

**“LAN-MATE” SERIES DESCRIPTION :**  
**10/100 BASE-T RJ45 1 x 1 INTEGRATED**  
**MAGNETICS CONNECTOR**  
**P/N: KLU1T041X LF**



**Feature**

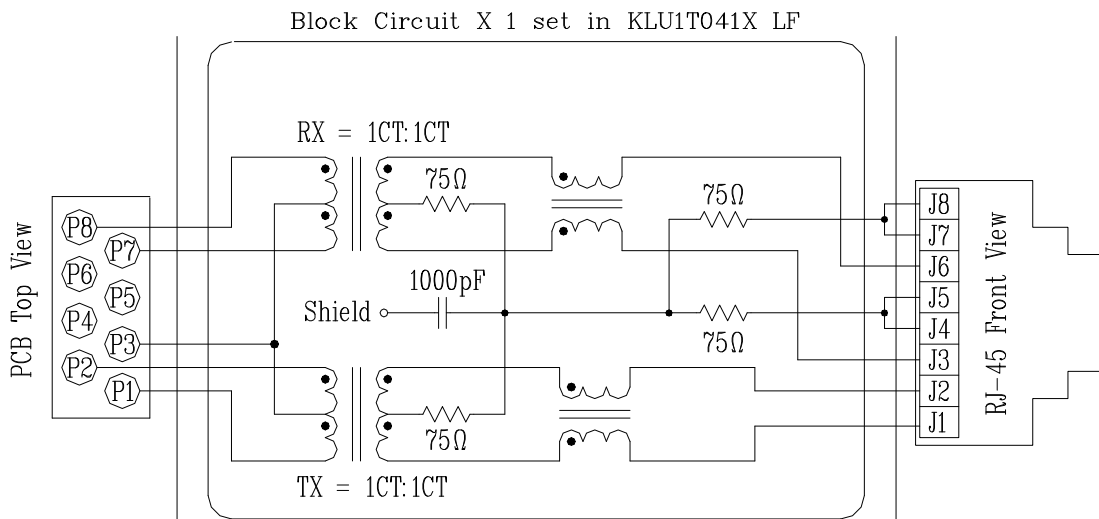


- RJ-45 needs to be matched FCC standard.
- Complies with requirement of IEEE 802.3u standards.
- RJ-45 connector integrated with transformer/impedance resistor/high voltage capacitor.
- Size same as RJ-45 connector to save PCB board space.
- Reduced EMI radiation to improve EMI performance.
- Design for 100 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 (uH Min) @ 100 KHz/0.1V with 8mA DC Bias	C <sub>www</sub> (pF Max)	L.L (uH Max)	Insertion Loss (dB Max) 0.3-100MHz	HI-POT (Vrms)
	TX	RX					
KLU1T041X LF	1CT:1CT	1CT:1CT	350	28	0.4	-1.15	1500

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

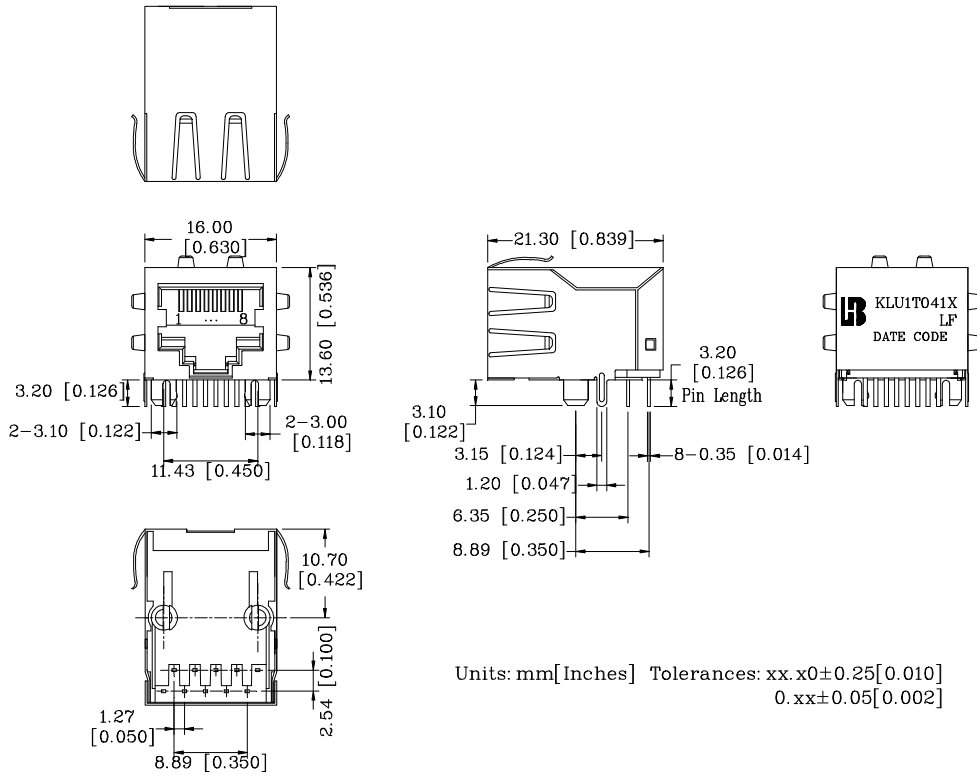
**Schematic**



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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 : 0.45mm Dia. Phosphor bronze with  $0.1524 \times 10^{-6}$  m gold plated &  $1.524 \times 10^{-6}$  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)**

