

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:

-  RoHS- peak wave solder temperature rating 260°C
-  Single port Connector for PoE applications
-  Contains Surge Suppression to protect IC from power spikes

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

RoHS Compliant	Tab Option	LEDs 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	60-90 MHz	1-10 MHz	30-60 MHz	60-100 MHz	1-50 MHz	
JK0-0020NL	UP	Y-G/G	-1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500
JK0-0025NL	UP	Y-G/G	-1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500
JK0-0026NL	UP	Y-G/G	-1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500
JK0-0044NL	UP	—	-1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500

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	5lbs./2.268kgs.	5lbs./2.268kgs.	500 Insertions	20lbs./9.072kgs.

RJ45 Material Specification

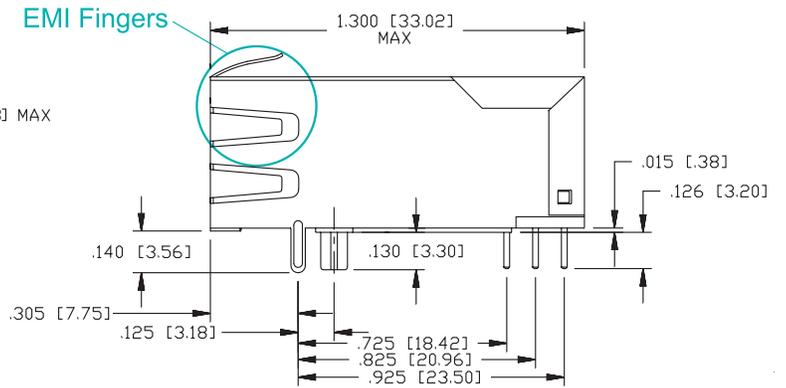
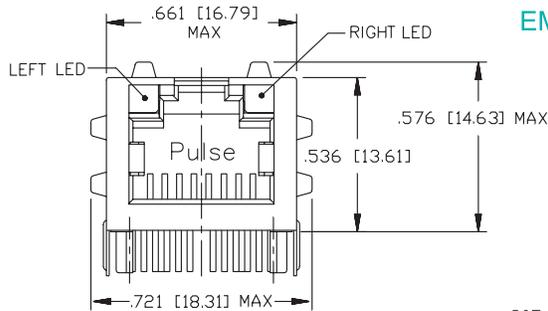
Part Number	Shield		Contact			Housing		MSL ³ Rating
	Material	Finish	Material	Plating Area	Solder Area ²	Material	Specification	
JK0 Series	Brass	20-40μ inches thick nickel over brass	Phosphor Bronze	15μ inches gold over 30-80μ inches nickel	Tin matte finish	Thermoplastic	UL 94 V-0	1

NOTES:

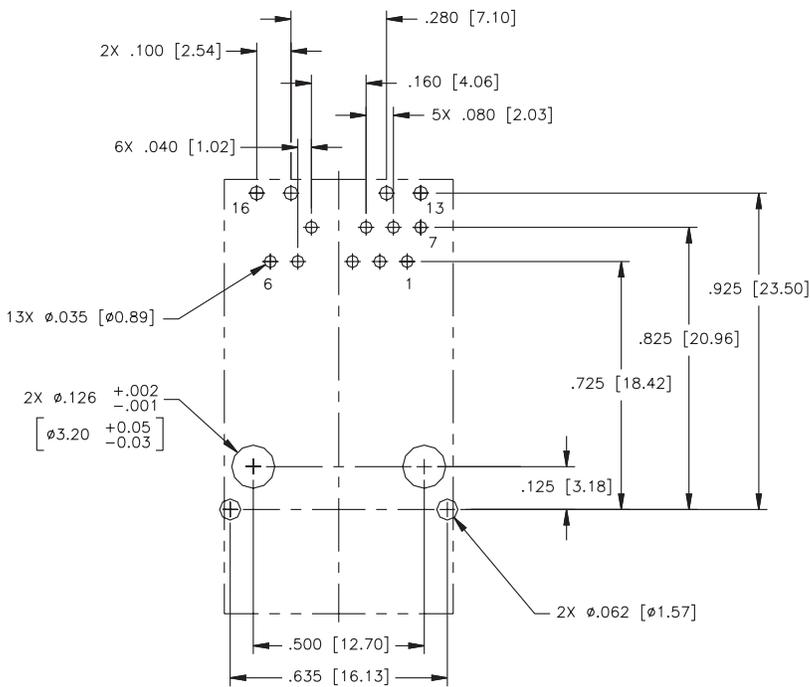
- Connector dimensions comply with FCC dimension requirements.
- NL parts are tin matte finish over nickel.
- MSL - Moisture Sensitivity Level class limits = 1 to 5 (Highest: 1; Lowest: 5).

Mechanical

JK0-00XXNL



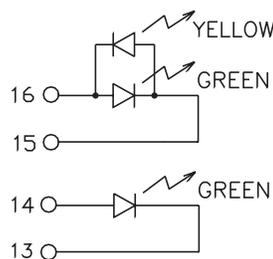
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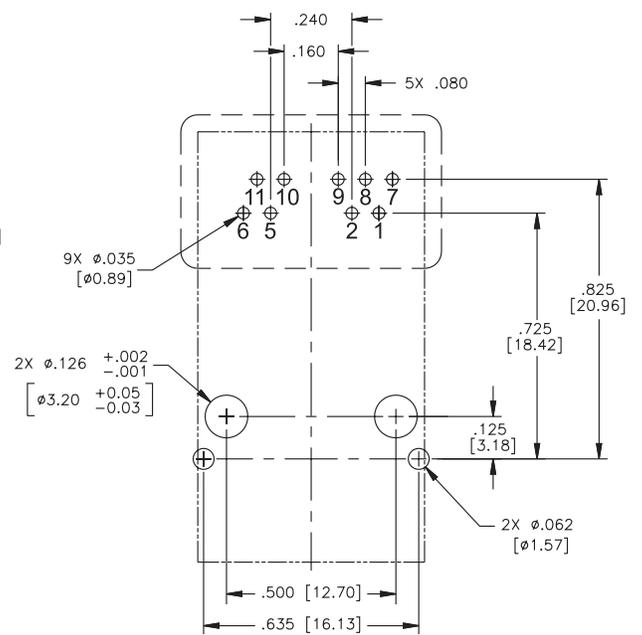
FRONT OF CONNECTOR

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

LED Pins



JK0-0044NL

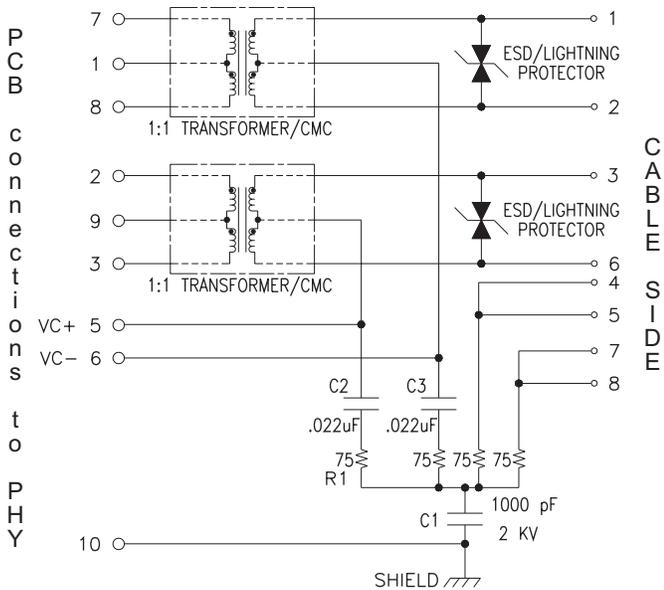


FRONT OF CONNECTOR

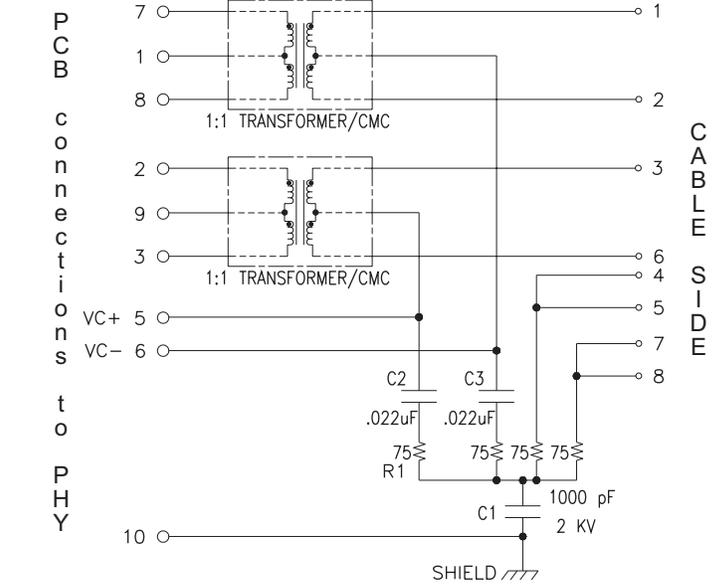
SUGGESTED PCB LAYOUT
COMPONENT SIDE SHOWN
DIMENSIONAL TOLERANCE:
.XXX ±.003 [X.XX ±0.08]

Schematics

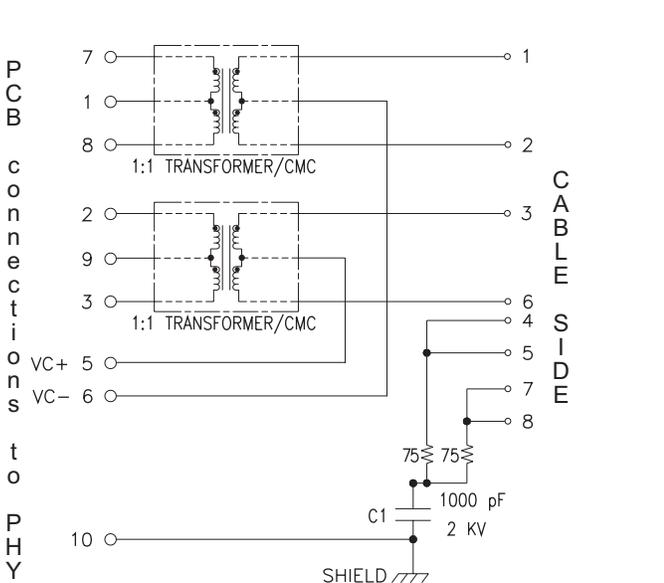
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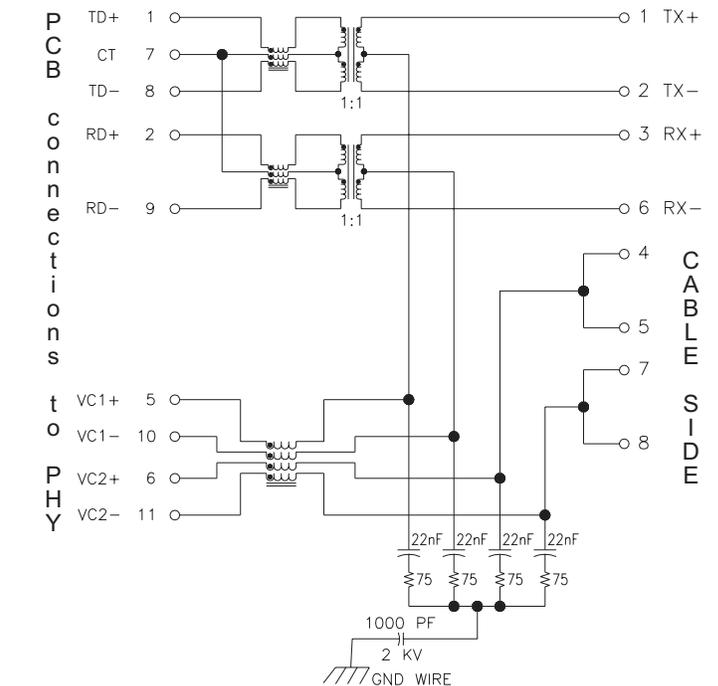
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For More Information:

Pulse Worldwide Headquarters

Two Pearl Buck Court
Bristol, PA 19007
U.S.A.

www.pulseeng.com

Tel: 215 781 6400

Fax: 215 781 6403

Pulse Europe

Einsteinstrasse 1
D-71083 Herrenberg
Germany

Tel: 49 7032 7806 0

Fax: 49 7032 7806 135

Pulse China Headquarters

B402, Shenzhen Academy of
Aerospace Technology Bldg.
10th Kejian Rd.
High-Tech Zone
Nanshan District
Shenzen, PR China 518057

Tel: 86 755 33966678

Fax: 86 755 33966700

Pulse North China

Room 2704/2705
Super Ocean Finance Ctr.
2067 Yan An Rd. West
Shanghai 200336
China

Tel: 86 21 62787060

Fax: 86 2162786973

Pulse South Asia

135 Joo Seng Rd.
#03-02
PM Industrial Bldg.
Singapore 368363

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 4643715

Fax: 886 3 4641911

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