PULSEJACK™
PowerJack G-UP10

Pulse® A TECHNITROL COMPANY

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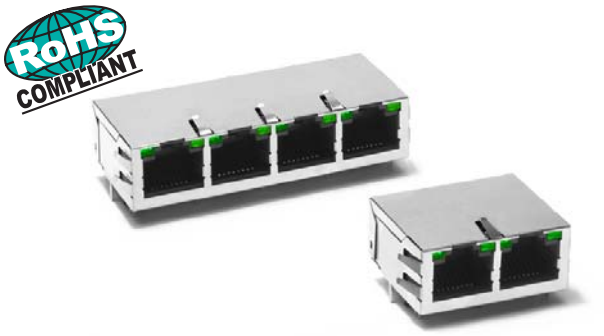
Description:

10/100 Base-TX RJ45 Multi-port with LEDs and integrated magnetics – Designed for most leading PHY manufacturers with the addition of Power Feeding over the signal pairs according to IEEE 802.3.AF



Features and Benefits:

- RoHS-5 peak wave solder temperature rating 235°C
- RoHS-6 peak wave solder temperature rating 260°C
- Unique design ensures a separation of >2.0mm between Power, Signal and Ground pins.
- Compact design includes integrated magnetics, bi-color LEDs

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

RoHS-5 [2] Compliant Part No.	RoHS-6 [3] Compliant Part No.	Port Option	LEDs[1] L/R	Insertion Loss TX/RX (dB TYP)	Return Loss (dB TYP) 100Ω (±15Ω)			Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (Vrms MIN)
				1-100 MHz	1-10 MHz	30 MHz	60-80 MHz	1-10 MHz	30-60 MHz	60-100 MHz	1-50 MHz	50-130 MHz	@60Hz 1 MIN
JG0-0031	JG0-0031NL	1x2	Y-G/G	-0.15	-20	-16	-12	-40	-35	-30	-20	-20	1500
JG0-0032	JG0-0032NL	1x4											

NOTES:
1. LEDs Left/Right: **Y-G** = Bi-color: yellow/green; **G** = green.
2. **RoHS-5** - Product does not contain 5 out of the 6 banned substances specified in the RoHS directive. Product contains lead in applications considered as solders.
3. **RoHS-6** - Product does not contain 5 out of the 6 banned substances specified in the RoHS directive. Some internal connections may contain lead in high temperature solder (solder alloys containing more than 85% lead).

RJ45 Durability Testing Rating

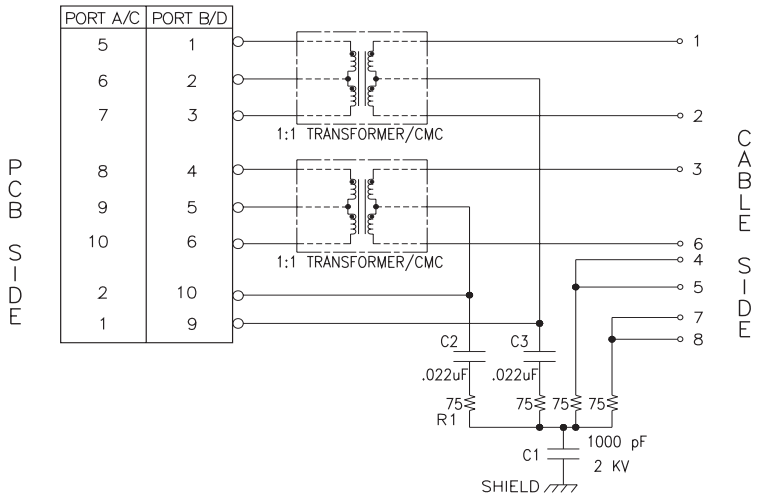
Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
JG0 Series	5lbs./2.268kgs.	5lbs./2.268kgs.	500 Insertions	20lbs./9.072kgs.

RJ45 Material Specification

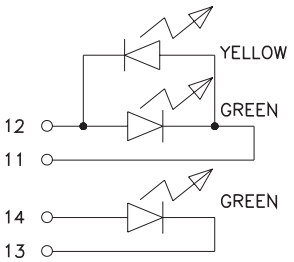
Part Number	Shield		Contact			Housing	
	Material	Finish	Material	Plating Area	Solder Area [2]	Material	Specification
JG0 Series	Brass	10-20µ inches thick nickel over 10-20µ inches thick brass	Phosphor Bronze	30µ inches gold over 30-80µ inches nickel	75-300µ inches tin-lead over 75-300µ inches nickel	Thermoplastic	UL 94 V-0

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

Schematic



LED Pins



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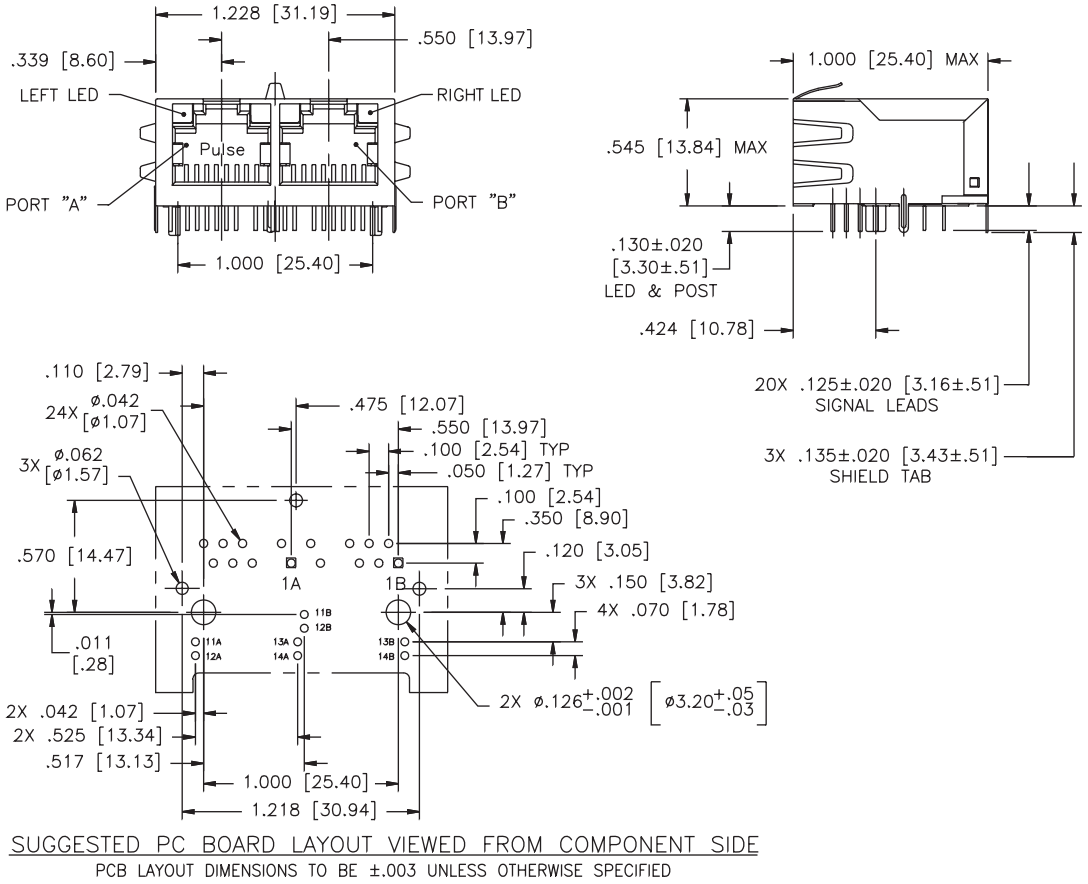
Mechanicals

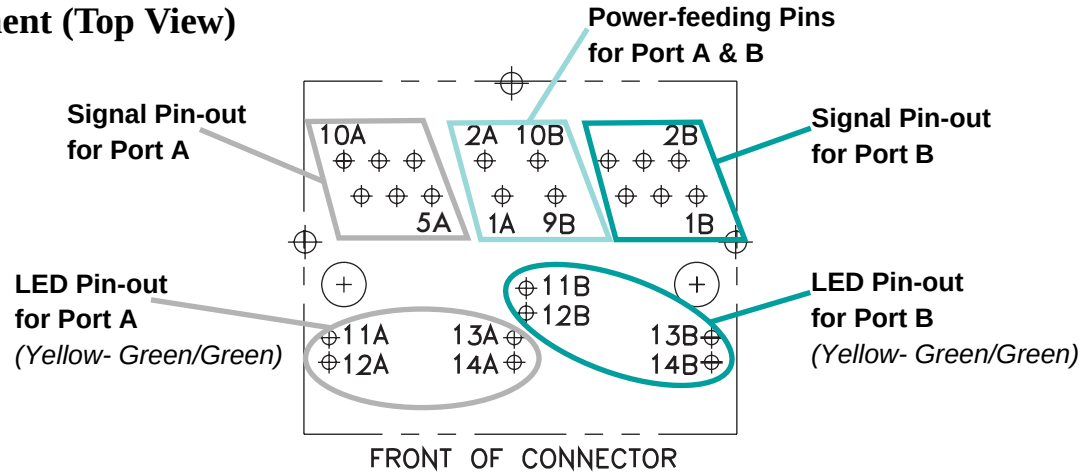
JG0-0031 **Dual Port PoE Solution**



SUGGESTED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE

PCB LAYOUT DIMENSIONS TO BE ±.003 UNLESS OTHERWISE SPECIFIED

Pin Assignment (Top View)



NOTE: *Pins 3A, 4A, 7B and 8B are removed from component to simplify PCB layout and separation of Power, Signal and Ground planes.*

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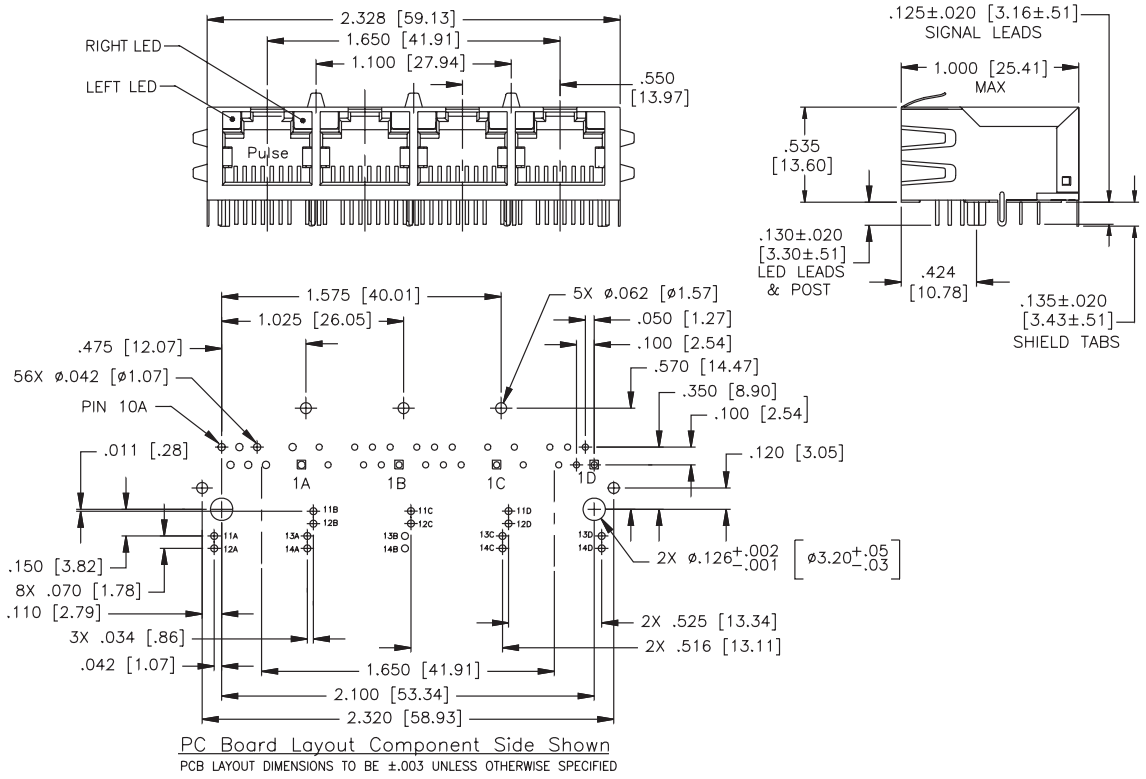
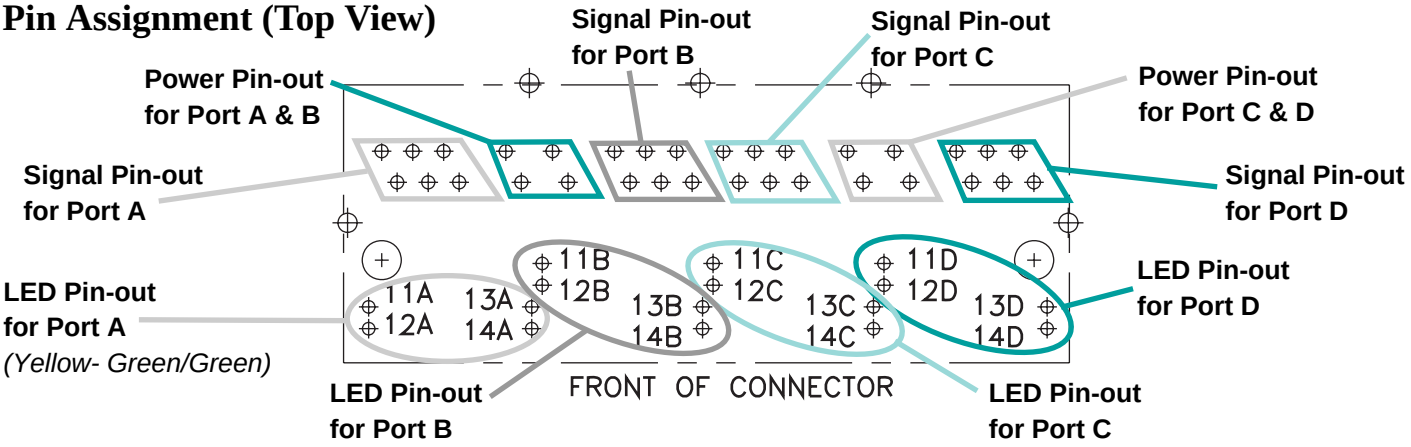
Mechanicals

JG0-0032 **Quad Port PoE Solution**



Pin Assignment (Top View)



NOTE: *Pins 3A, 4A, 7B, 8B, 3C, 4C, 7D and 8D are removed from component to simplify PCB layout and separation of Power, Signal and Ground planes.*

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