

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-5 peak wave solder temperature rating 235°C
- Ⓜ RoHS-6 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-5 ³ Compliant Part No.	RoHS-6 ⁴ Compliant Part No.	Tab Option	LEDs ² 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) @60Hz 1 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	
JK0-0020	JK0-0020NL	UP	Y-G/G	-1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500	
JK0-0025	JK0-0025NL	UP	Y-G/G	-1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500	
JK0-0026	JK0-0026NL	UP	Y-G/G	-1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500	
JK0-0044	JK0-0044NL	UP	—	-1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500	

NOTES:

1. Both transmit and receive channels meet **IEEE 802.3i/u** (10/100 Base-T) and **IEEE 802.3af** (10/100 Base-T PoE) specifications.
2. LEDs Left/Right: **Y-G** = Bicolor: yellow/green; **G** = green.
3. **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.
4. **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)
JK0 Series	5lbs./2.268kgs.	5lbs./2.268kgs.	500 Insertions	20lbs./9.072kgs.

RJ45 Material Specification

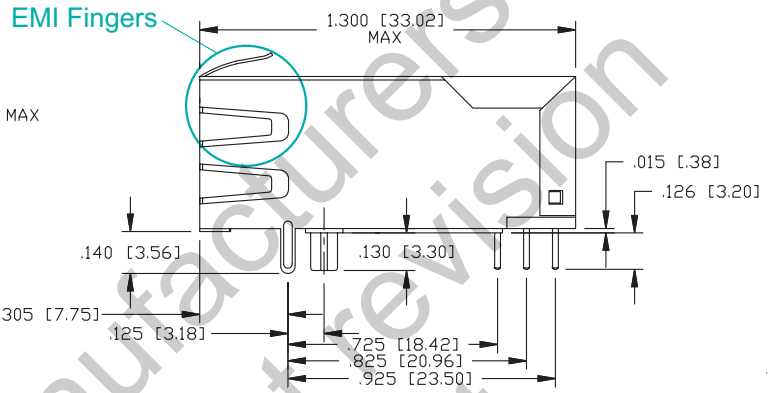
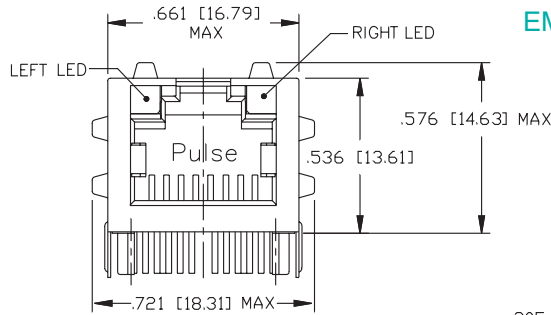
Part Number	Shield		Contact			Housing		MSL ³ Rating
	Material	Finish	Material	Plating Area	Solder Area ²	Material	Specification	
JK0 Series	Brass	20-40μ inches thick nickel over brass	Phosphor Bronze	15μ inches gold over 30-80μ inches nickel	75-300μ inches tin-lead over 75-300μ inches nickel	Thermoplastic	UL 94 V-0	1

NOTES:

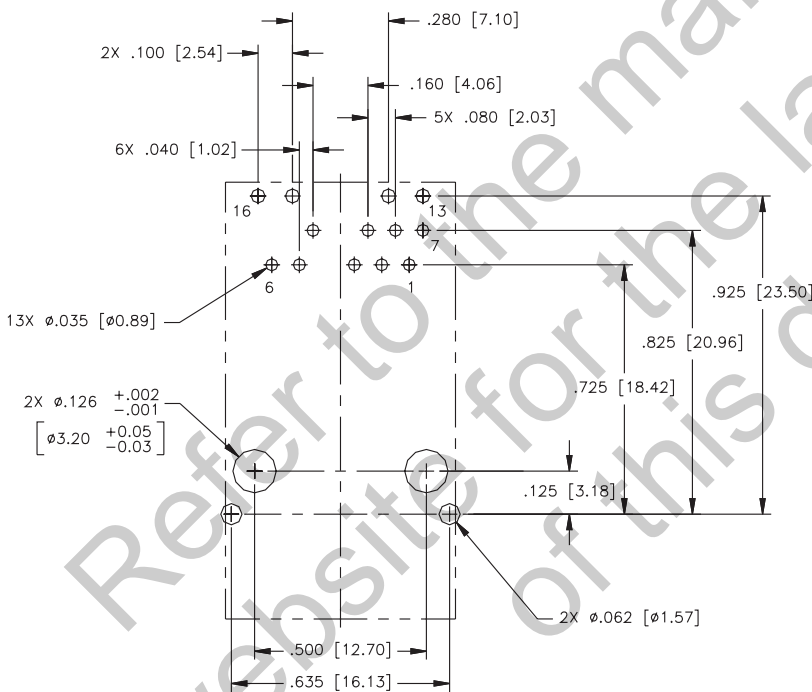
1. Connector dimensions comply with FCC dimension requirements.
2. NL parts are tin matte finish over nickel.
3. MSL - Moisture Sensitivity Level class limits = 1 to 5 (Highest: 1; Lowest: 5).

Mechanical

JK0-00XX

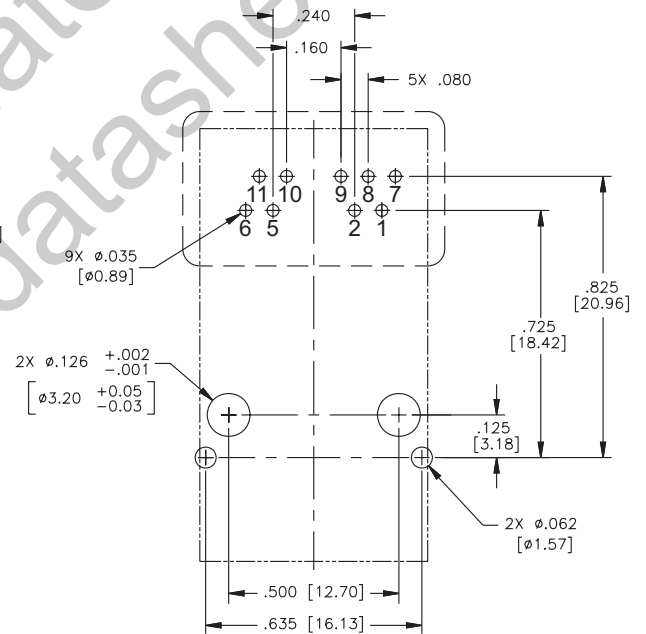


JK0-0020/0025/0026



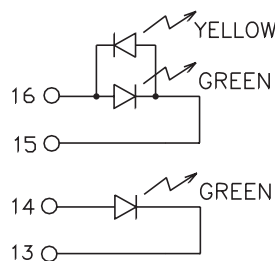
FRONT OF CONNECTOR
SUGGESTED PCB LAYOUT
COMPONENT SIDE SHOWN
DIMENSIONAL TOLERANCE:
.XXX ±.003 [X.XX ±0.08]

JK0-0044



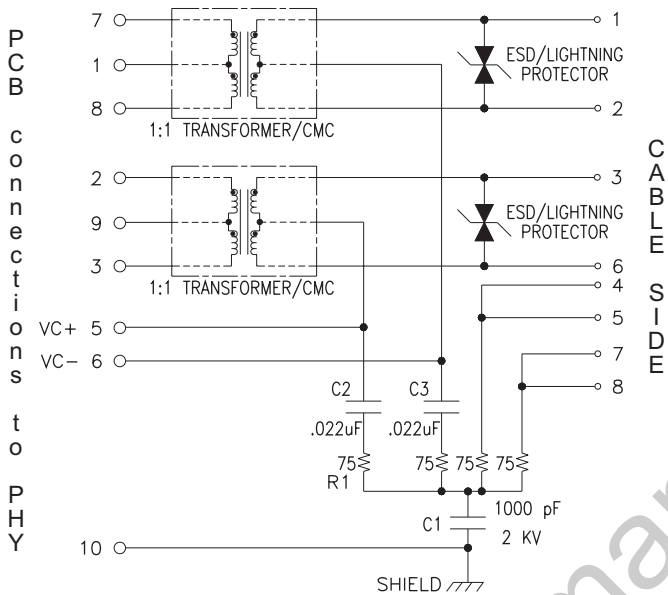
FRONT OF CONNECTOR
SUGGESTED PCB LAYOUT
COMPONENT SIDE SHOWN
DIMENSIONAL TOLERANCE:
.XXX ±.003 [X.XX ±0.08]

LED Pins

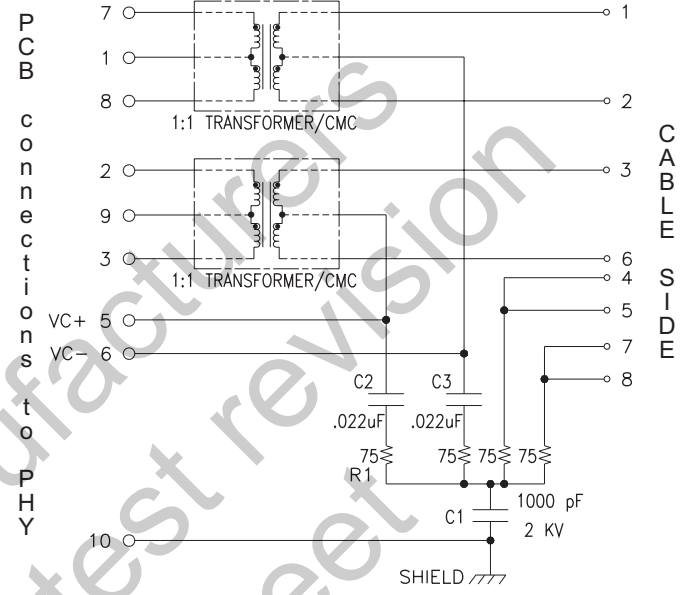


Schematics

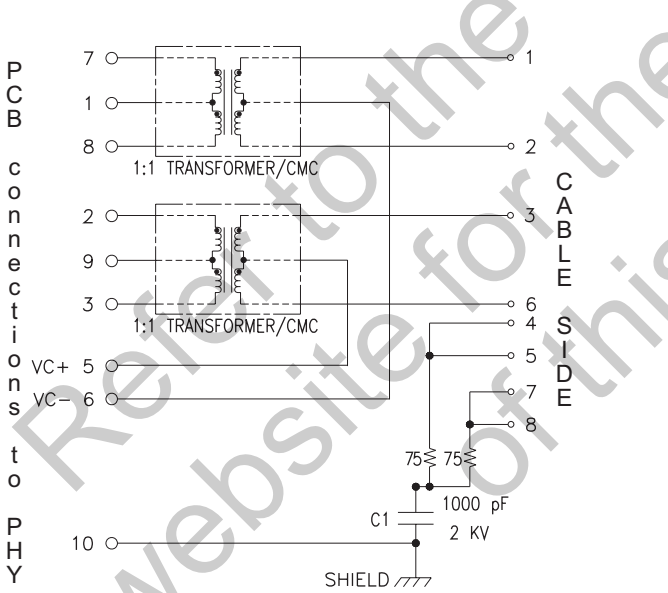
JK0-0020



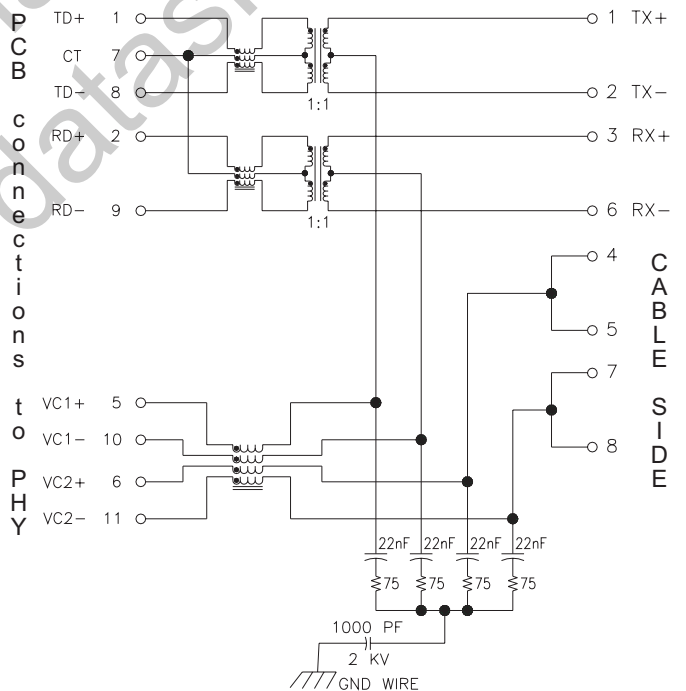
JK0-0025



JK0-0026



JK0-0044



For More Information:

Pulse Worldwide Headquarters
12220 World Trade Drive
San Diego, CA 92128
U.S.A.
www.pulseeng.com
TEL: 858 674 8100
FAX: 858 674 8262

Pulse Northern Europe
3 Huxley Road
Surrey Research Park
Guildford, Surrey GU2 5RE
United Kingdom
TEL: 44 1483 401700
FAX: 44 1483 401701

Pulse Southern Europe
Zone Industrielle
F-39270
Orgelet
France
TEL: 33 3 84 35 04 04
FAX: 33 3 84 25 46 41

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 Road
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 Road
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.