

### Description:

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



### Features and Benefits:

- ✔ RoHS 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 Part No.	Tab Orientation	LEDs <sup>1</sup> L/R	Insertion Loss TX/RX (dB)	Return Loss (dB TYP) 100Ω (±15Ω)					Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (MIN) @60Hz 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	
JK0-0004NL	UP	G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	
JK0-0014NL	UP	G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	
JK0-0016NL	UP	Y-G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	
JK0-0017NL	UP	NONE	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	
JK0-0018NL <sup>2</sup>	UP	NONE	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	
JK0-0036NL	UP	Y-G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	
JK0654219NL	UP	G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500Vrms	

Notes: 1. LEDs Left/Right: G = green; Y = yellow; Y-G = Bicolor. 2. JK0-0018NL is supplied without EMI tabs; refer to Mechanical drawing for explanation of EMI tabs.

### 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.

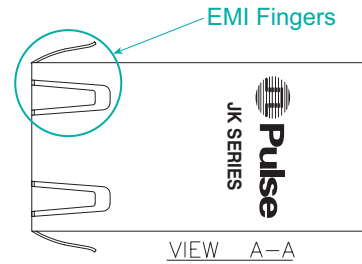
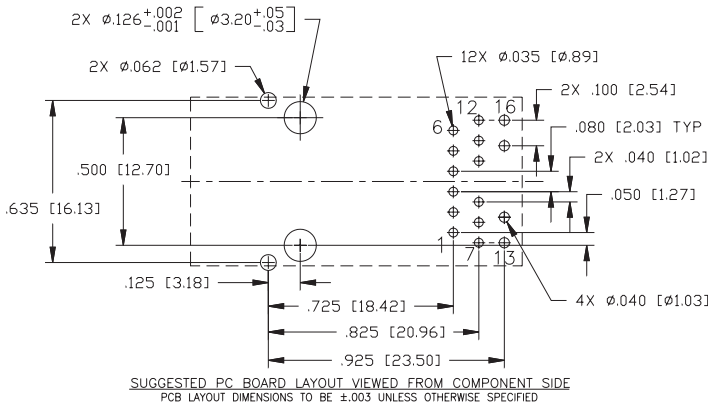
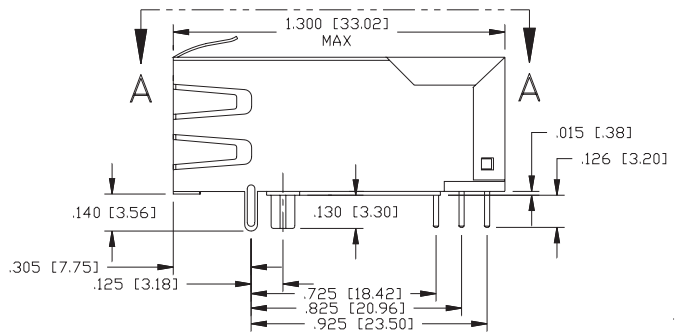
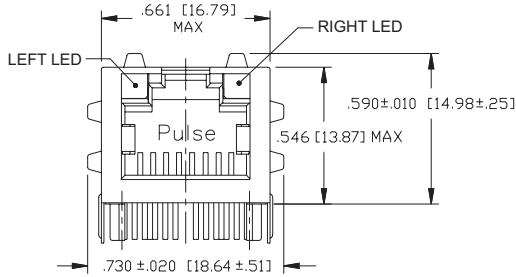
### RJ45 Material Specification

Part Number	Shield		Contact			Housing		MSL Rating
	Material	Finish	Material	Plating Area	Solder Area	Material	Specification	
JK 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: 1. Connector dimensions comply with FCC dimension requirements.

### Mechanical

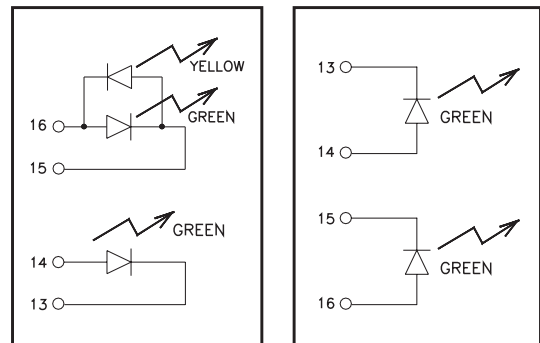
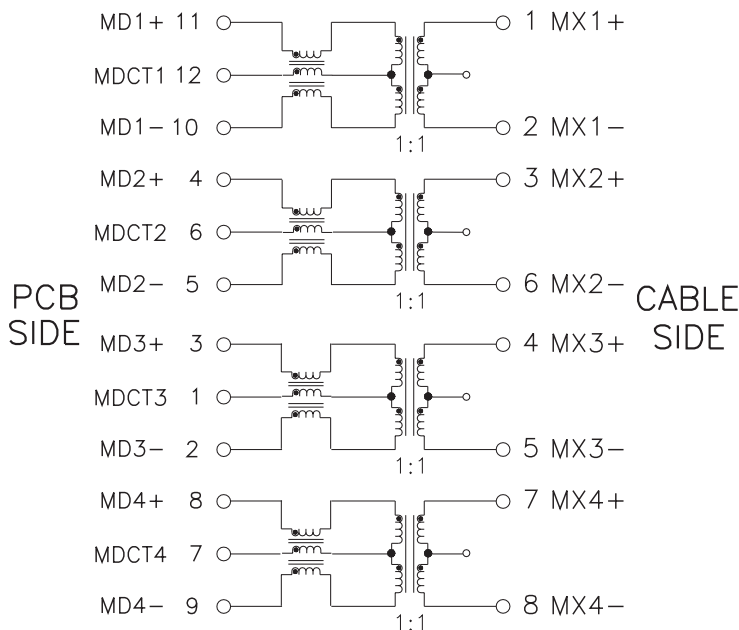
JK0-0004NL / JK0-001XNL / JK0-0036NL / JK0654219NL



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

### Schematic

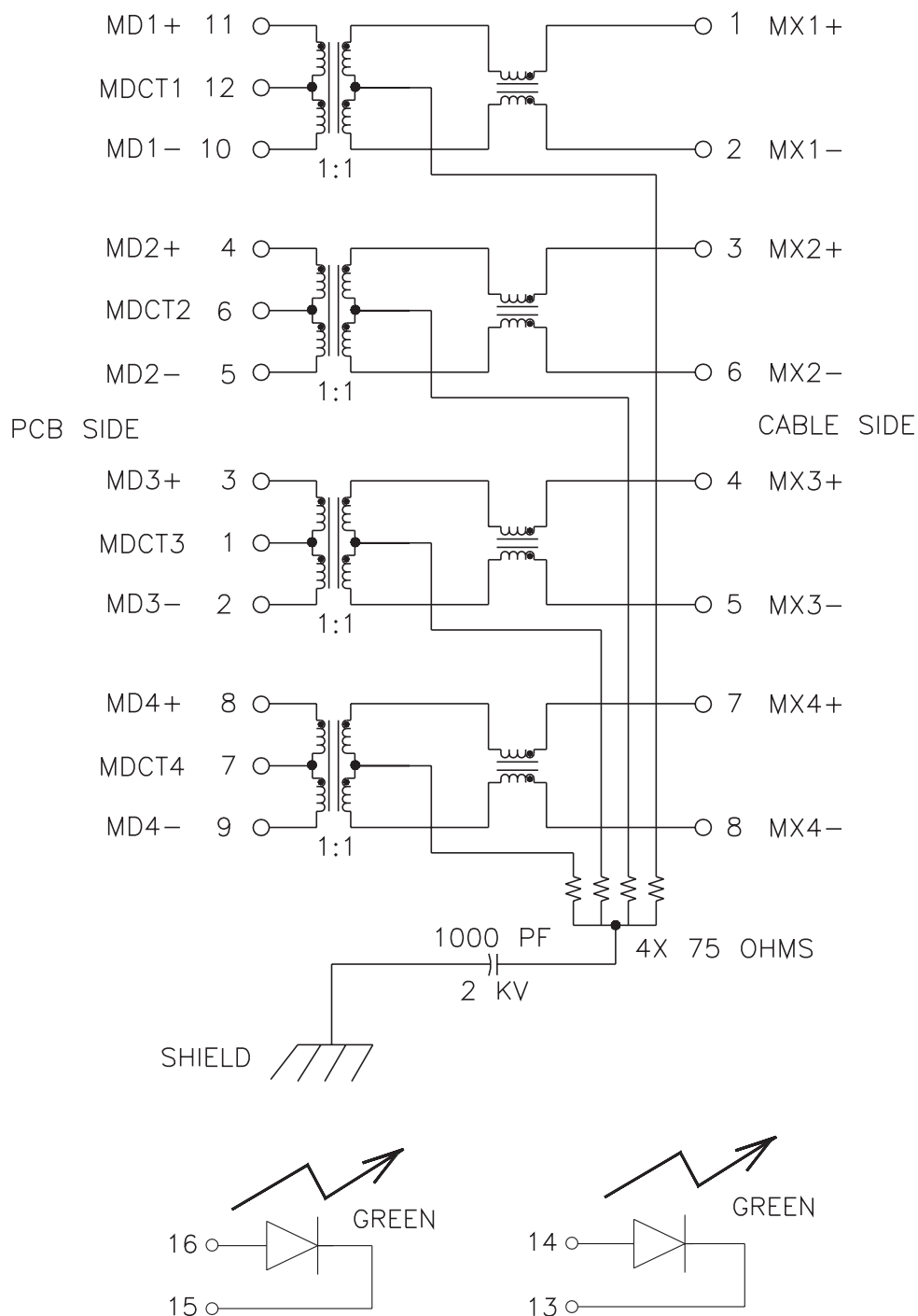
JK0-001XNL



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

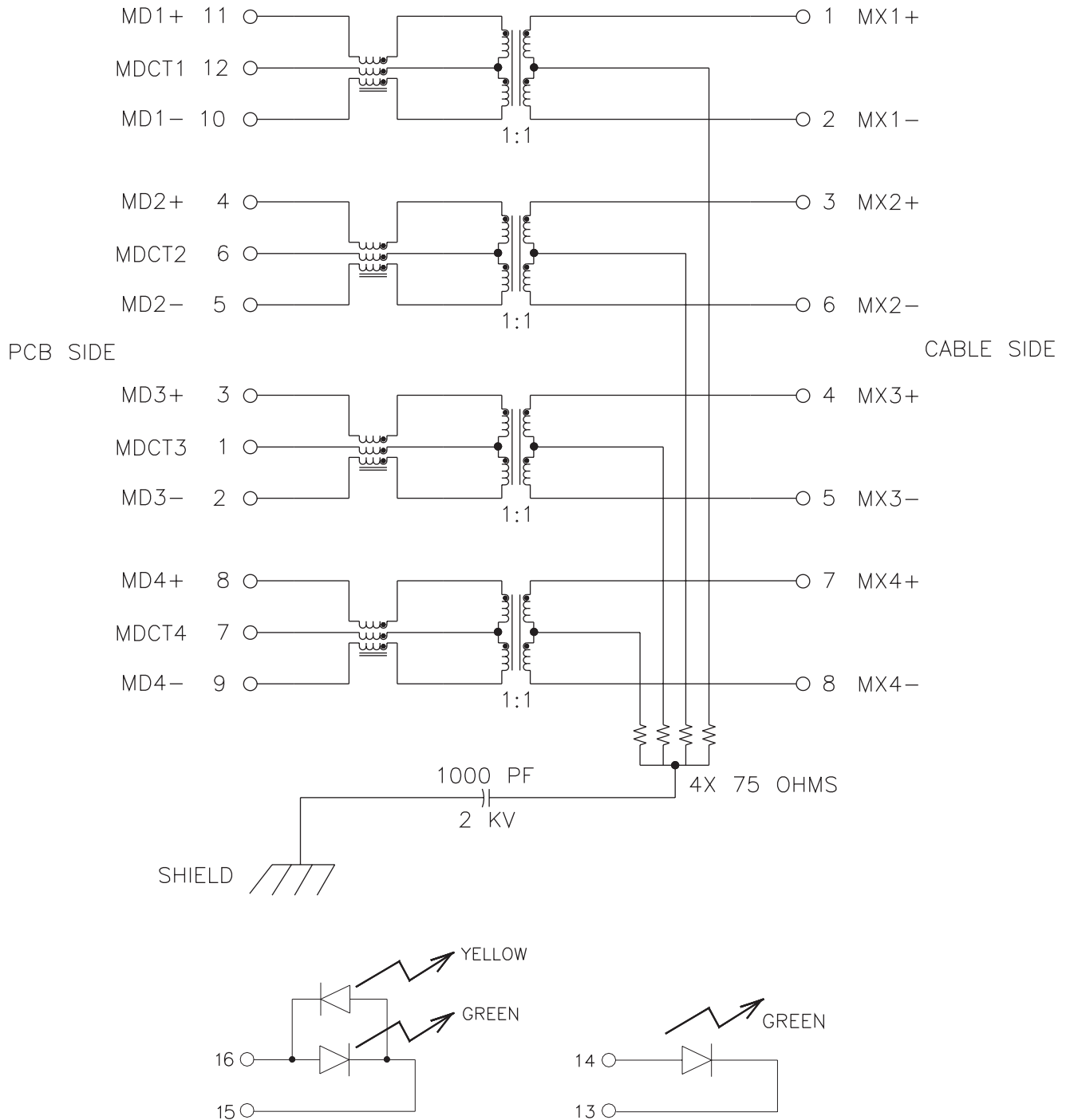
### Schematic

**JK0-0004NL**



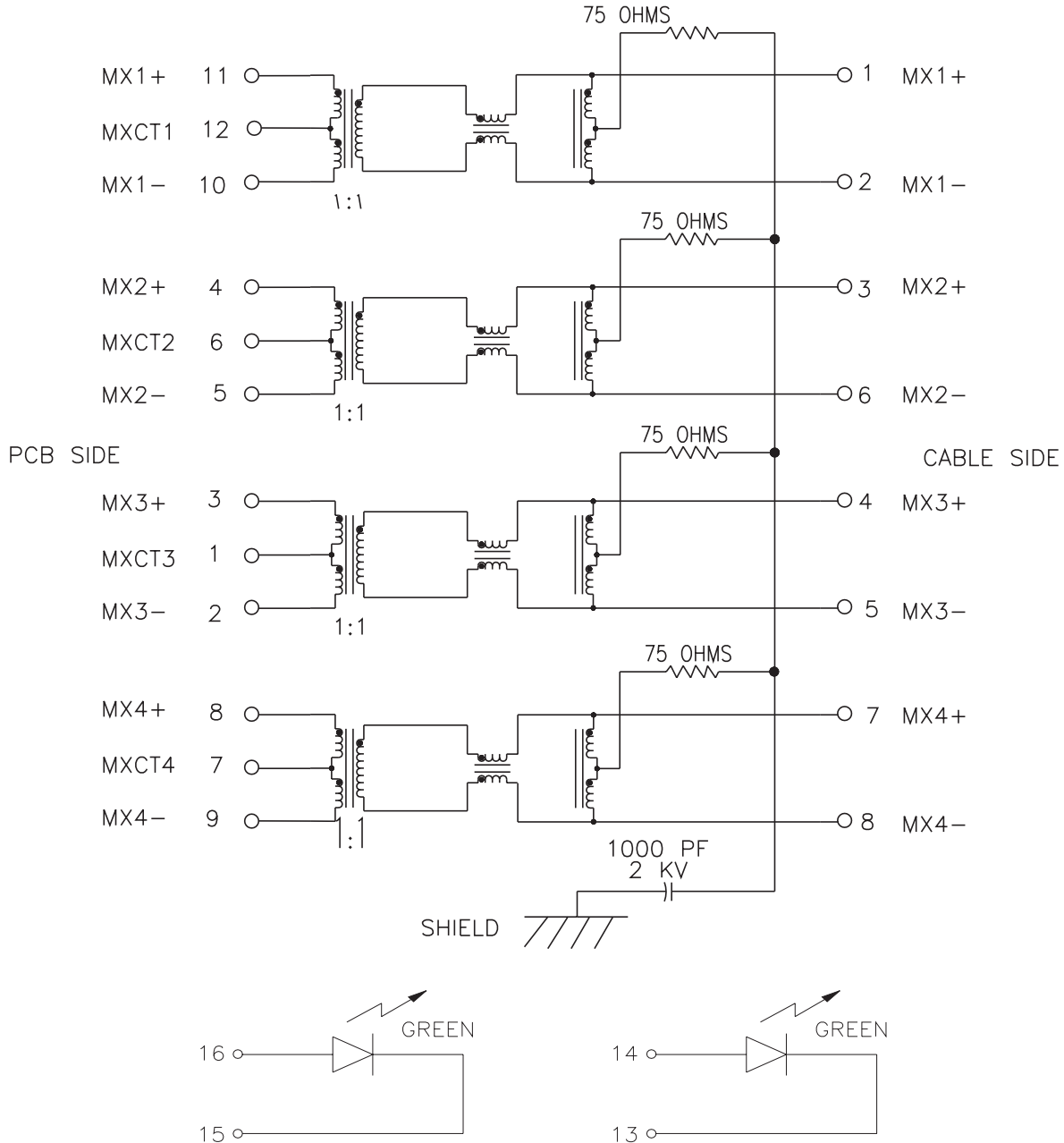
## Schematic

**JK0-0036NL**



### Schematic

**JK0654219NL**



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