

### 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 <sup>1</sup> 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 <sup>2</sup>	JK0-0018NL <sup>2</sup>	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.

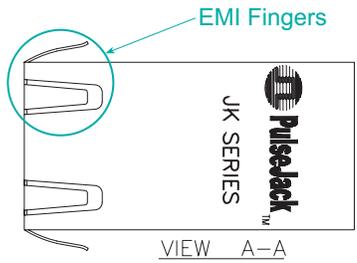
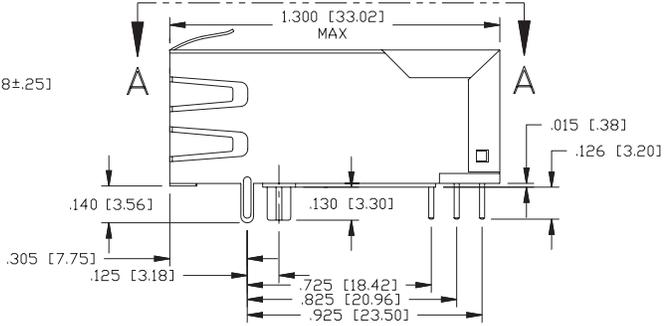
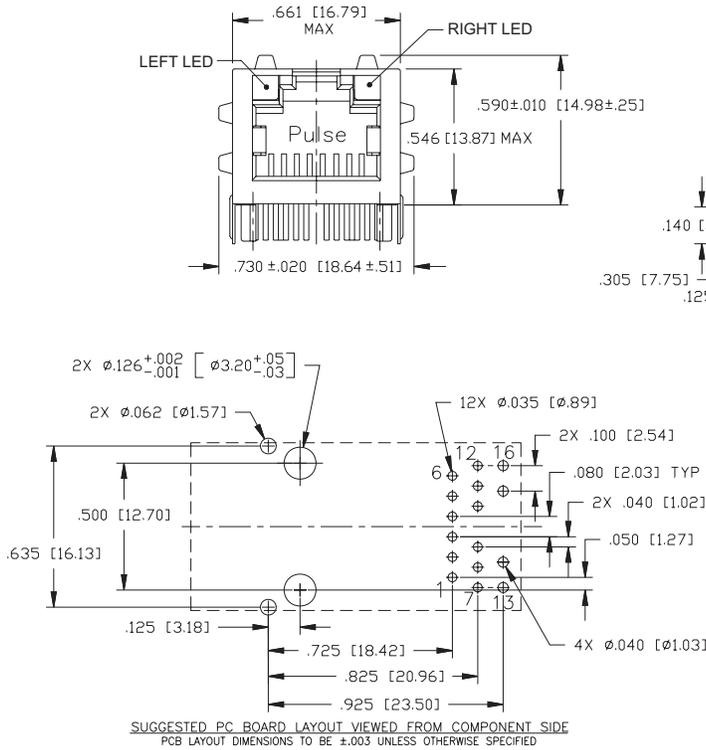
### RJ45 Material Specification

Part Number	Shield		Contact			Housing		MSL <sup>2</sup> Rating
	Material	Finish	Material	Plating Area	Solder Area <sup>3</sup>	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

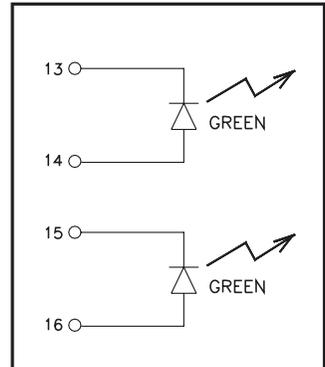
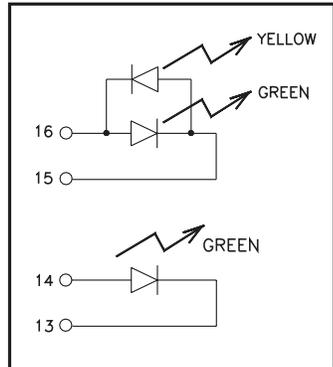
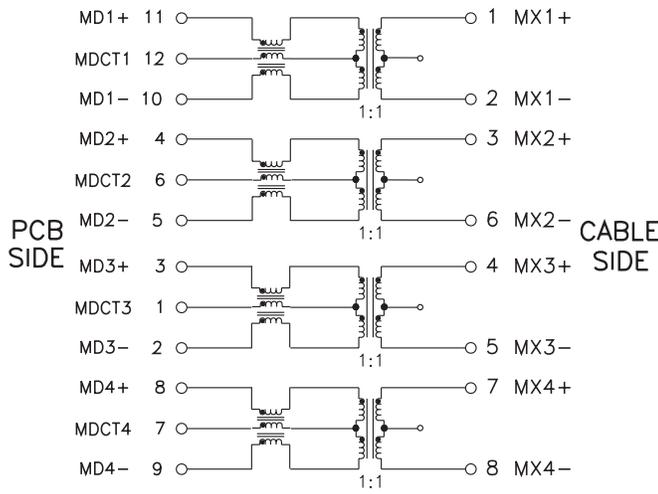
**JK0-0004 / JK0-001X / JK0-0036 / JK0654219**



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

### Schematic

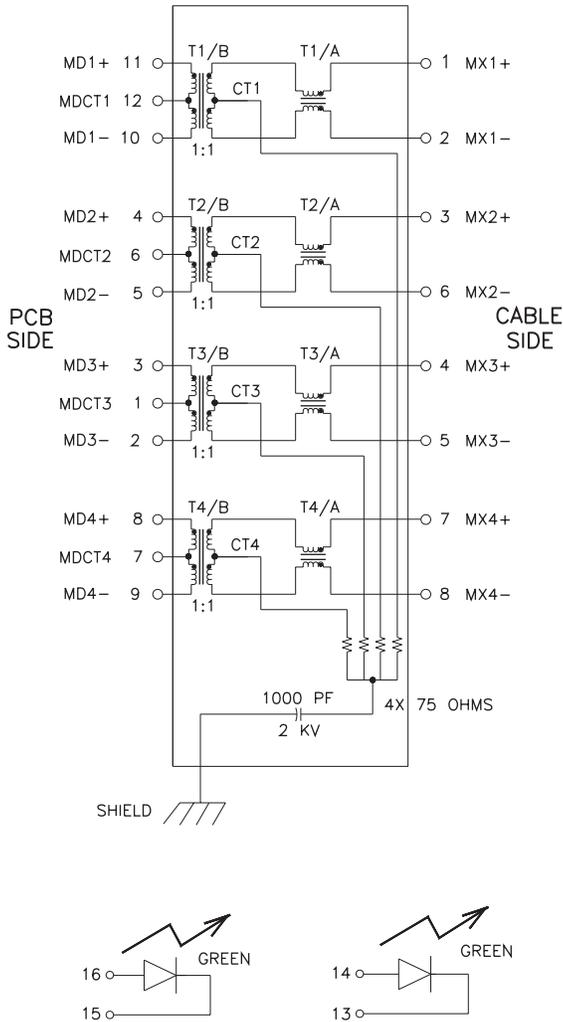
**JK0-001X**



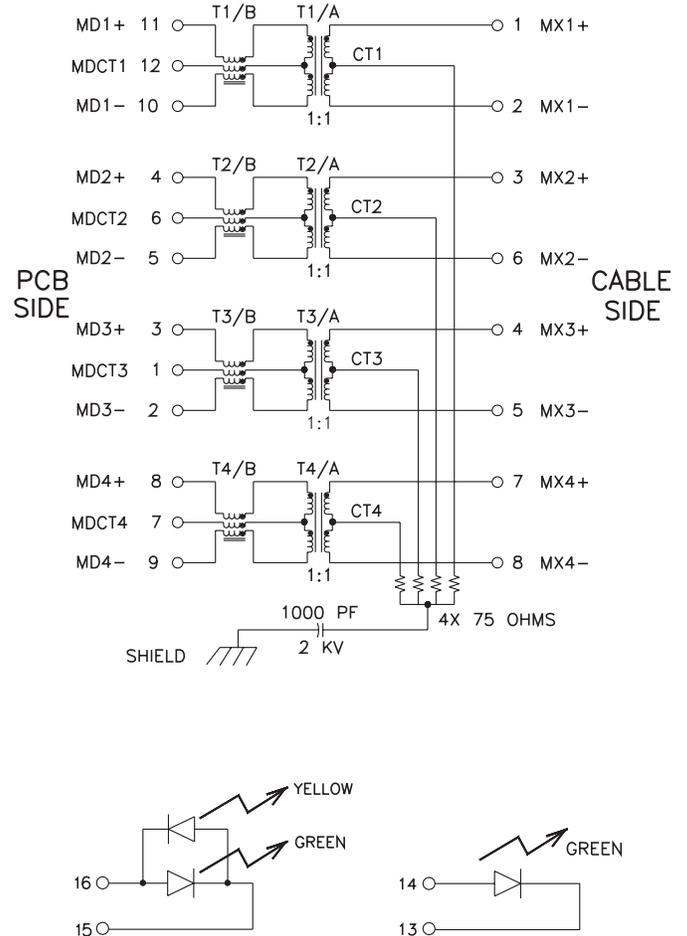
**NOTE:** JK0-0017 and JK0-0018 are supplied without LEDs.

### Schematics

**JK0-0004**

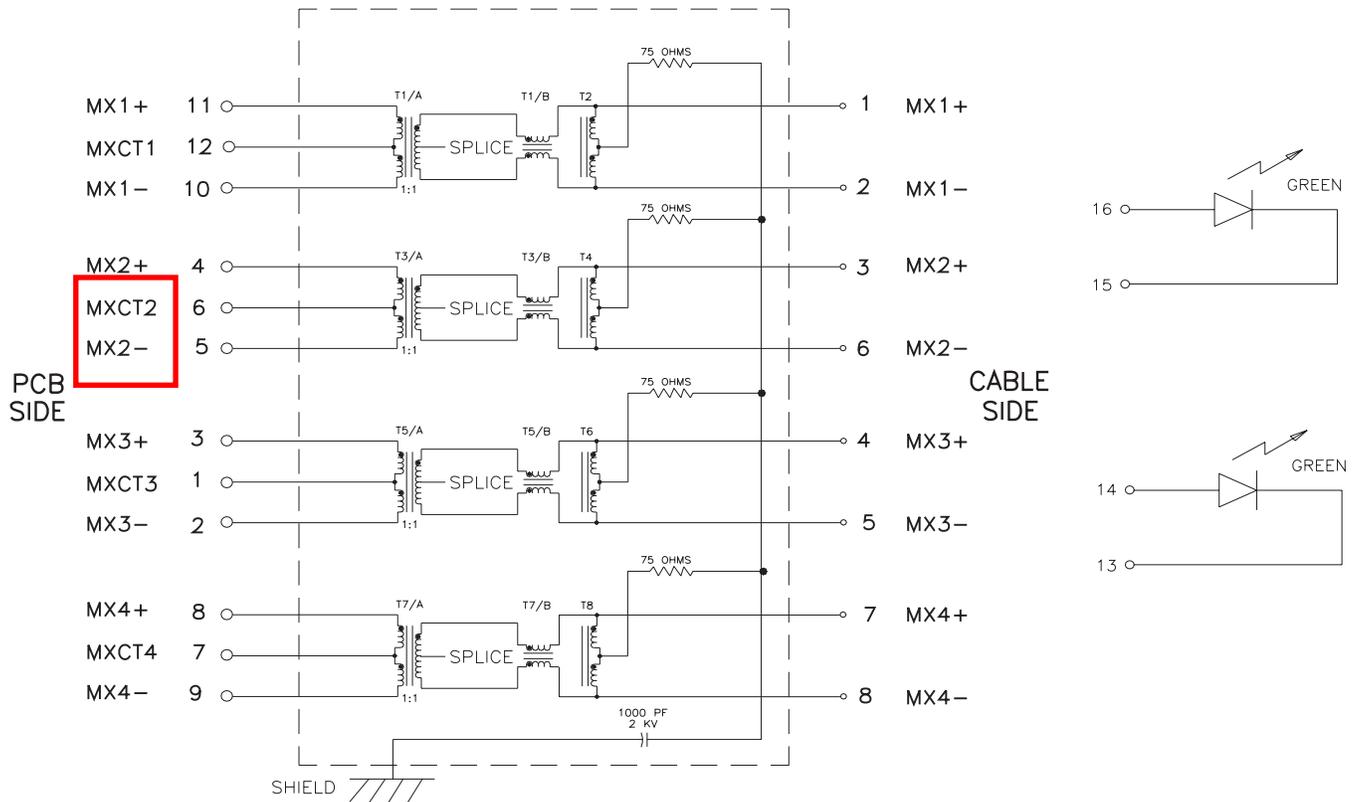


**JK0-0036**



### Schematics

**JK0654219**



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