# PULSEJACK<sup>TM</sup> 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) 100 $\Omega$ (±15 $\Omega$ )			Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (Vrms MIN)
				30 MHz	60-80 MHz	100 MHz	30 MHz	60 MHz	100 MHz	1-50 MHz	50-130 MHz	@60Hz 1 MIN
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:

<sup>1.</sup> 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		Shield		Contact	Housing		MSL <sup>3</sup>		
Number	Material	Finish	Material	Plating Area	Solder Area <sup>2</sup>	Material	Specification	Rating	
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

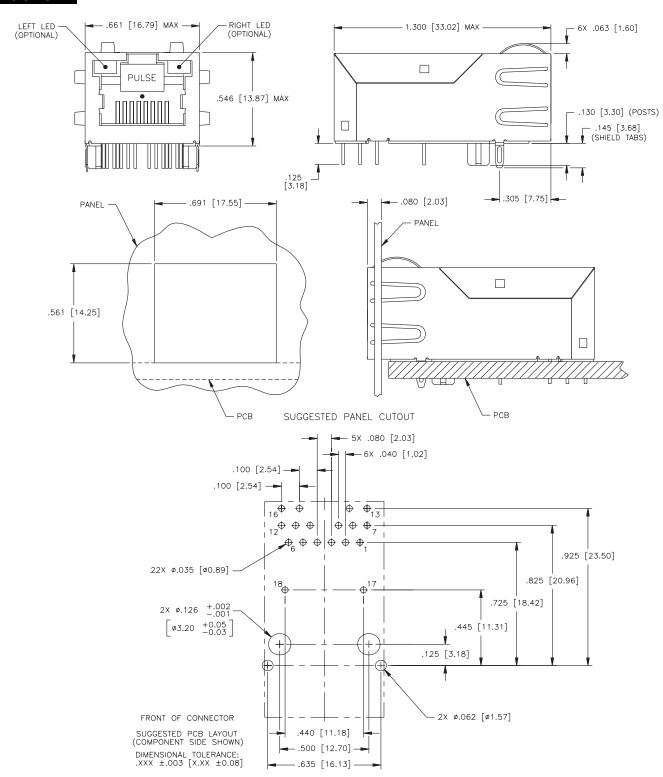
# JK0-0133NL - .661 [16.79] MAX -LEFT LED (OPTIONAL) RIGHT LED (OPTIONAL) 6X .063 [1.60] **PULSE** .546 [13.87] MAX .130 [3.30] (POSTS) .145 [3.68] (SHIELD TABS) .125 [3.18] \_\_\_\_.305 [7.75] - .080 [2.03] .691 [17.55] -PANEL PANEL .561 [14.25] SUGGESTED PANEL CUTOUT PCB - 5X .080 [2.03] -6X .040 [1.02] $\dot{\oplus}|\oplus \oplus_{7}$ <sub>12</sub> $\oplus$ $\oplus$ $\oplus$ 22X Ø.035 [Ø0.89] .825 [20.96] <del>⊕</del><sup>13</sup> .725 [18.42] 2X Ø.126 +.002 -.001 Ø3.20 +0.05 -0.03 .445 [11.31] .125 [3.18] 2X Ø.062 [Ø1.57] FRONT OF CONNECTOR SUGGESTED PCB LAYOUT (COMPONENT SIDE SHOWN) .440 [11.18] .500 [12.70] — DIMENSIONAL TOLERANCE: .XXX ±.003 [X.XX ±0.08] .635 [16.13]

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## Mechanical

### JK0-0145NL

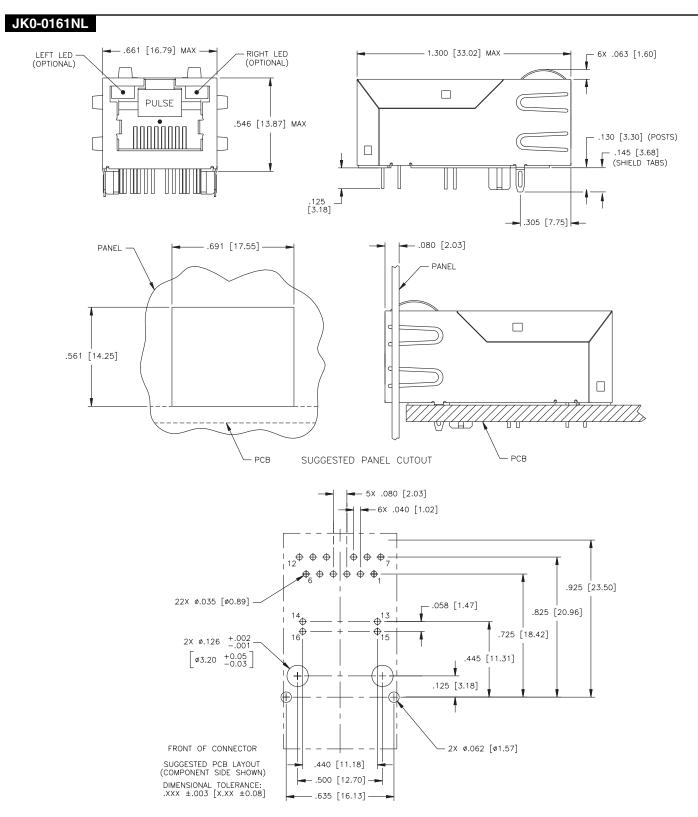






### Mechanical

## Mechanic



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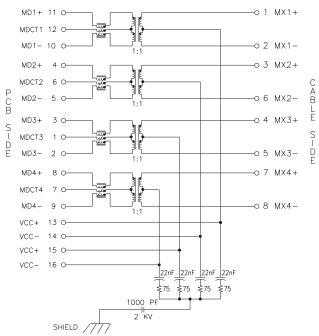


### **Schematics**

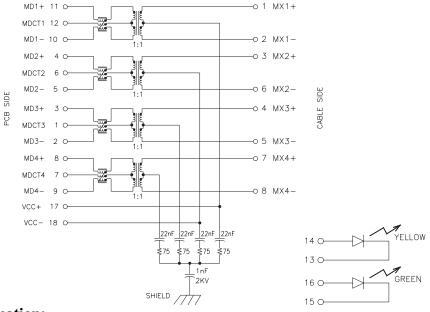
# www.pulseeng.com

#### JK0-0133NL MD1+ 1 MX1+ MDCT1 12 C MD2+ -0 3 MX2+ MDCT2 PCB MD2-0.6 MX2-MD3+ 4 MX3+ MDCT3 о 5 МХЗ-MD3-MD4 +8 C -0 7 MX4+ MDCT4 08 MX4− 22nF 22nF 22nF 22nF 1000 P 2 "KV SHIELD /

# JK0-0161NL



#### JK0-0145NL



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