

PULSEJACK™

PowerJack T12







Description:

10/100 Base-TX RJ45 single 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 802.3af



Features and Benefits:

-  Single port Connector for PoE applications
-  Contains Surge Suppression to protect IC from power spikes
-  1500 Vrms minimum breakdown between Primary and Secondary windings
-  Unique design ensures a separation of >2.0mm between Power, Signal and Ground pins.

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

Part Number	Tab Option	LEDs ³ L/R	Insertion Loss TX/RX (dB TYP)				Return Loss (dB TYP) 100 Ω (±15 Ω)			Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (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	@60 Hz 1 MIN			
JK0-0020	UP	Y-G/G	-1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500 Vrms			
JK0-0025	UP	Y-G/G	- 1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500 Vrms			
JK0-0026	UP	Y-G/G	- 1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500 Vrms			
JK0-0044	UP	—	- 1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500 Vrms			

NOTES:

- Both transmit and receive channels meet **IEEE 802.3i/u** (10/100 Base-T) and **IEEE 802.3af** (10/100 Base-T PoE) specifications.
- LEDs Left/Right: **Y-G** = Bicolor: yellow/green; **G** = green.

RJ45 Durability Testing Rating

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

RJ45 Material Specification

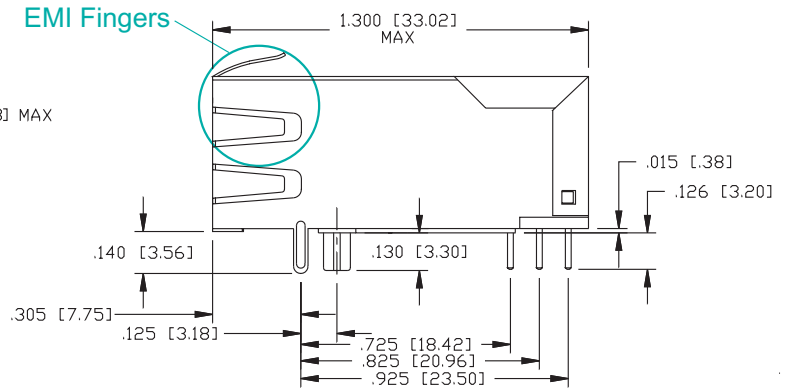
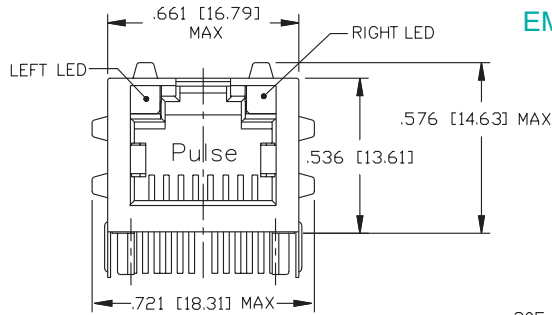
Part Number	Shield		Contact			Housing	
	Material	Finish	Material	Plating Area	Solder Area	Material	Specification
JK0 Series	Brass	20-40μ inches thick nickel over Brass	Phosphor Bronze	15μ inches gold over 30-80μ inches nickel	75-300μ inches tin-lead over 75-300μ inches nickel	Thermoplastic	UL 94 V-0

Notes:

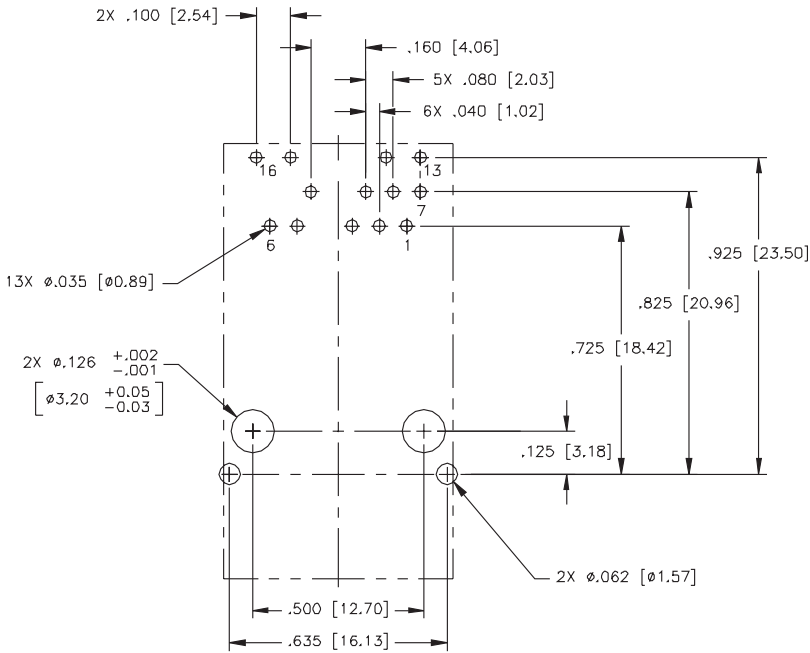
- All connector part numbers listed above comply to the above limits.
- Connector dimensions comply with FCC dimension requirements.

Mechanical

JK0-00XX



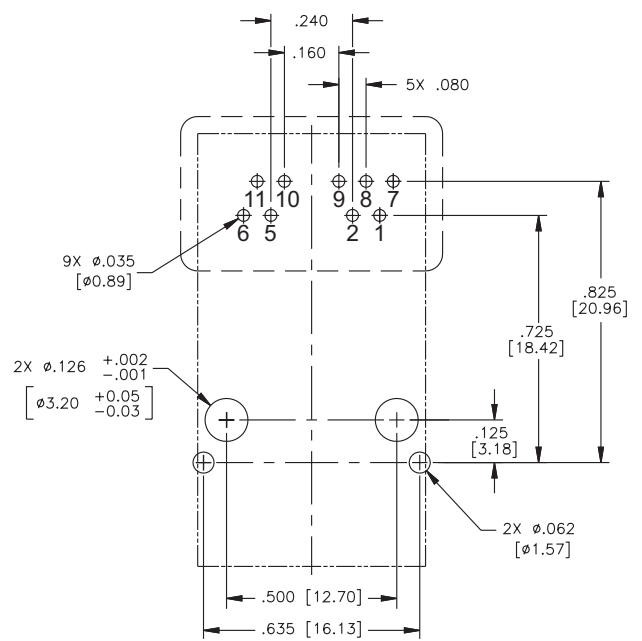
JK0-0020/0025/0026



FRONT OF CONNECTOR

SUGGESTED PCB LAYOUT
COMPONENT SIDE SHOWN
DIMENSIONAL TOLERANCE:
XXX ±.003 [X.XX ±0.08]

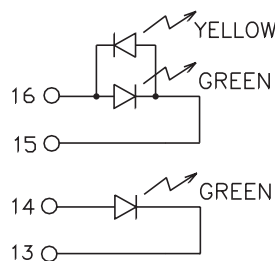
JK0-0044



FRONT OF CONNECTOR

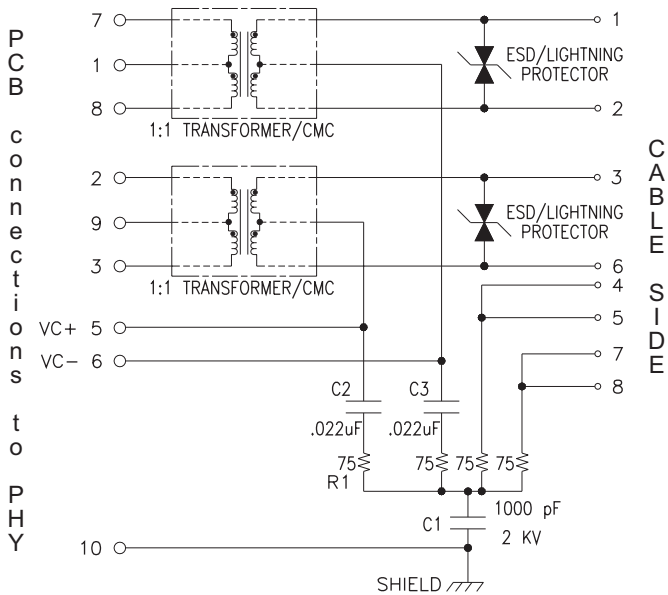
SUGGESTED PCB LAYOUT
COMPONENT SIDE SHOWN
DIMENSIONAL TOLERANCE:

LED Pins

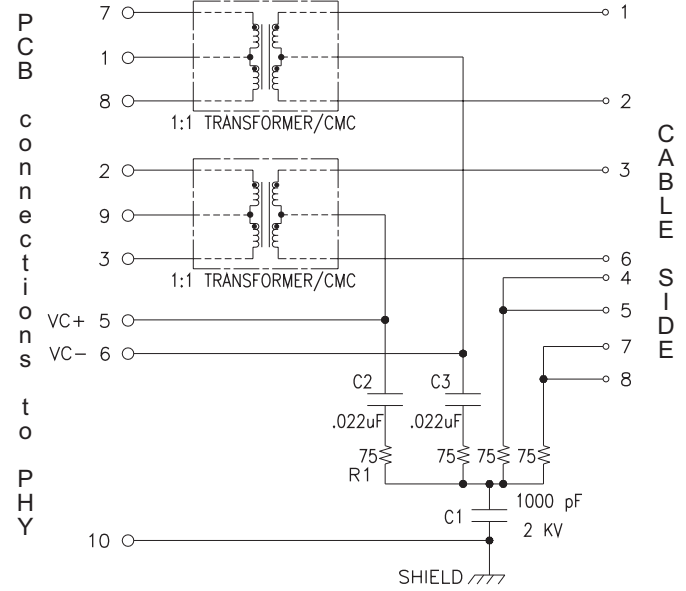


Schematics

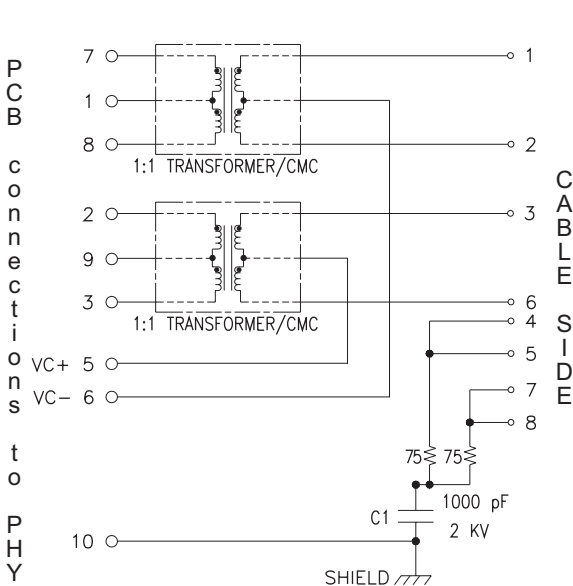
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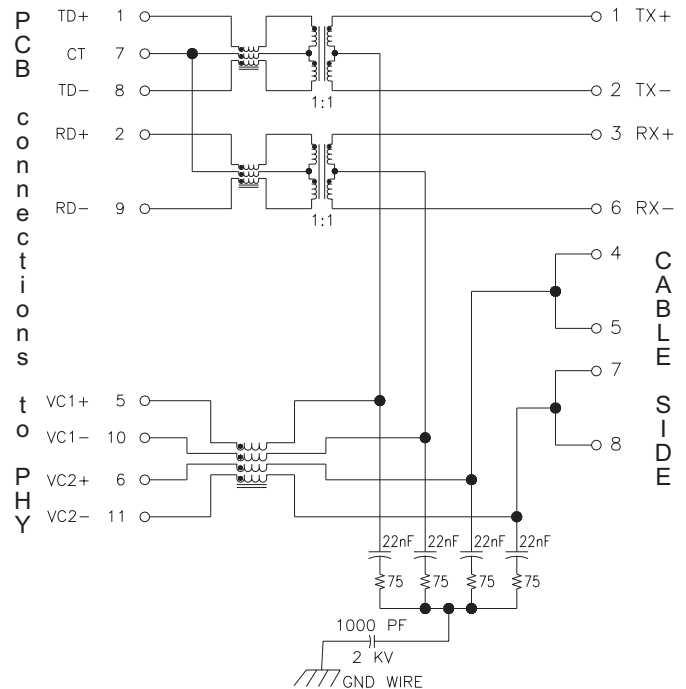
JK0-0025



JK0-0026



JK0-0044



For More Information:

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12220 World Trade Drive San Diego, CA 92128 U.S.A. http://www.pulseeng.com TEL: 858 674 8100 FAX: 858 674 8262	3 Huxley Road Surrey Research Park Guildford, Surrey GU2 5RE United Kingdom TEL: 44 1483 401700 FAX: 44 1483 401701	Zone Industrielle F-39270 Orgelet France TEL: 33 3 84 35 04 04 FAX: 33 3 84 25 46 41	150 Kampong Ampat #07-01/02 KA Centre Singapore 368324 TEL: 65 6287 8998 FAX: 65 6280 0080	3F-4, No. 81, Sec. 1 HsinTai Wu Road Hsi-Chih, Taipei Hsien Taiwan, R.O.C. Tel: 886 2 2698 0228 FAX: 886 2 2698 0948	Unit 11, 11/F Wah Lai Industrial Centre 10-14 Kwei Tei Street, Fotan, Shatin, Hong Kong TEL: 852 2788 6588 FAX: 852 2776 1055	

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