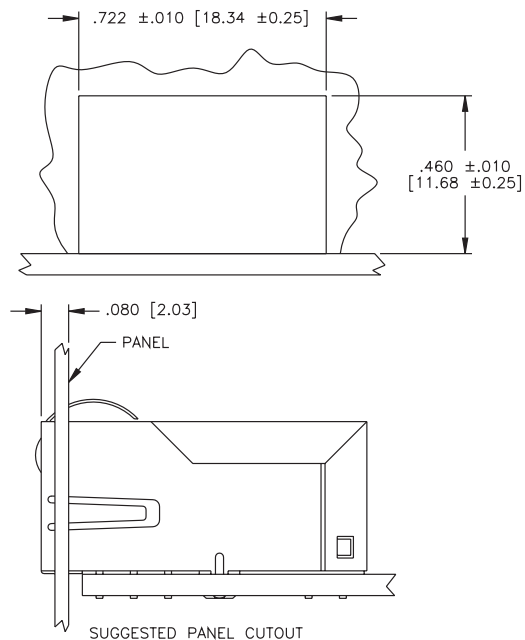
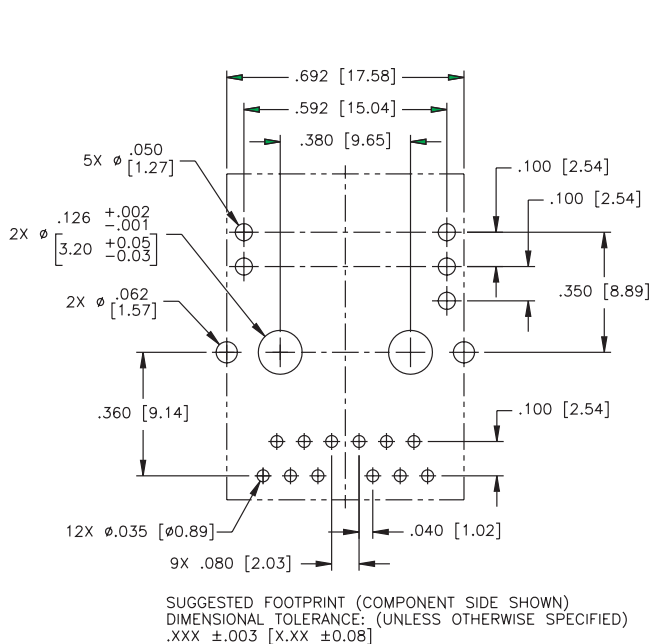
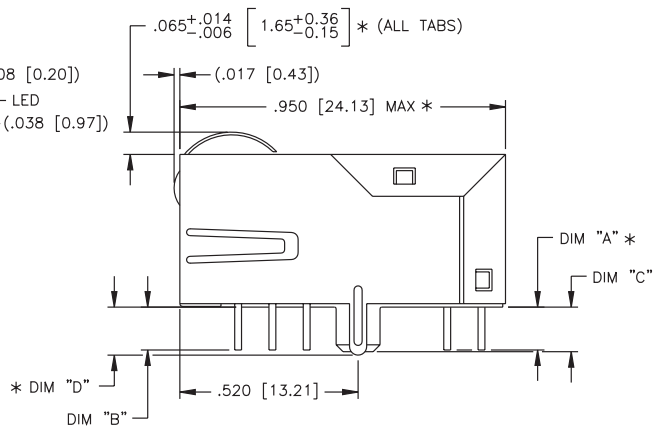
Mechanicals

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



EMI Tabs Configuration

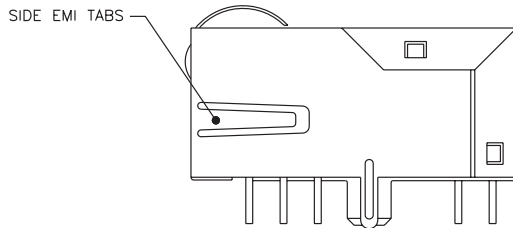


FIGURE 1 (HORIZONTAL SIDE EMI TABS)

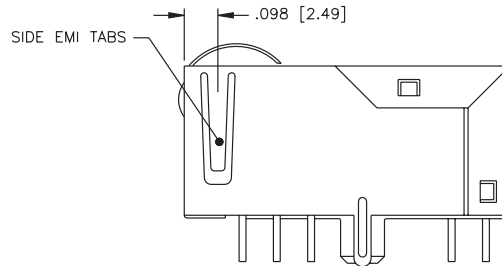


FIGURE 2 (VERTICAL SIDE EMI TABS)

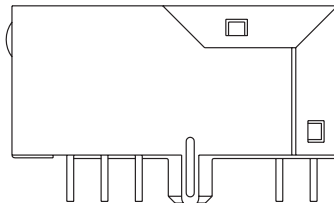


FIGURE 3 (NO EMI TABS)

For More Information:

Pulse Worldwide Headquarters

Two Pearl Buck Court
Bristol, PA 19007
U.S.A.

www.pulseeng.com

Tel: 215 781 6400
Fax: 215 781 6403

Pulse Europe

Einsteinstrasse 1
D-71083 Herrenberg
Germany

Tel: 49 7032 7806 0
Fax: 49 7032 7806 135

Pulse China Headquarters

B402, Shenzhen Academy of
Aerospace Technology Bldg.
10th Kejinan Rd.
High-Tech Zone
Nanshan District
Shenzhen, PR China 518057

Tel: 86 755 33966678
Fax: 86 755 33966700

Pulse North China

Room 2704/2705
Super Ocean Finance Ctr.
2067 Yan An Rd. West
Shanghai 200336
China

Tel: 86 21 62787060
Fax: 86 2162786973

Pulse South Asia

135 Joo Seng Rd.
#03-02
PM Industrial Bldg.
Singapore 368363

Tel: 65 6287 8998
Fax: 65 6280 0080

Pulse North Asia

No. 26, Kao Ching Rd.
Yang Mei Chen
Taoyuan Hsien
Taiwan
R. O. C.

Tel: 886 3 4643715
Fax: 886 3 4641911

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2009. Pulse Engineering, Inc. All rights reserved.