

# PULSEJACK™

## Single-Port Gigabit PoE

### Description:

10/100/1000 Base-TX RJ45 single port with integrated magnetics – Designed for most leading PHY manufacturers with the addition of Power over Ethernet, according to IEEE 802.3af



### Features and Benefits:

- ⊕ RoHS peak wave solder temperature rating 260°C
- ⊕ Single port Connector for PoE applications

### Electrical Performance Summary:

- ⊕ 350µH minimum OCL with 8mA bias current
- ⊕ High performance for maximum EMI suppression
- ⊕ 15W, 350mA, 48V PoE rating

### Electrical Specifications @ 25°C — Operating Temperature 0°C to +70°C

RoHS Compliant Part No.	Tab Option	LEDs <sup>1</sup> L/R	Insertion Loss TX/RX (dB TYP) 1-100 MHz	Return Loss (dB TYP) 100Ω (±15Ω)			Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (Vrms MIN) @60Hz 1 MIN
				30 MHz	60-80 MHz	100 MHz	30 MHz	60 MHz	100 MHz	1-50 MHz	50-130 MHz	
JK0-0133NL	UP	—	-1.0	-16	-12	-10	-44	-37	-33	-27	-20	1500
JK0-0145NL	UP	G/Y	-1.0	-16	-12	-10	-44	-37	-33	-27	-20	1500
JK0-0161NL	UP	—	-1.0	-16	-12	-10	-44	-37	-33	-27	-20	1500

#### NOTES:

1. LEDs Left/Right: G = green; Y = yellow.

### RJ45 Durability Testing Rating

Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
JK0 Series	5lbs./2.268kgs.	5lbs./2.268kgs.	500 Insertions	20lbs./9.072kgs.

### RJ45 Material Specification

Part Number	Shield		Contact			Housing		MSL <sup>3</sup> Rating
	Material	Finish	Material	Plating Area	Solder Area <sup>2</sup>	Material	Specification	
JK0 Series	Brass	20-40µ inches thick nickel over brass	Phosphor Bronze	15µ inches gold over 30-80µ inches nickel	75-300µ inches tin-lead over 75-300µ inches nickel	Thermoplastic	UL 94 V-0	1

#### NOTES:

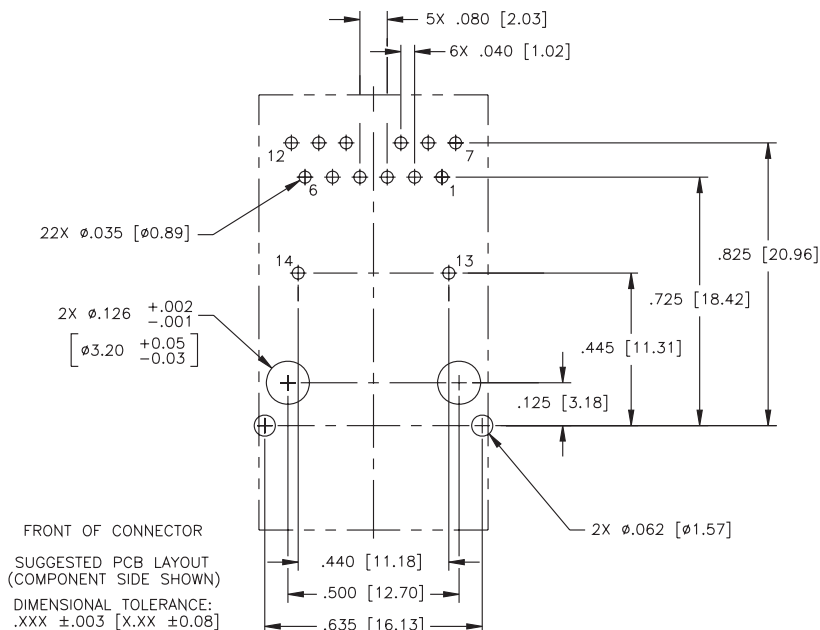
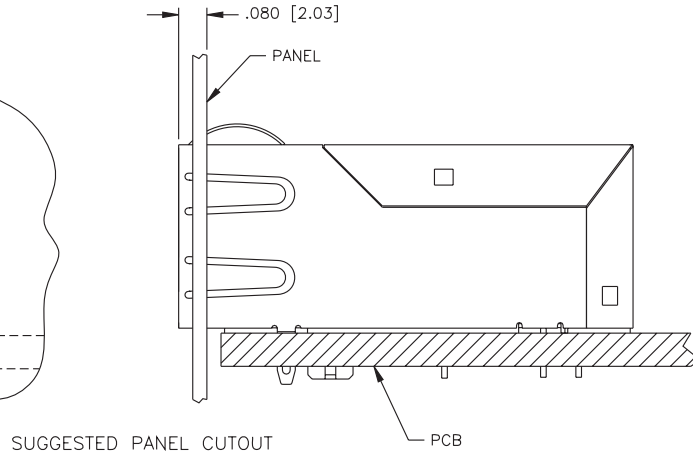
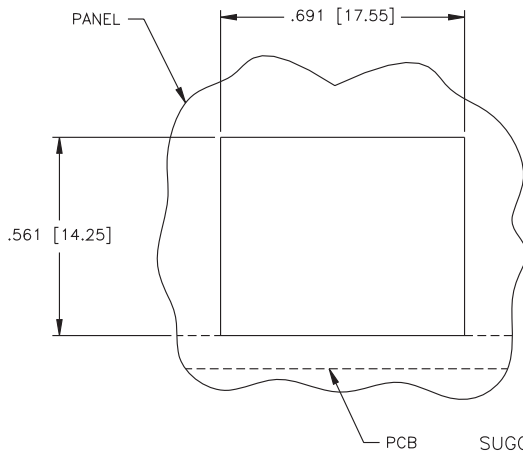
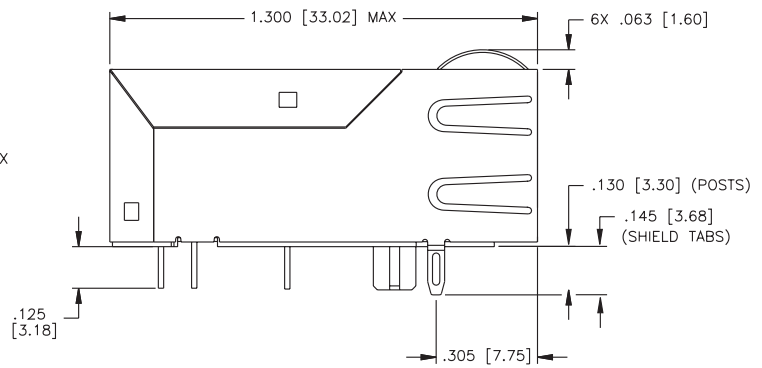
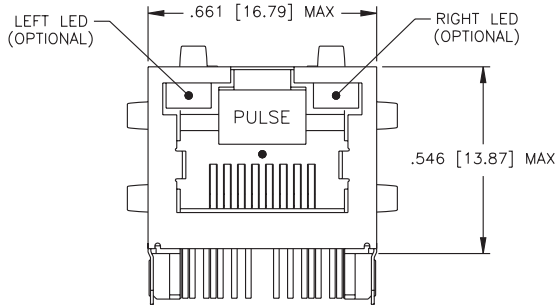
1. Connector dimensions comply with FCC dimension requirements.

2. NL parts are tin matte finish over nickel.

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

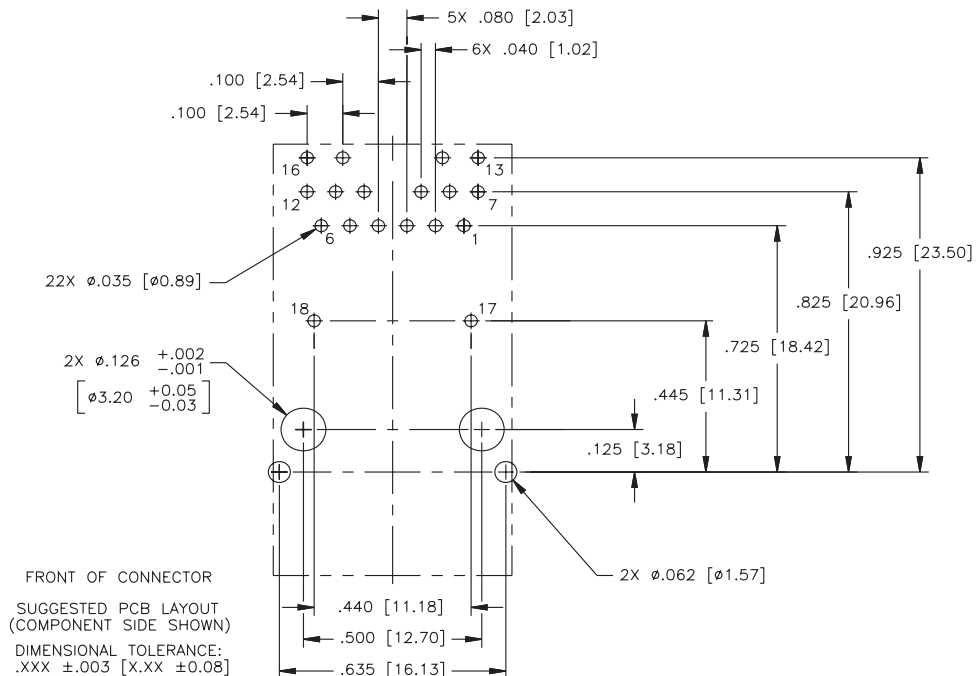
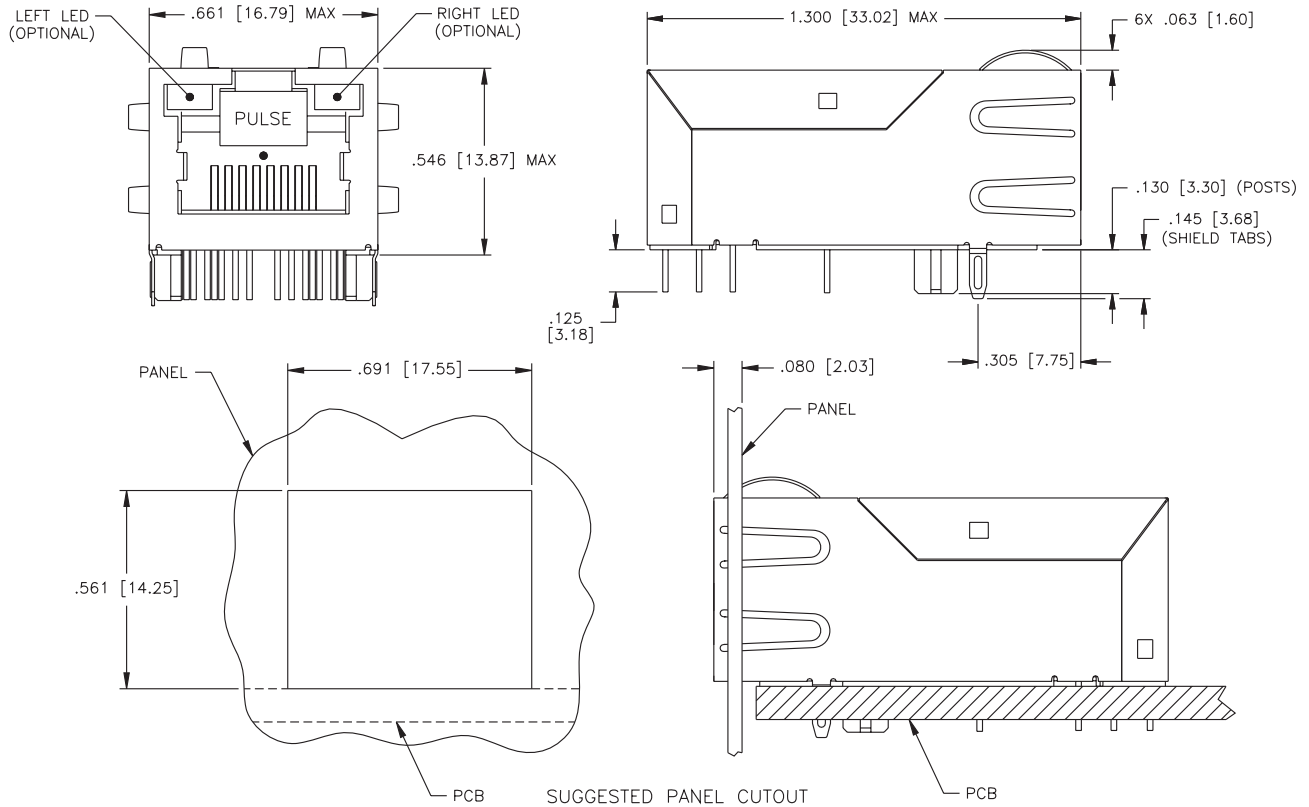
### Mechanical

**JK0-0133NL**



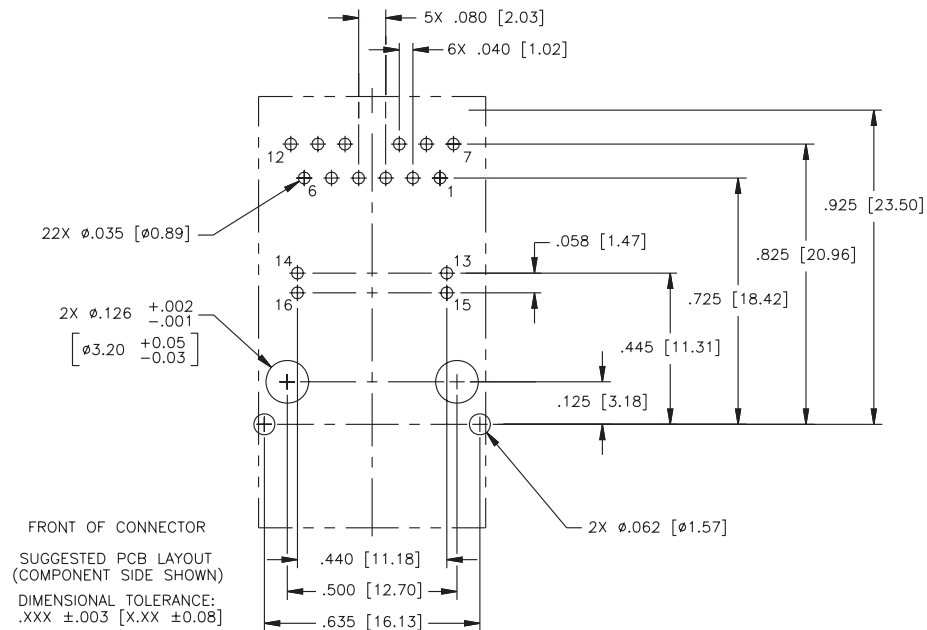
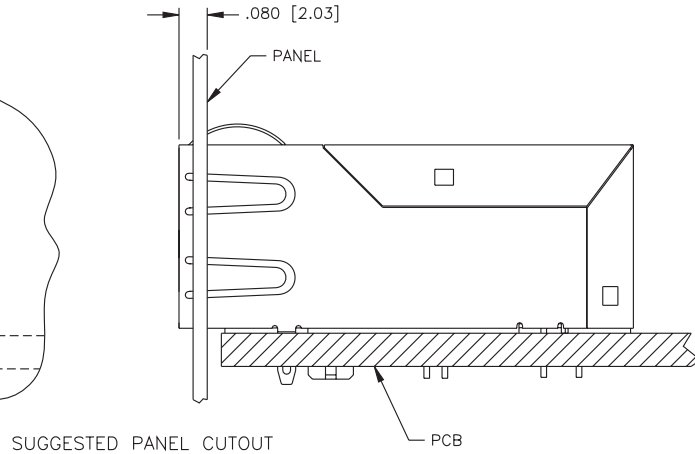
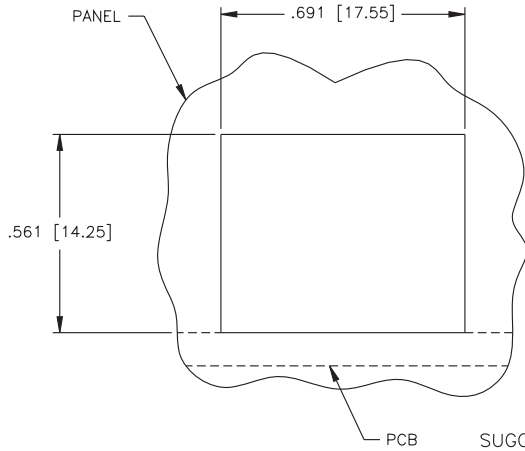
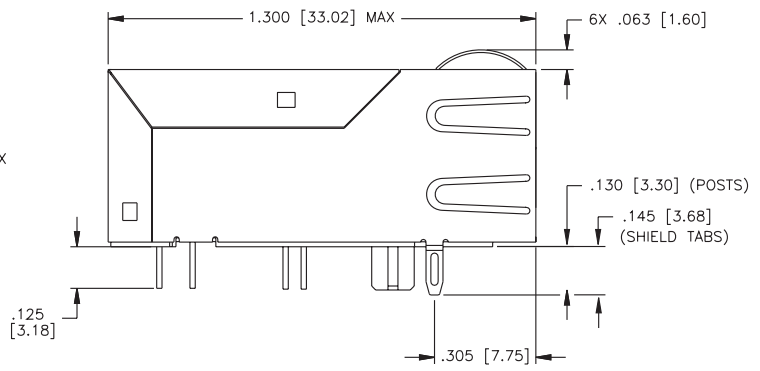
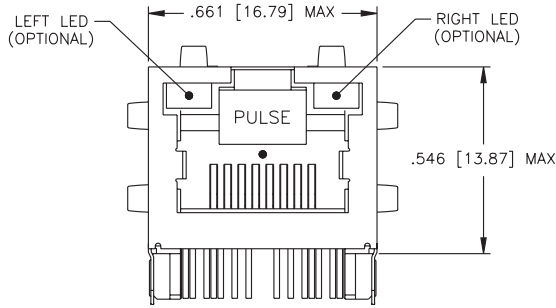
### Mechanical

**JK0-0145NL**



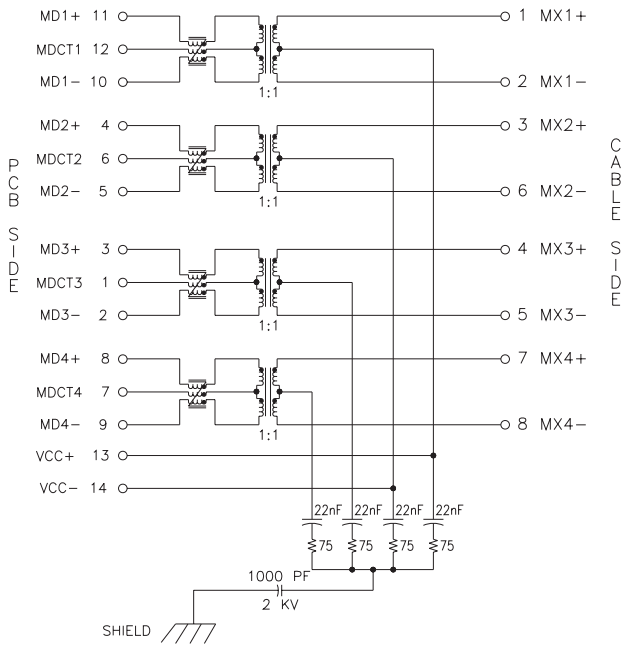
### Mechanical

**JK0-0161NL**

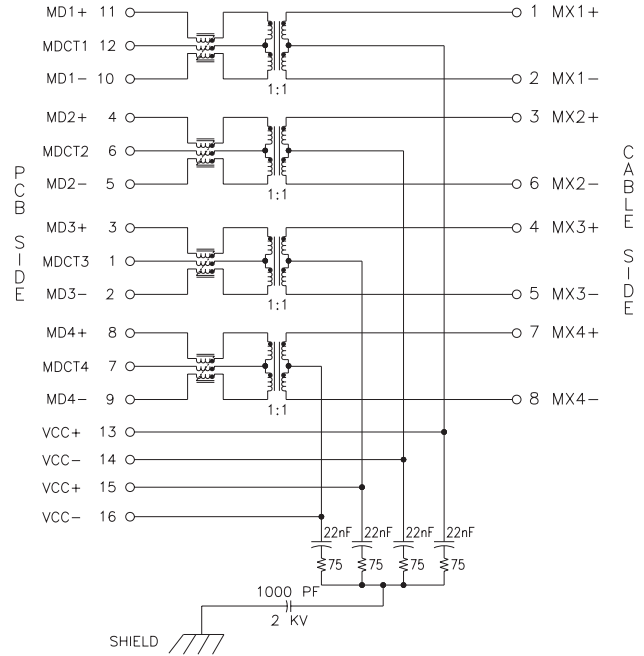


### Schematics

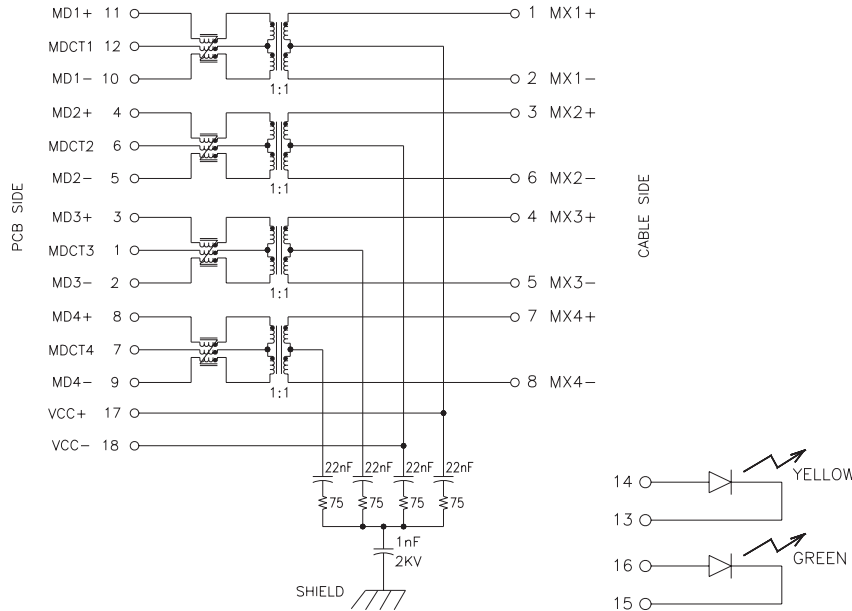
**JK0-0133NL**



**JK0-0161NL**



**JK0-0145NL**



### For More Information:

**Pulse Worldwide Headquarters**  
12220 World Trade Dr.  
San Diego, CA 92128  
U.S.A.  
[www.pulseeng.com](http://www.pulseeng.com)

**Pulse European Headquarters**  
Einsteinstrasse 1  
D-71083 Herrenberg  
Germany

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

**Pulse North China**  
Room 1503  
XinYin Building  
No. 888 YiShan Rd.  
Shanghai 200233  
China

**Pulse South Asia**  
150 Kampong Ampat  
#07-01/02  
KA Centre  
Singapore 368324

**Pulse North Asia**  
No. 26  
Kao Ching Rd.  
Yang Mei Chen  
Taoyuan Hsien  
Taiwan, R. O. C.  
32667

TEL: 858 674 8100  
FAX: 858 674 8262

TEL: 49 7032 7806 0  
FAX: 49 7032 7806 12

TEL: 86 755 33966678  
FAX: 86 755 33966700

TEL: 86 21 32181071  
FAX: 86 21 32181396

TEL: 65 6287 8998  
FAX: 65 6280 0080

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, 2008. Pulse Engineering, Inc. All rights reserved.