## "LAN-MATE" SERIES DESCRIPTION: 10/100 BASE-T RJ45 1 x 1 INTEGRATED MAGNETICS CONNECTOR



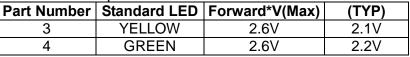
P/N: KLU1T041X-43 LF

#### **Feature**



- Complies with requirement of IEEE802.3u 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 10/100 BASE transmission over UTP-5 cable.
- Includes integrated 2 LEDS (option).
- LEDS are isolated to reduce cross talk and electro- magnetics interference.
- Compliance with ROHS requirements.
- Operating temperature range:  $0^{\circ}$ C to +70°C.
- Storage temperature range: -25<sup>o</sup>C to +85<sup>o</sup>C.

Recommended panel

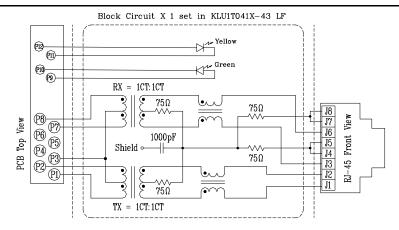


\*With a forward current 20mA

Electrical Specifications @ 25°C									
Part Number	Turns Ratio (±5%) TX RX		OCL (uH Min) @ 100KHz/0.1V with 8mA DC Bias	C <sub>w/w</sub> (pF Max)	L.L (uH Max)	Insertion Loss (dB Max) 0.3-100MHz	HI-POT (Vrms)		
KLU1T041X-43 LF	1CT:1CT	1CT:1CT	350	56	0.5	-0.8	1500		

	Continue										
Part Number	Return Loss					Cross talk			CMR		
	(dB Min)					(dB Min)			(dB Min)		
	30MH	z 40MHz	50MHz	60MHz	80MHz	0.3-30MHz	30-60MHz	60-100MHz	1-30MHz	30-60MHz	60-125MHz
KLU1T041X-43 LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20

### **Schematic**



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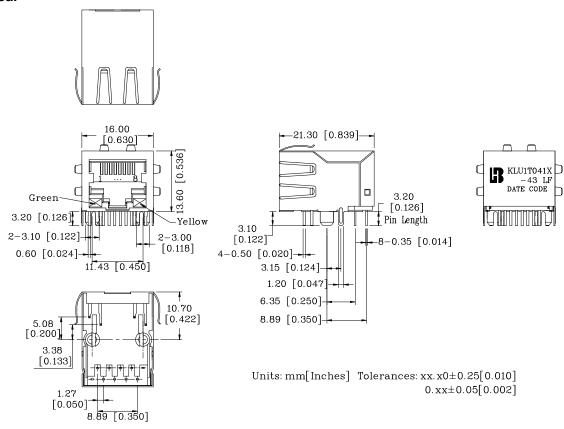
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### Mechanical



1. Plastic Material : Thermoplastic (UL 94V-0), Black Housing

2. Metal Shield : Brass, 20u" inches thick Nickel

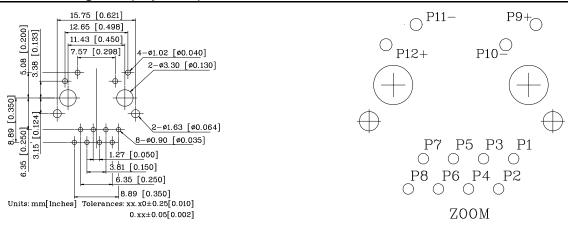
3. Spring Wire : 0.45mm Dia. Phosphor bronze with 0.1524 \*10<sup>-6</sup> m gold plated &

1.524\*10<sup>-6</sup> m thick Nickel

4. Solder Pin : 0.5x0.35mm, SUS430 with solder Plated

5. Durability : 750 Mating cycles Min.

### PCB Layout Mounting Hole(Top View)



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