

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)
			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.

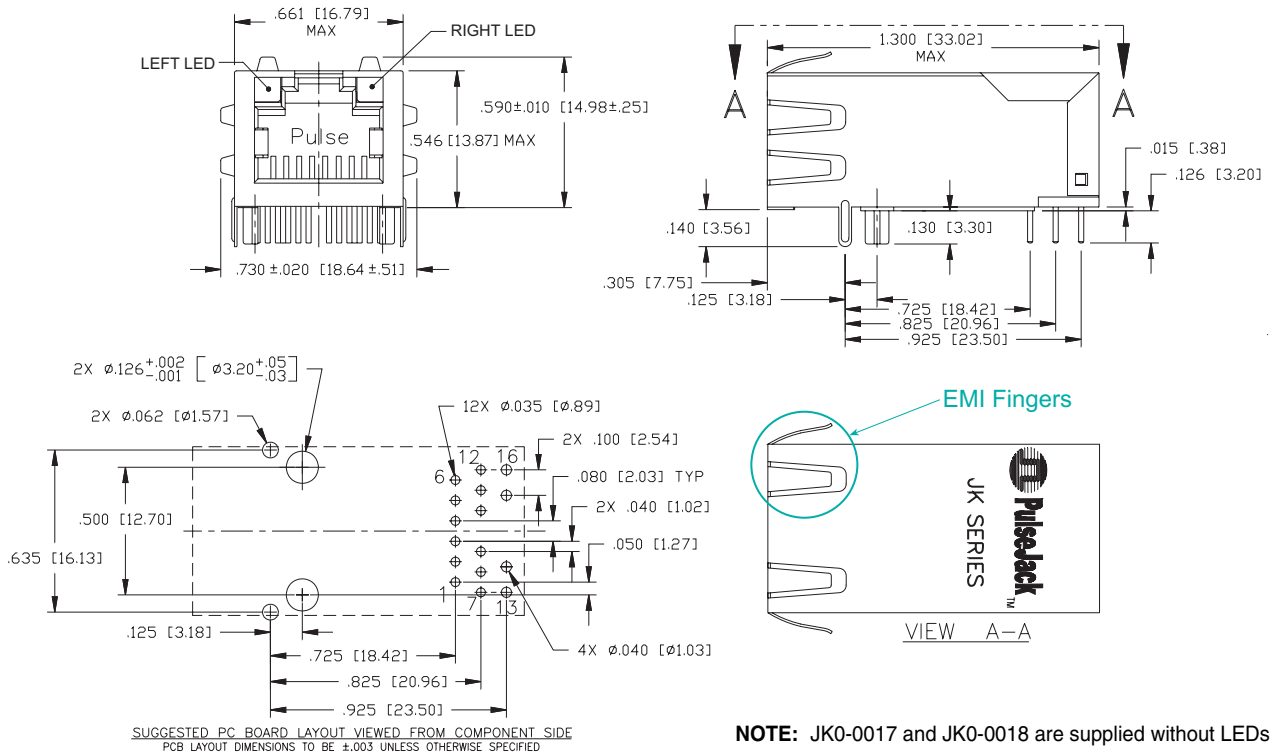
RJ45 Material Specification

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

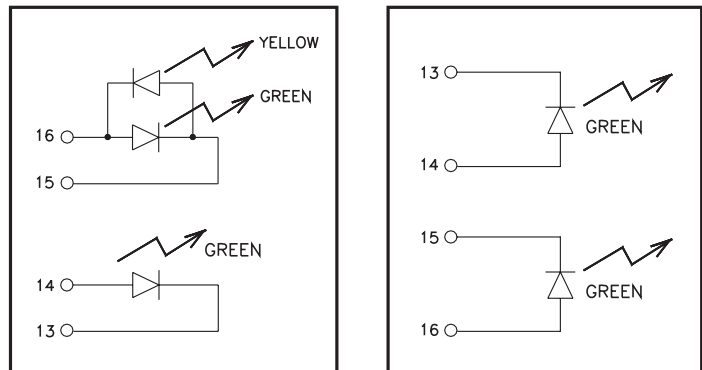
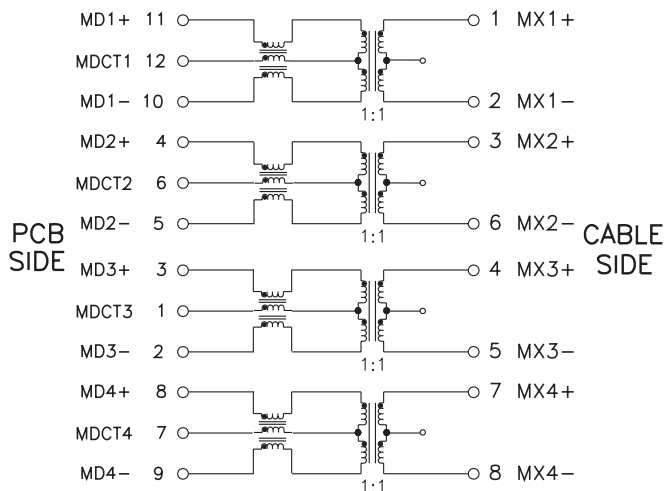
Mechanical

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



Schematic

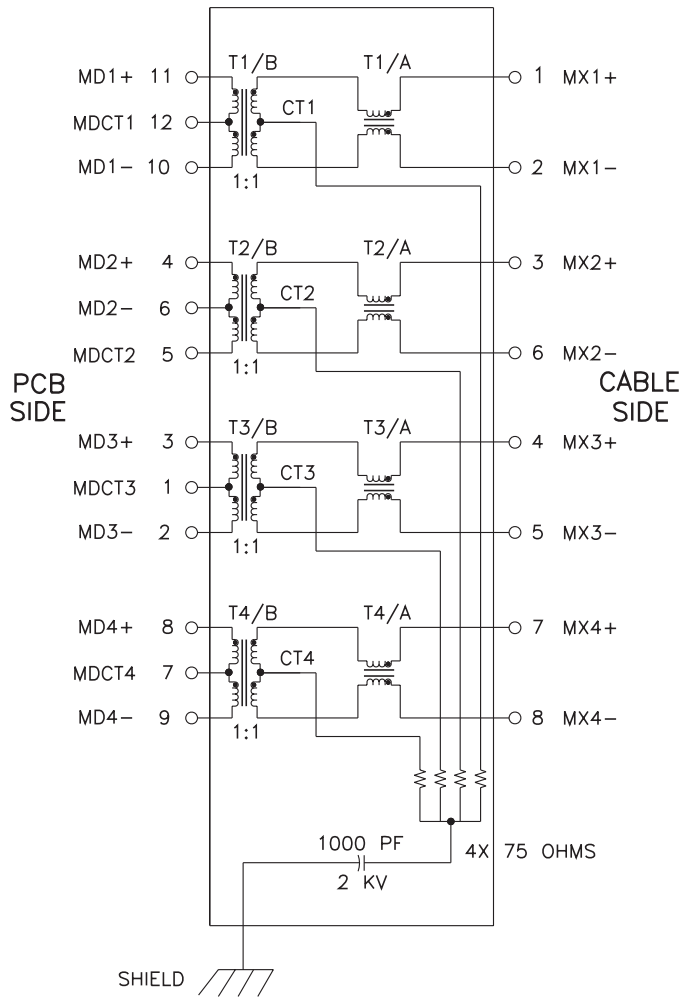
JK0-001X



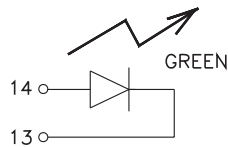
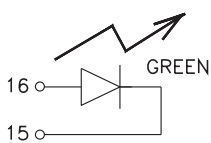
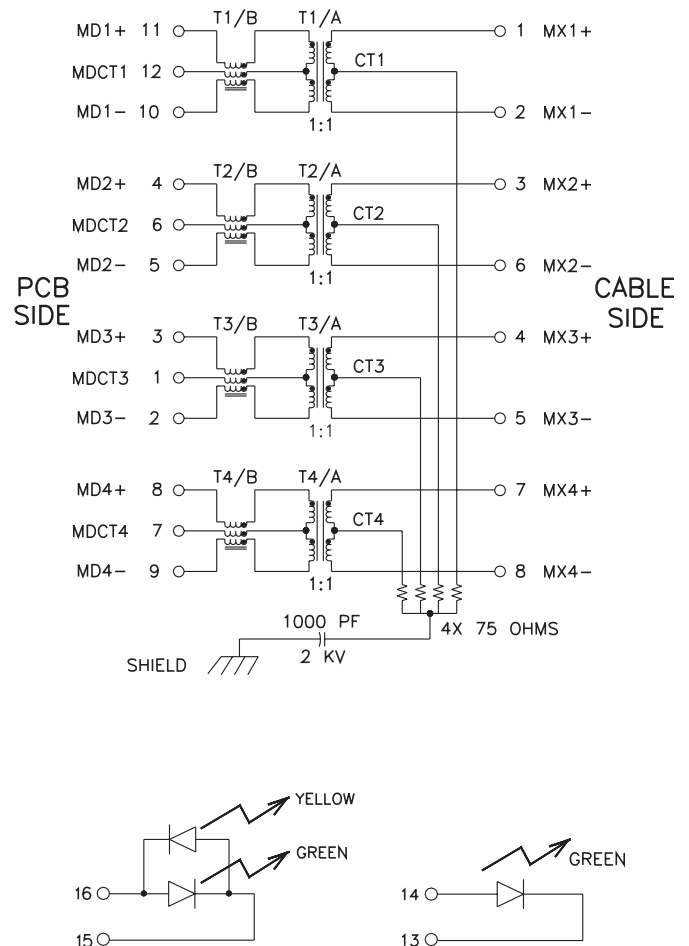
NOTE: JK0-0017 and JK0-0018 are supplied without LEDs.

Schematics

JK0-0004

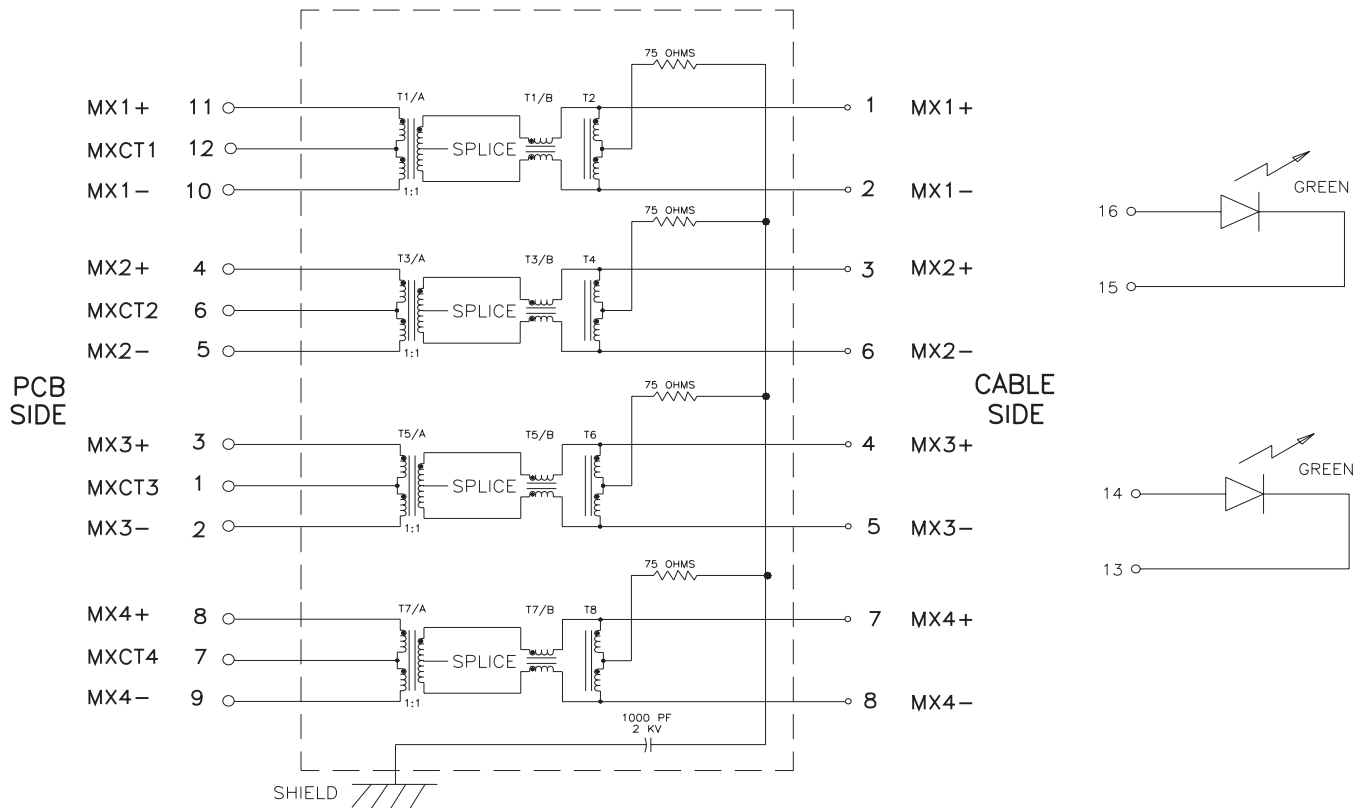


JK0-0036



Schematics

JK0654219



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