

PULSEJACK™

PowerJack G-UP10







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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

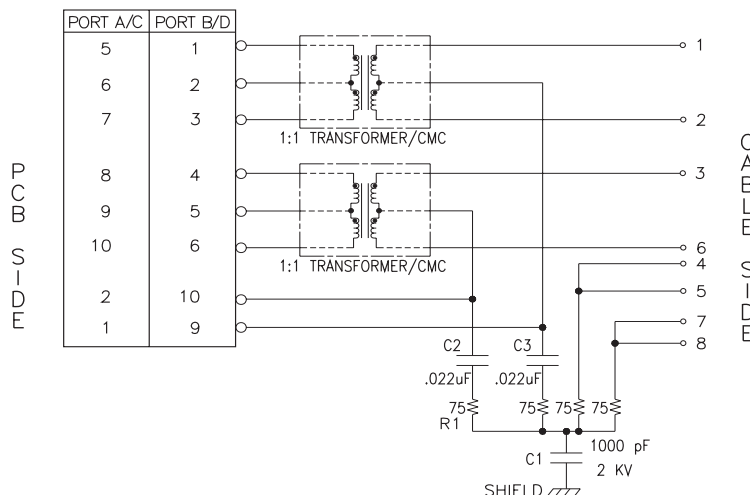
Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
JG0 Series	5lbs./2.268kgs.	5lbs./2.268kgs.	500 Insertions	20lbs./9.072kgs.

RJ45 Material Specification

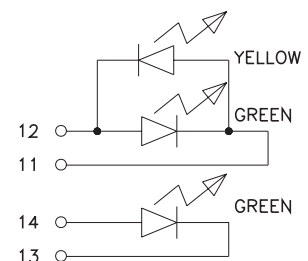
Part Number	Shield		Contact			Housing	
	Material	Finish	Material	Plating Area	Solder Area ²	Material	Specification
JG0 Series	Brass	10-20μ inches thick nickel over 10-20μ inches thick brass	Phosphor Bronze	30μ inches gold over 30-80μ inches nickel	75-300μ inches tin-lead over 75-300μ inches nickel	Thermoplastic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

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

Schematic

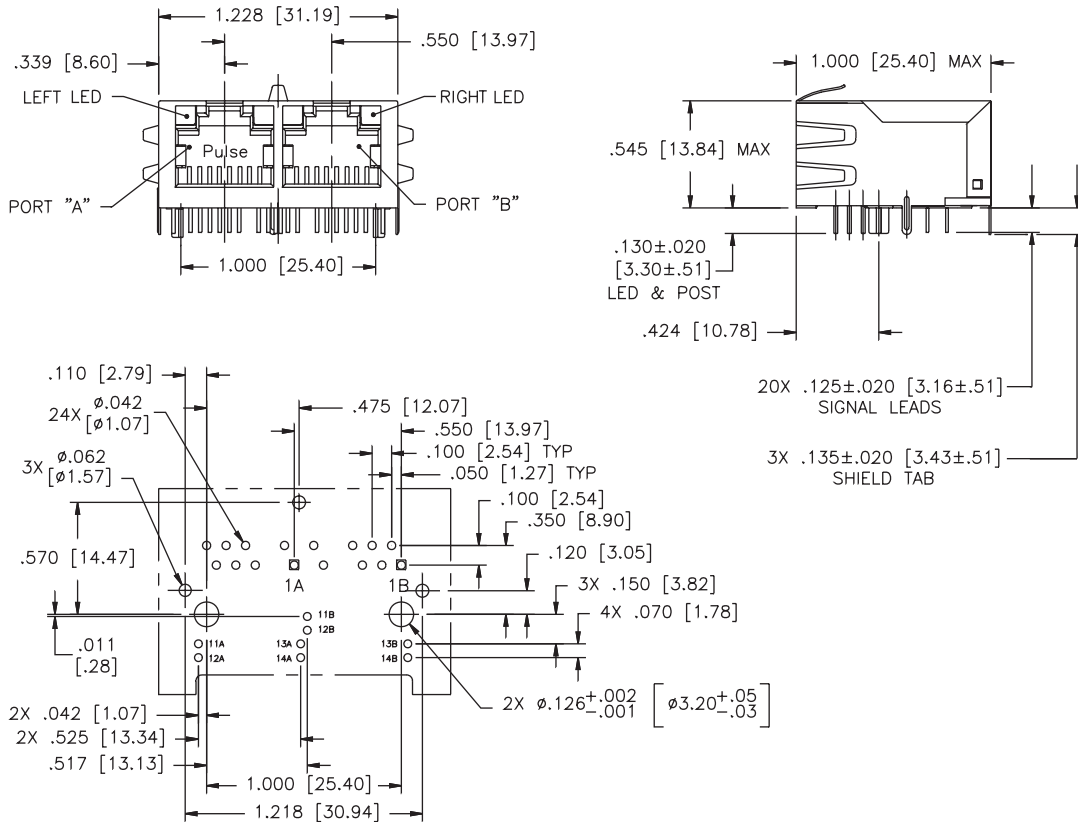


LED Pins



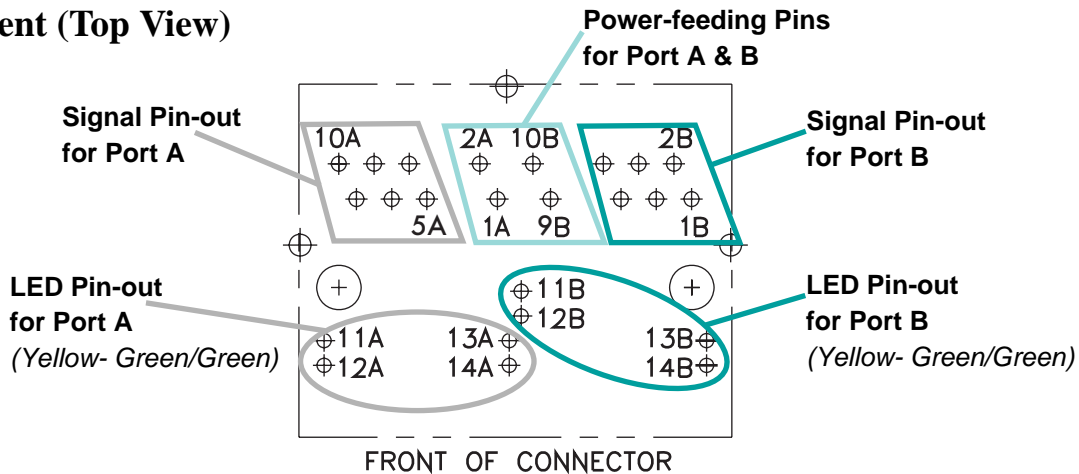
Mechanicals

JG0-0031 Dual Port PoE Solution



SUGGESTED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE
PCB LAYOUT DIMENSIONS TO BE ±.003 UNLESS OTHERWISE SPECIFIED

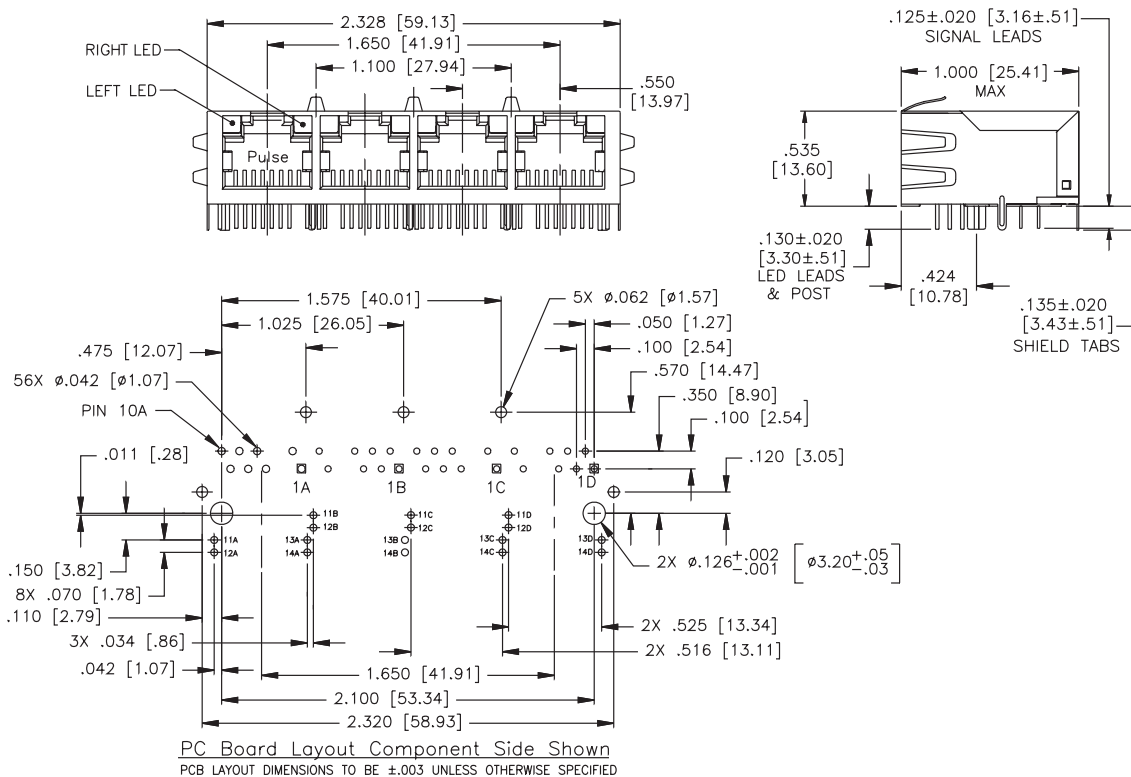
Pin Assignment (Top View)



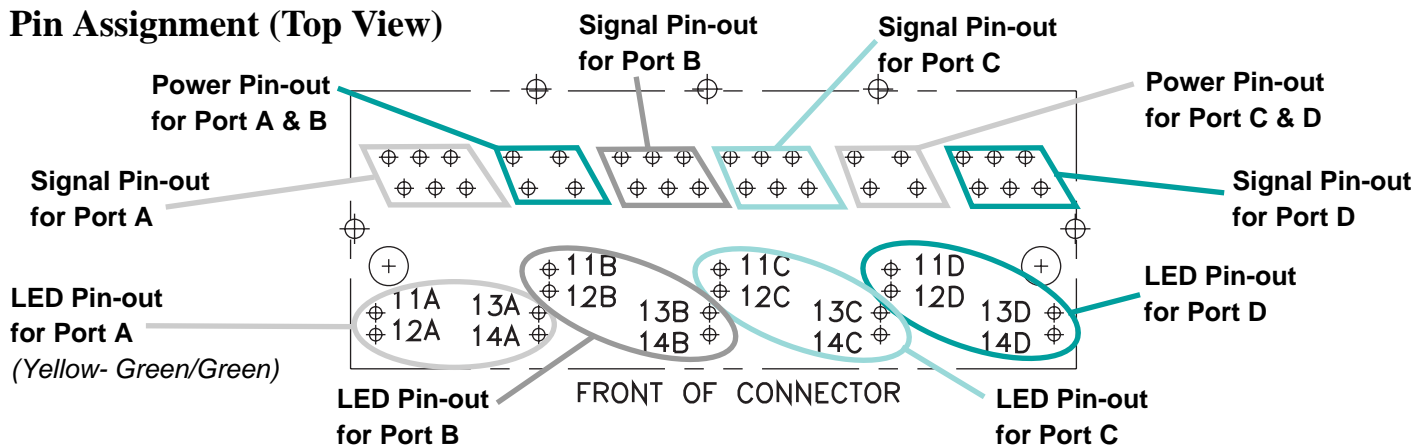
NOTE: Pins 3A, 4A, 7B and 8B are removed from component to simplify PCB layout and separation of Power, Signal and Ground planes.

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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