## Pulse Jack<sup>tm</sup>





## **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 <sup>1</sup>	Speed	EMI Tabs	Insertion Loss TX/RX (dB)	Return Loss (dB TYP) 100Ω ( $\pm$ 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
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	Number Mating Force Unmating Force (MAX) Unmating Force Durabi		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	Part Shield		Contact			Housing		MSL <sup>2</sup>
Number	Material	Finish	Material	Plating Area	Solder Area	Material	Specification	Rating
JGL	Brass	30-50µ inches thick nickel	Phosphor	50µ inches gold over	Tin matte			

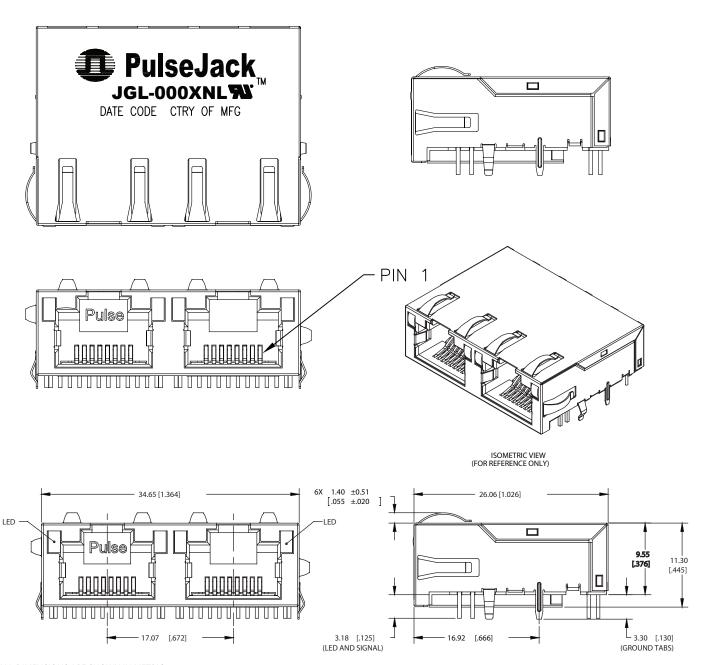
Notes: 1. Connector dimensions comply with FCC dimension requirements.

2. MSL - Moisture Sensitivity Level

# PULSEJACK<sup>TM</sup> Low Profile 1x2 Gigabit Tab-Up

## **Mechanicals**

### JGL-0001NL/-0004NL

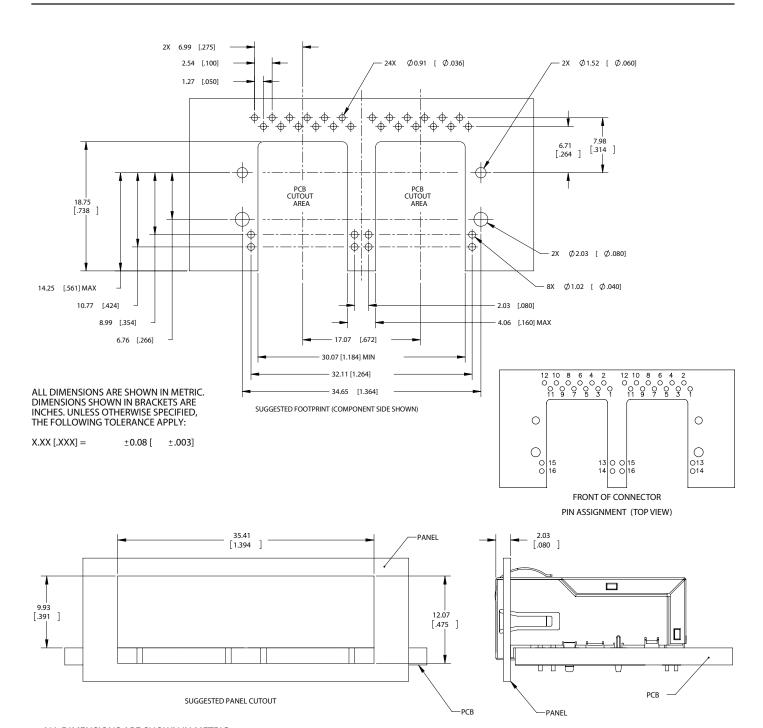


ALL DIMENSIONS ARE SHOWN IN METRIC. DIMENSIONS SHOWN IN BRACKETS ARE INCHES. UNLESS OTHERWISE SPECIFIED, THE FOLLOWING TOLERANCE APPLY:

 $X.XX [.XXX] = \pm 0.25 [ \pm .010]$ 

# PULSEJACK<sup>TM</sup> 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:

 $X.XX [.XXX] = \pm 0.10 [ \pm .004]$ 

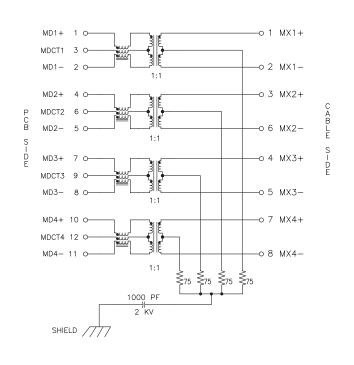
## Pulse Jack<sup>tm</sup>

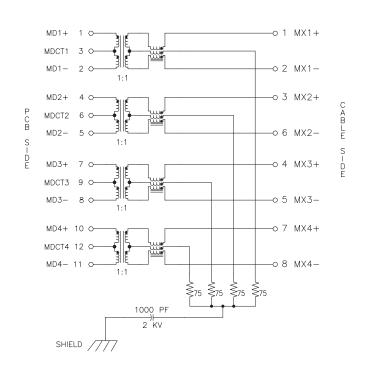
## Low Profile 1x2 Gigabit Tab-Up

## **Schematics**

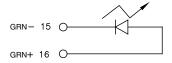
#### JGL-0001NL

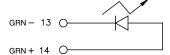
## JGL-0004NL





## JGL-0001NL LEDs

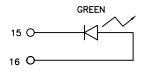


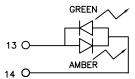


EMMITTED COLOR	GREEN
WAVELENGTH (nM)	565
POWER DISSIPATION (Pd)	105 mW MAX
DC FORWARD CURRENT	25 mA MAX
FORWARD VOLTAGE (VF) @ 20 mA	2.2V TYP

NOTE: PER VENDOR'S SPECIFICATION

#### JGL-0004NL LEDs





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							

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