

PULSEJACK™



Low Profile 1x2 Gigabit Tab-Up

Description:




Gigabit (10/100/1000Base-T) dual port RJ45 (1x2) Tab-UP integrated magnetics connector, designed to support applications, such as Servers, PCI-Express, and Switches.



Features and Benefits:

-  RoHS peak wave solder temperature 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	LEDs ¹	Speed	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		
JGL-0001NL	G/G	10/100/1000BT	Yes	-1.2	-18	-18	-12	-10	-40	-35	-30	-30	1500Vrms	
JGL-0004NL	G/G-A	10/100/1000BT	Yes	-1.0	-18	-18	-12	-10	-40	-35	-30	-30	1500Vrms	

Notes: 1. LEDs Left/Right: G = green, G-A = green-amber

RJ45 Durability Testing Rating

Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
JGL 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	
JGL Series	Brass	30-50µ inches thick nickel over brass	Phosphor Bronze	50µ inches gold over 50µ inches nickel	Tin matte finish over nickel	Thermoplastic	UL 94 V-0	1

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

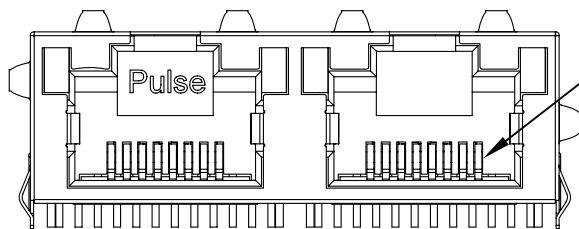
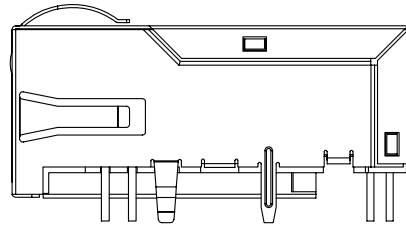
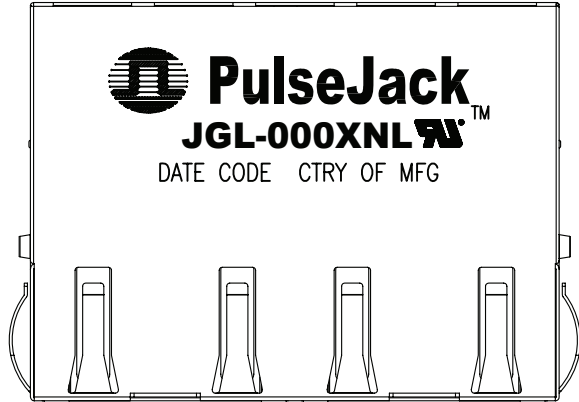
2. MSL - Moisture Sensitivity Level

PULSEJACK™

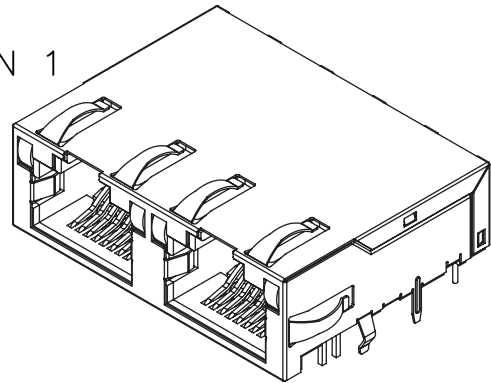
Low Profile 1x2 Gigabit Tab-Up

Mechanicals

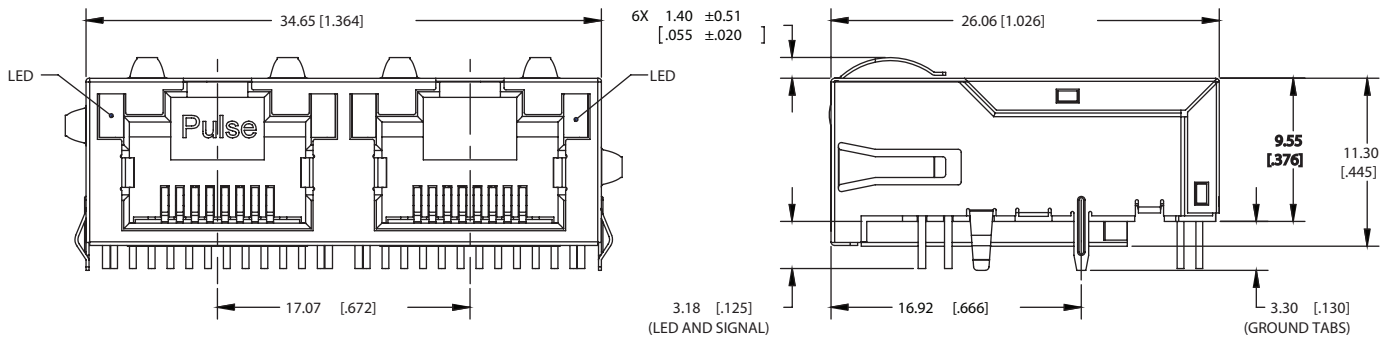
JGL-0001NL/-0004NL



PIN 1



ISOMETRIC VIEW
(FOR REFERENCE ONLY)



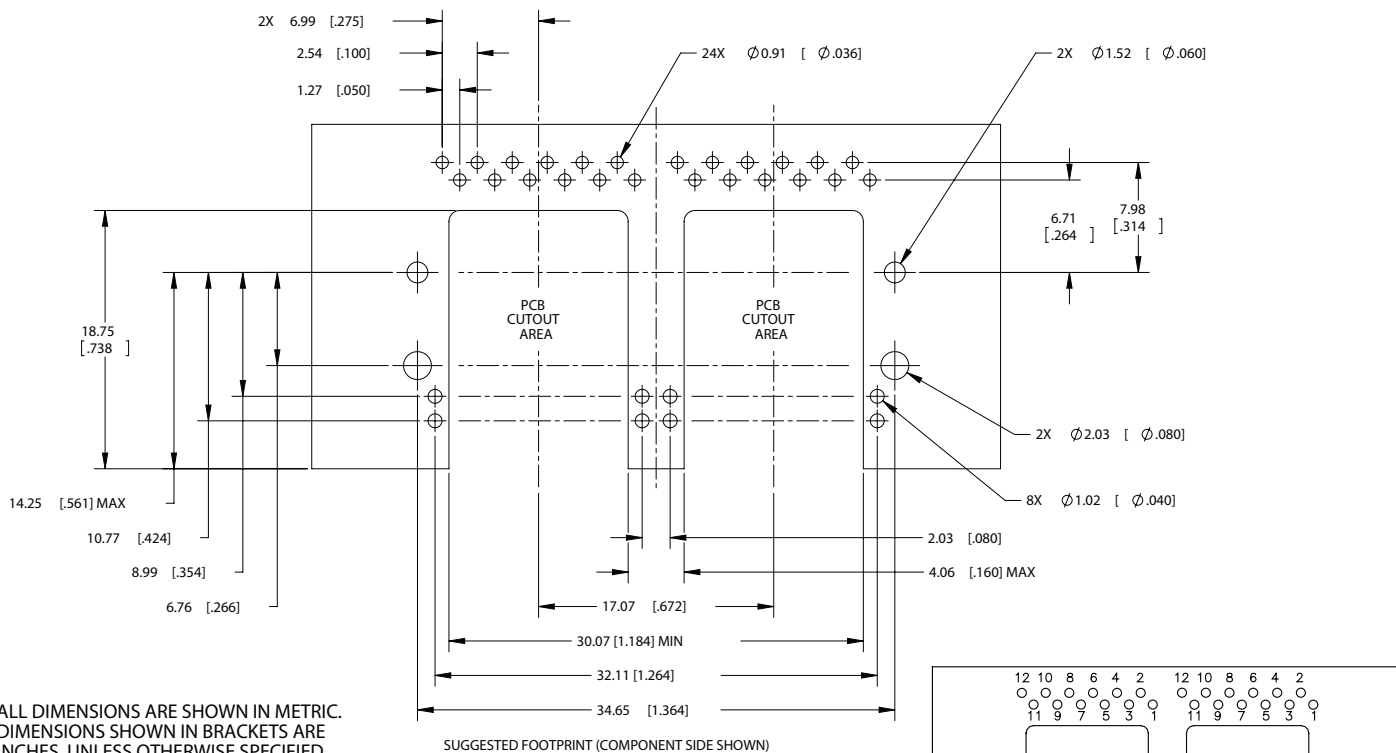
ALL DIMENSIONS ARE SHOWN IN METRIC.
DIMENSIONS SHOWN IN BRACKETS ARE
INCHES. UNLESS OTHERWISE SPECIFIED,
THE FOLLOWING TOLERANCE APPLY:

X.XX [.XXX] = ±0.25 [±.010]

PULSEJACK™

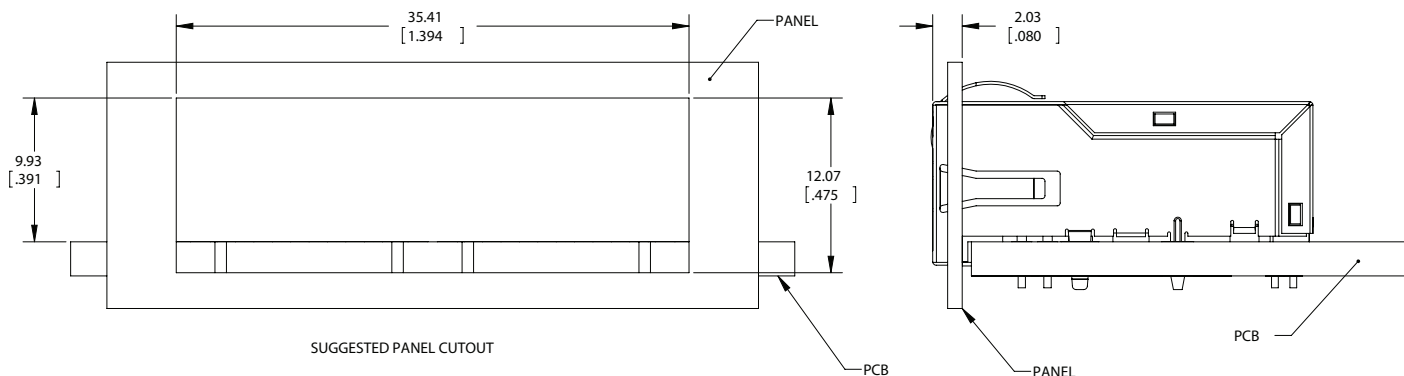
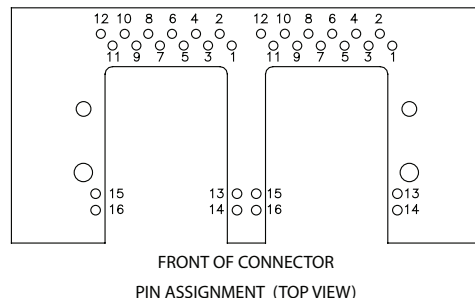
Low Profile 1x2 Gigabit Tab-Up

Mechanicals (cont.)



ALL DIMENSIONS ARE SHOWN IN METRIC.
DIMENSIONS SHOWN IN BRACKETS ARE
INCHES. UNLESS OTHERWISE SPECIFIED,
THE FOLLOWING TOLERANCE APPLY:

X.XX [.XXX] = ± 0.08 [$\pm .003$]



ALL DIMENSIONS ARE SHOWN IN METRIC.
DIMENSIONS SHOWN IN BRACKETS ARE
INCHES. UNLESS OTHERWISE SPECIFIED,
THE FOLLOWING TOLERANCE APPLY:

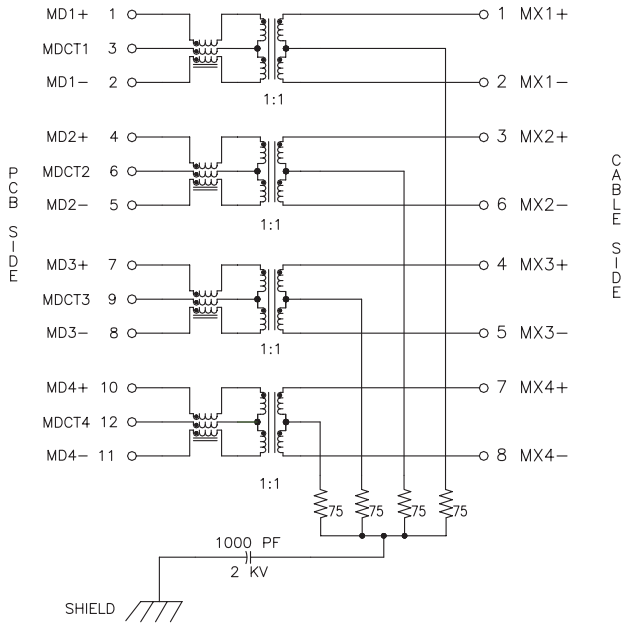
X.XX [.XXX] = ± 0.10 [$\pm .004$]

PULSEJACK™

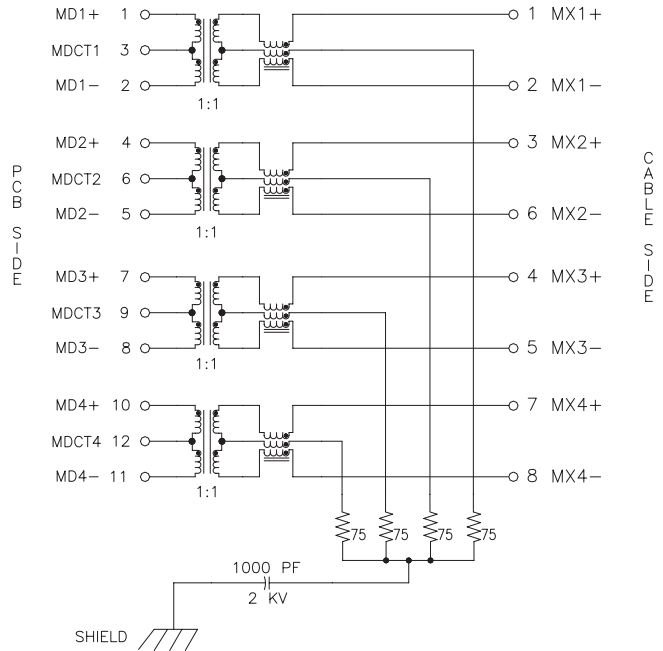
Low Profile 1x2 Gigabit Tab-Up

Schematics

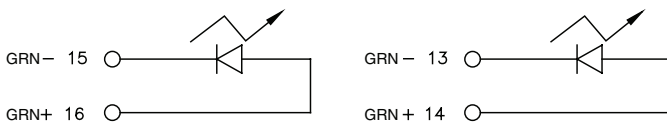
JGL-0001NL



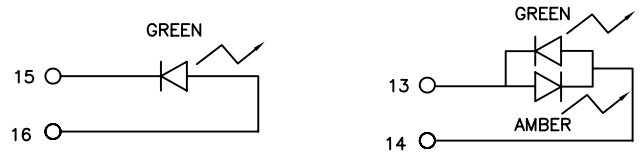
JGL-0004NL



JGL-0001NL LEDs



JGL-0004NL LEDs



EMMITTED COLOR	GREEN
WAVELENGTH (nm)	565
POWER DISSIPATION (Pd)	105 mW MAX
DC FORWARD CURRENT	25 mA MAX
FORWARD VOLTAGE (VF) @ 20 mA	2.2V TYP

NOTE: PER VENDOR'S SPECIFICATION

EMMITTED COLOR	GREEN	AMBER	GREEN
WAVELENGTH (nm)	565	607	565
POWER DISSIPATION (Pd)	105 mW MAX	105 mW MAX	105 mW MAX
DC FORWARD CURRENT	25 mA MAX	30 mA MAX	25 mA MAX
FORWARD VOLTAGE (VF) @ 20 mA	2.2V TYP	2.15V TYP	2.2V TYP

NOTE: PER VENDOR'S SPECIFICATION

BICOLOR

For More Information:

Pulse Worldwide Headquarters
12220 World Trade Dr.
San Diego, CA 92128
U.S.A.

www.pulseeng.com
Tel: 858 674 8100
Fax: 858 674 8262

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 Kejian Rd.
High-Tech Zone
Nanshan District
Shenzen, 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 6287 8998

Pulse North Asia
3F, No. 198
Zhongyuan Rd.
Zhongli City
Taoyuan County 320
Taiwan R. O. C.
Tel: 886 3 4356768
Fax: 886 3 4356823 (Pulse)
Fax: 886 3 4356820 (FRE)

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.