

PULSEJACK™

PowerJack G-UP10



Description:

www.pulseeng.com

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

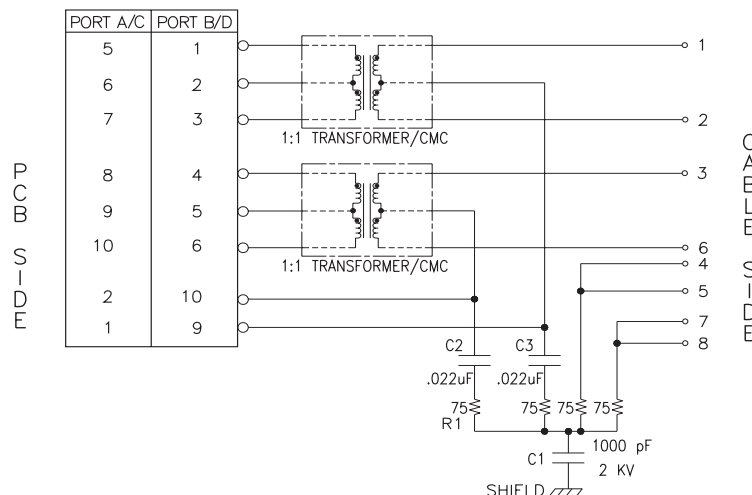
Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
JG0 Series	5lbs./2.268kgs.	5lbs./2.268kgs.	500 Insertions	20lbs./9.072kgs.

RJ45 Material Specification

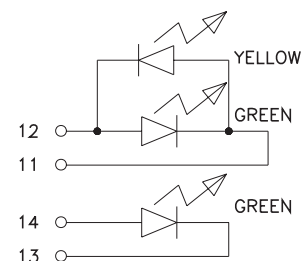
Part Number	Shield		Contact			Housing	
	Material	Finish	Material	Plating Area	Solder Area ²	Material	Specification
JG0 Series	Brass	10-20μ inches thick nickel over 10-20μ inches thick brass	Phosphor Bronze	30μ inches gold over 30-80μ inches nickel	75-300μ inches tin-lead over 75-300μ inches nickel	Thermoplastic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

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

Schematic

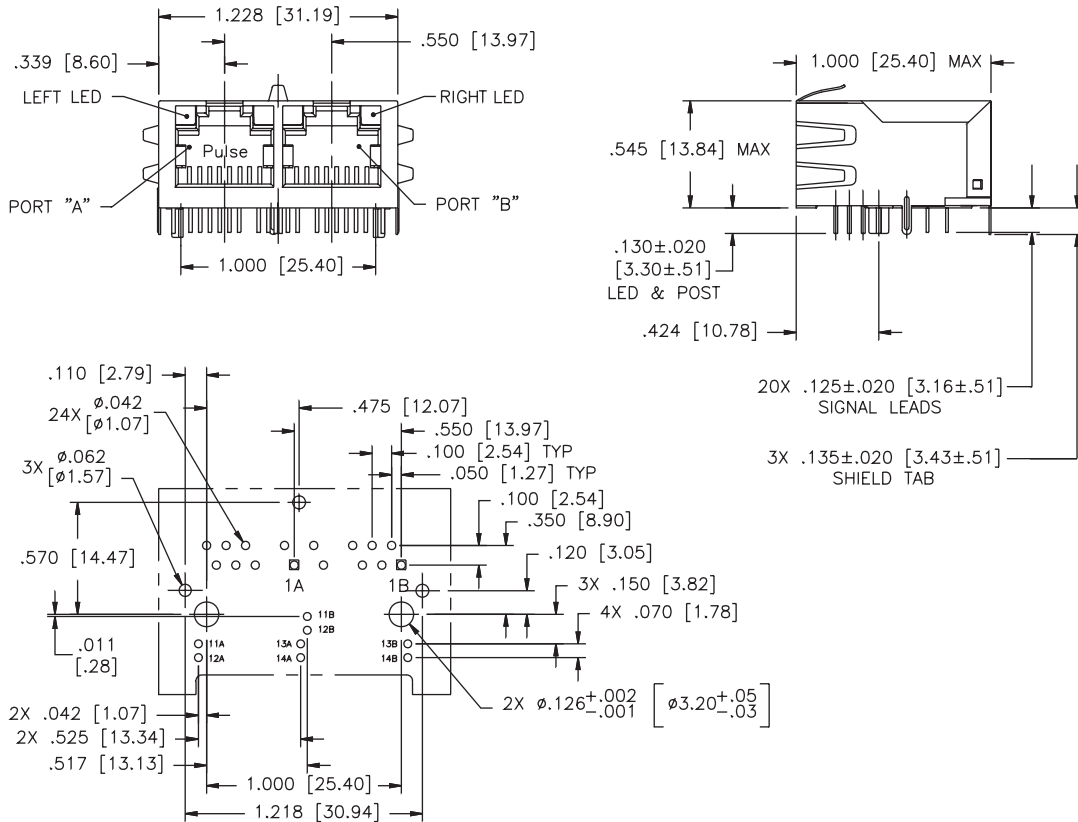


LED Pins



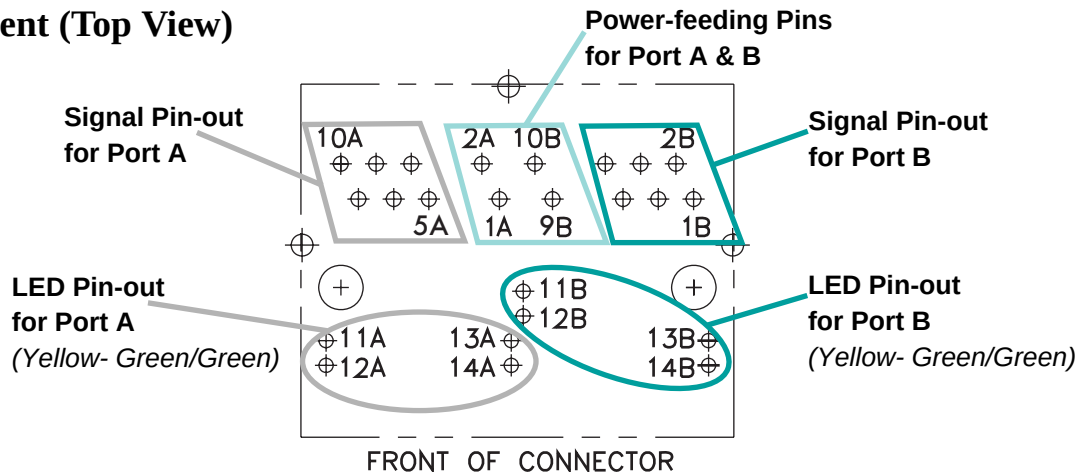
Mechanicals

JG0-0031 Dual Port PoE Solution



SUGGESTED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE
PCB LAYOUT DIMENSIONS TO BE ± 0.003 UNLESS OTHERWISE SPECIFIED

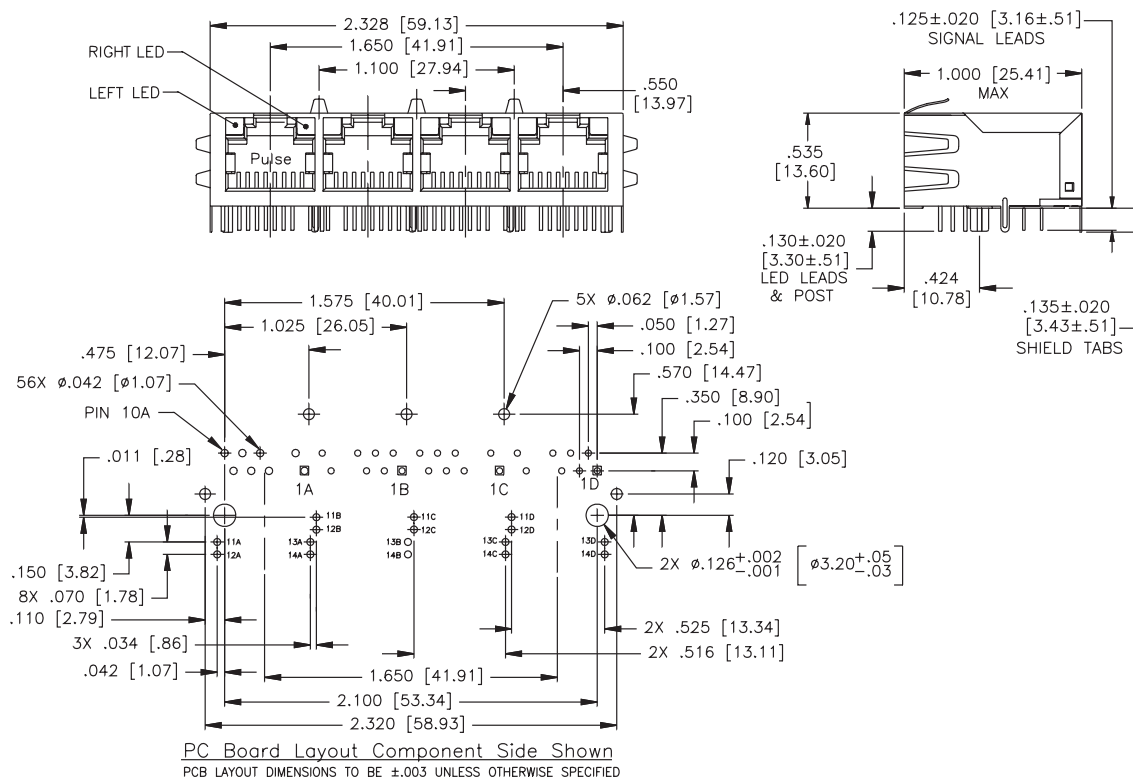
Pin Assignment (Top View)



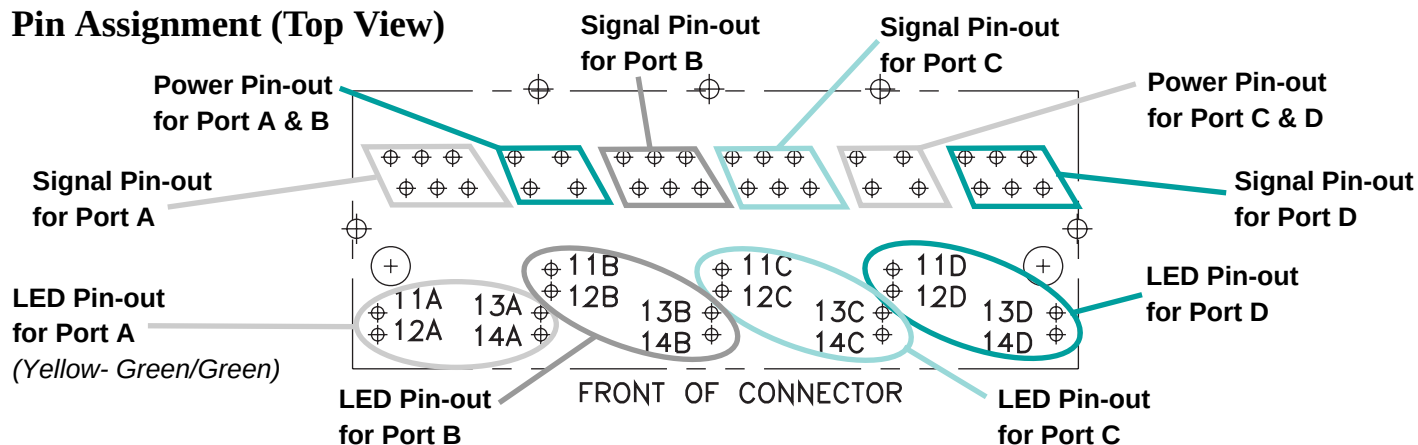
NOTE: Pins 3A, 4A, 7B and 8B are removed from component to simplify PCB layout and separation of Power, Signal and Ground planes.

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.

For More Information:

Pulse Worldwide Headquarters

12220 World Trade Dr.
San Diego, CA 92128
U.S.A.

www.pulseeng.com

TEL: 858 674 8100
FAX: 858 674 8262

Pulse Europe

Einsteinstrasse 1
D-71083 Herrenberg
Germany

Tel: 49 7032 7806 116
Fax: 49 7032 7806 135

Pulse China Headquarters

No. 1
Industrial District
Changan, Dongguan
China

Tel: 86 769 85538070
Fax: 86 769 85538870

Pulse North China

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

Tel: 86 21 54643211/2
Fax: 86 21 54643210

Pulse South Asia

150 Kampong Ampat
#07-01/02
KA Centre
Singapore 368324

Tel: 65 6287 8998
Fax: 65 6280 0080

Pulse North Asia

No. 26
Kao Ching Rd.
Yang Mei Chen
Taoyuan Hsien
Taiwan, R. O. C.

Tel: 886 3 4641811
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, 2006. Pulse Engineering, Inc. All rights reserved.

www.pulseeng.com

J416.B (6/06)