

“LAN-MATE” SERIES

SINGLE RJ45 CONNECTOR MODULE WITH INTEGRATED 1000 BASE-T MAGNETICS

P/N:KLA1T109 LF

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Feature



- RJ-45 needs to be matched FCC standard.
- Complies with requirement of IEEE 802.3ab standards.
- RJ-45 connector integrated with transformer/impedance resistor/high voltage capacitor.
- Size same as RJ-45 connector to save PCB board space.
- Reduced EMI radiation to improve EMI performance.
- Design for 1000 BASE transmission over UTP-5 cable.
- Compliance with ROHS requirements.
- Operating temperature range: 0°C to +70°C.
- Storage temperature range: -25°C to +85°C.

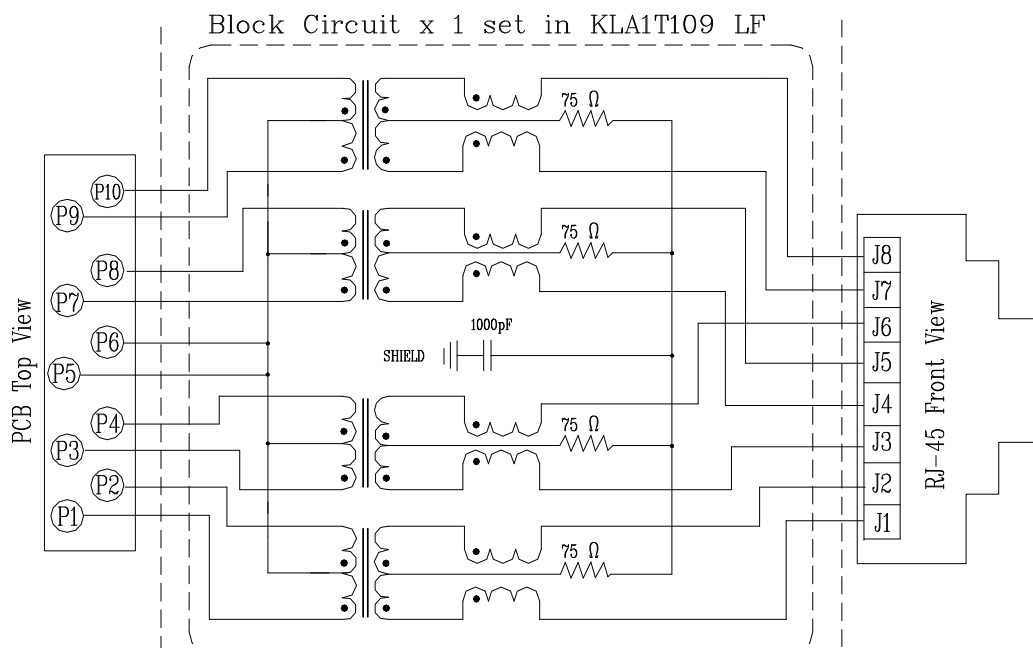
Electrical Specifications @ 25°C

Part Number	Turns Ratio (±5%)		OCL(μH Min) @100KHz/0.1V with 8mA DC Bias	Cross talk (dB Min)			HI-POT (Vrms)
	TX	RX		0.3-30MHz	30-60MHz	60-100MHz	
KLA1T109 LF	1CT:1CT	1CT:1CT	350	-40	-35	-30	1500

Continue

Part Number	Insertion Loss (dB Max)	Return Loss (dB Min) @ Load 100Ω				CMR (dB Min)		
	1-100MHz	1-30MHz	30-40MHz	40-50MHz	50-80MHz	1-30MHz	30-60MHz	60-125 MHz
KLA1T109 LF	-1.0	-16	-13.5	-11.5	-10	-30	-25	-20

Schematic



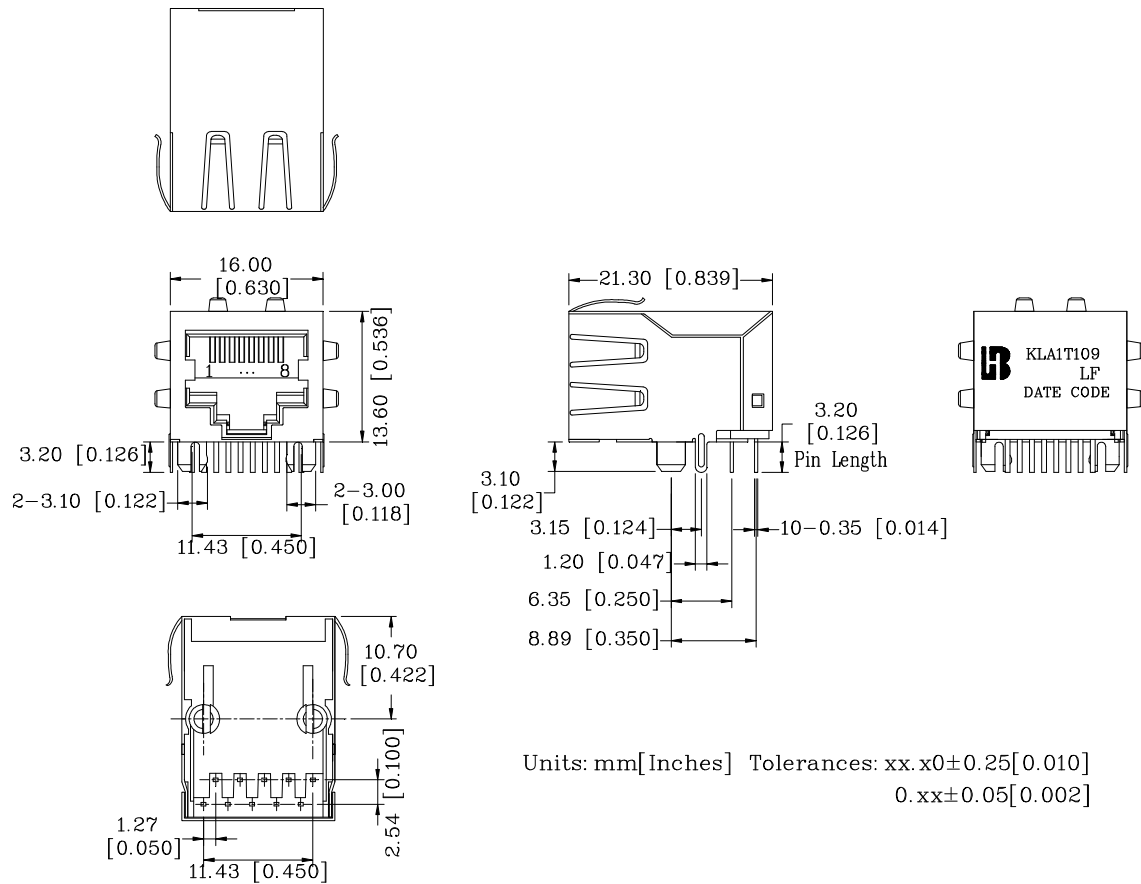
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Mechanical



- | | |
|---------------------|---|
| 1. Plastic Material | : Thermoplastic (UL 94V-0), Black Housing |
| 2. Metal Shield | : Brass, 20u" inches thick Nickel |
| 3. Spring Wire | : Phosphor bronze with selective gold plating |
| 4. Solder Pin | : 0.5x0.35mm, SUS430 with solder Plated |
| 5. Durability | : 750 Mating cycles Min. |

PCB Layout Mounting Hole(Top View)

