

Description:

10/100/1000 Base-T RJ45 single port (1x1) Tab-UP with or without LEDs integrated magnetics connector (ICM), designed to support applications, such as Network Interface Cards (NIC), LAN-on-Motherboard (LOM), and PC applications.



Features and Benefits:

- RoHS-5 peak wave solder temperature rating 235°C
- RoHS-6 peak wave solder temperature rating 260°C
- Suitable for CAT 5 and 6 Fast Ethernet cable or better UTP

Electrical Performance Summary:

- Meets IEEE 802.3 specification
- 350µH minimum OCL with 8mA bias current
- High performance for maximum EMI suppression

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

RoHS-5 Part No.	RoHS-6 Part No.	LEDs ¹ L/R	Insertion Loss TX/RX (dB)	Return Loss (dB TYP) 100 Ω (±15 Ω)					Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (MIN) @60 Hz 1 MIN
				1-100 MHz	1-10 MHz	30 MHz	60-80 MHz	80-100 MHz	1-10 MHz	32-65 MHz	65-100 MHz	1-125 MHz	125-500 MHz	
JK0-0004	JK0-0004NL	G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500 Vrms	
JK0-0014	JK0-0014NL	G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500 Vrms	
JK0-0016	JK0-0016NL	Y-G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500 Vrms	
JK0-0017	JK0-0017NL	NONE	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500 Vrms	
JK0-0018 ²	JK0-0018NL ²	NONE	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500 Vrms	
JK0-0036	JK0-0036NL	Y-G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500 Vrms	
JK0654219	JK0654219NL	G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500 Vrms	

Notes: 1. LEDs Left/Right: **G** = green; **Y** = yellow; **Y-G** = Bicolor. 2. **JK0-0018** and **JK0-0018NL** is supplied without EMI tabs; refer to Mechanical drawing for explanation of EMI tabs. 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)
JK Series	5 lbs./2.268 kgs.	5 lbs./2.268 kgs.	750 Insertions	20 lbs./9.072 kgs.

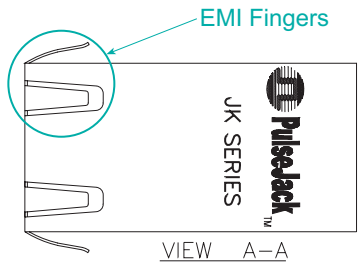
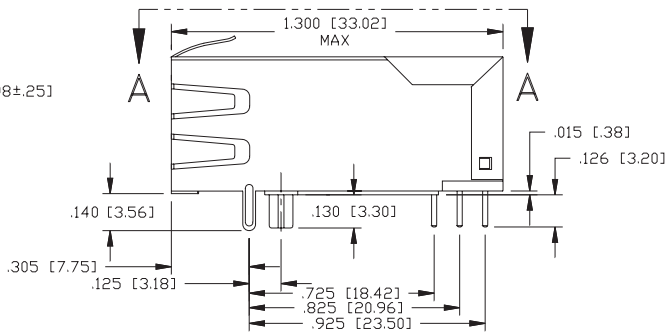
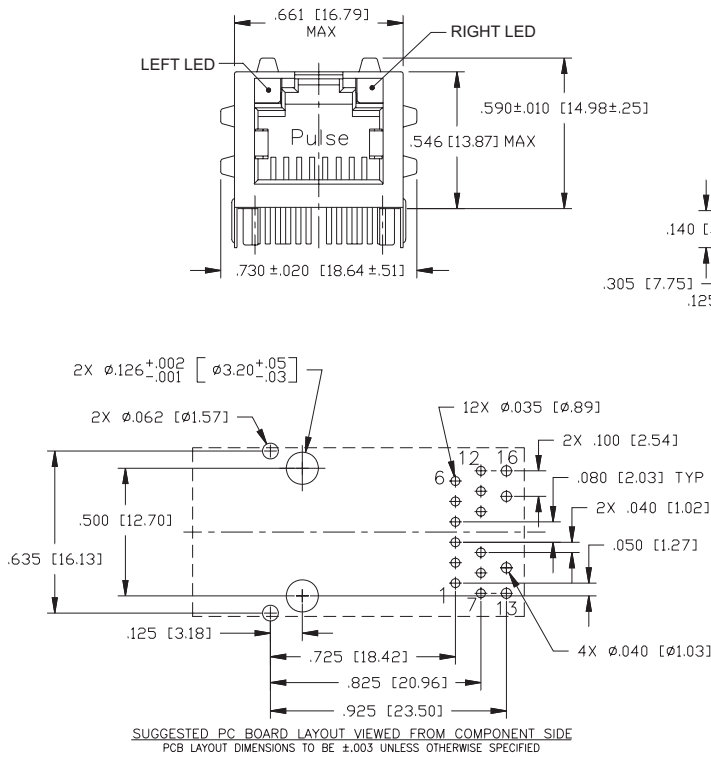
RJ45 Material Specification

Part Number	Shield		Contact			Housing		MSL ² Rating
	Material	Finish	Material	Plating Area	Solder Area ³	Material	Specification	
JK 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. MSL - Moisture Sensitivity Level class limits = 1 to 5 (Highest: 1; Lowest: 5). 3. NL parts are tin matte finish over nickel.

Mechanical

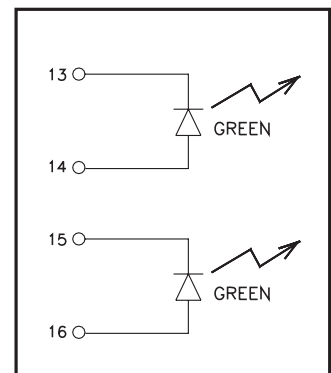
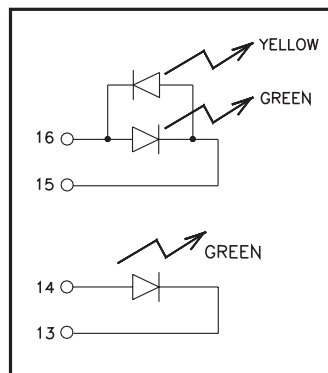
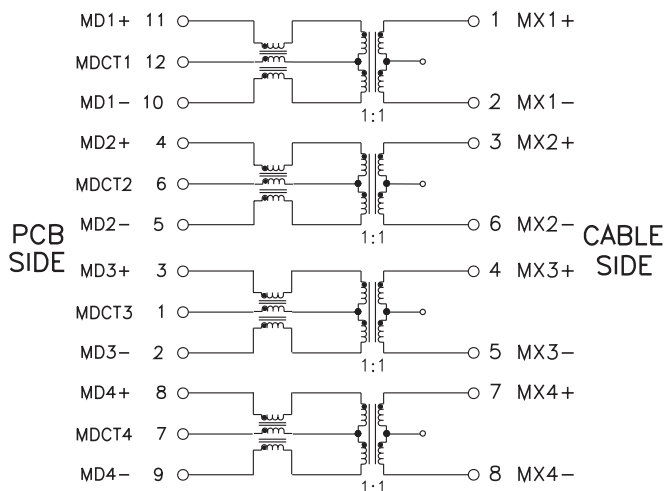
JK0-0004 / JK0-001X / JK0-0036 / JK0654219



NOTE: JK0-0017 and JK0-0018 are supplied without LEDs.

Schematic

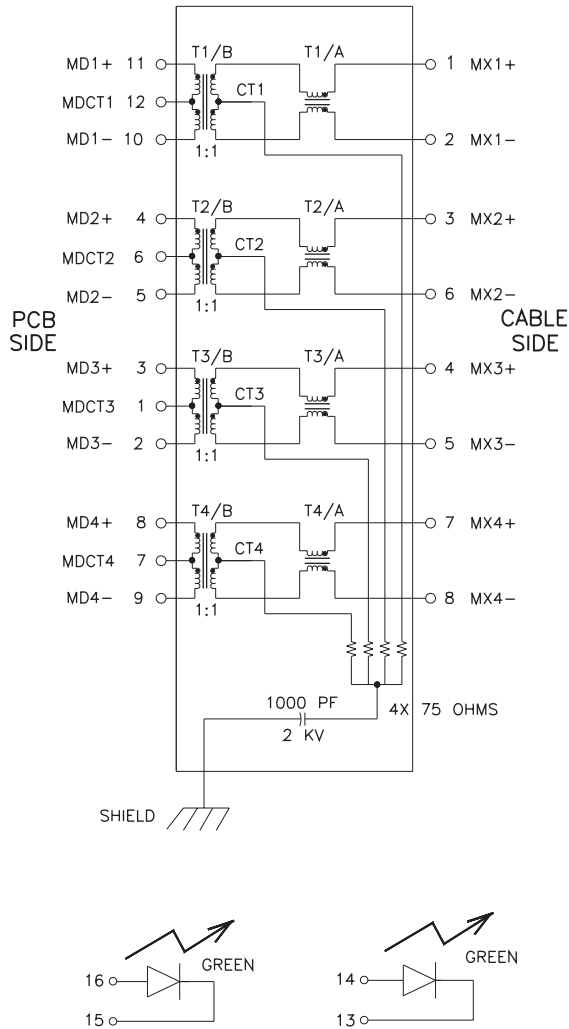
JK0-001X



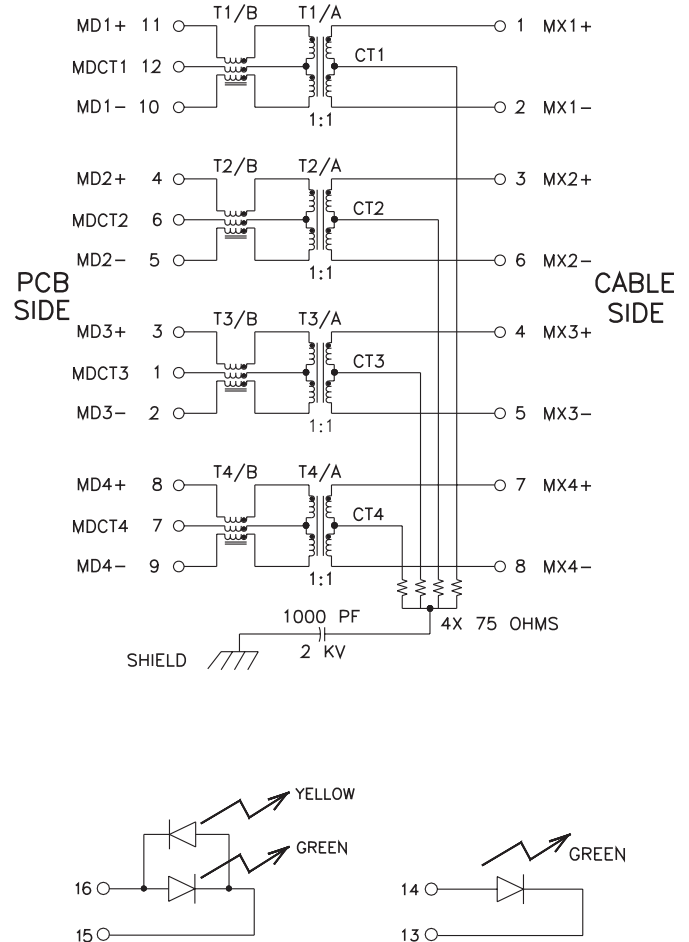
NOTE: JK0-0017 and JK0-0018 are supplied without LEDs.

Schematics

JK0-0004

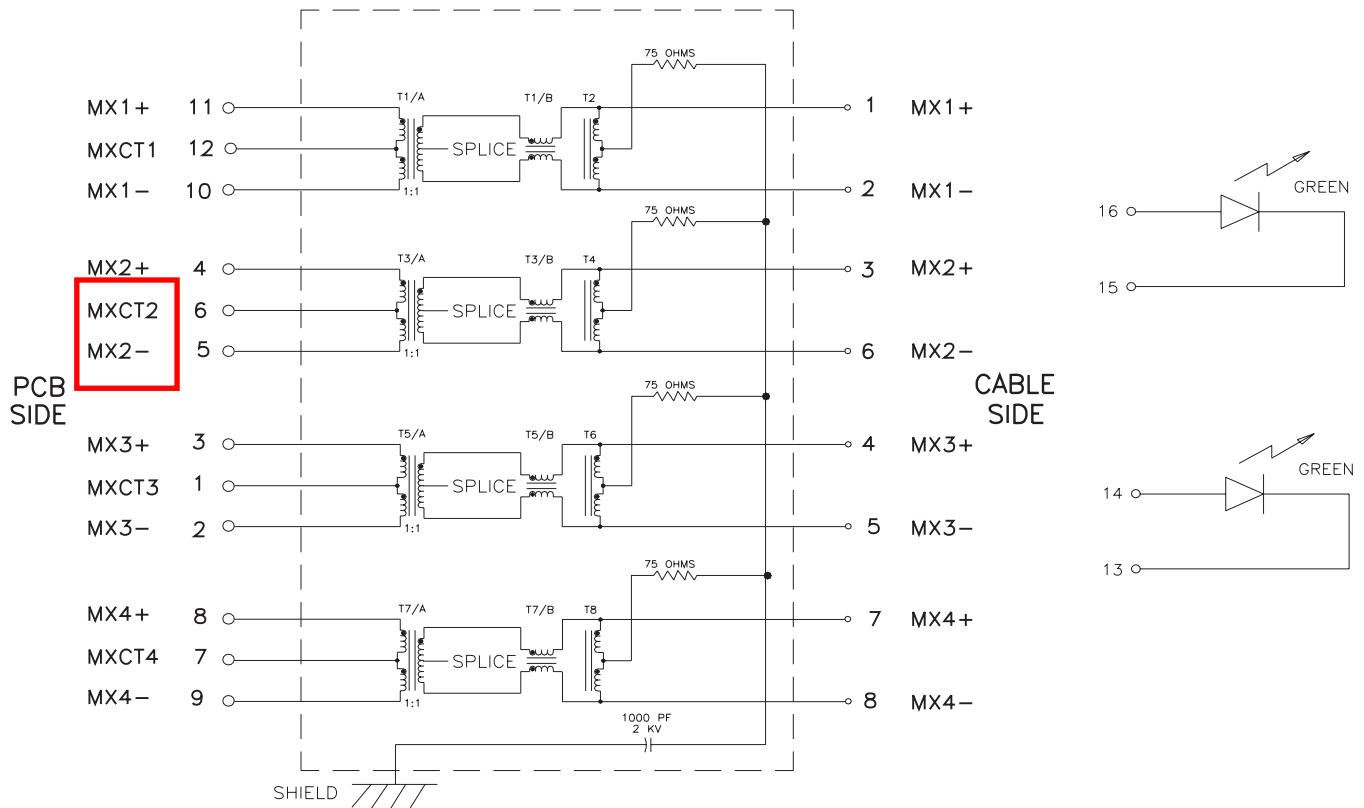


JK0-0036



Schematics

JK0654219



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 European Headquarters

Einsteinstrasse 1
71083 Herrenberg
Germany
TEL: 49 7032 7806 0
FAX: 49 7032 7806 12

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.