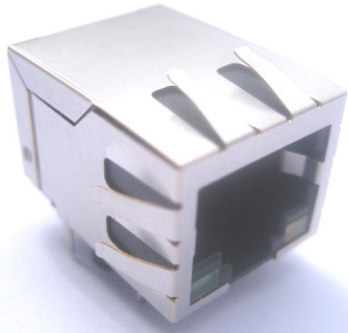


**“LAN-MATE” SERIES DESCRIPTION :**  
**10/100 BASE-T RJ45 1 x 1 INTEGRATED**  
**MAGNETICS CONNECTOR**  
**P/N: KLU1T041-43 LF**



**Feature**



- RJ-45 needs to be matched FCC standard.
- 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 signal leads are isolated from the Ethernet signal leads to reduce EMI and cross talk.
- Compliance with ROHS requirements.
- Operating temperature range: 0°C to +70°C.
- Storage temperature range: -25°C to +85°C.
- Recommended panel

Part Number	Standard LED	Forward*V(Max)	(TYP)
3	YELLOW	2.6V	2.1V
4	GREEN	2.6V	2.2V

\*With a forward current 20mA

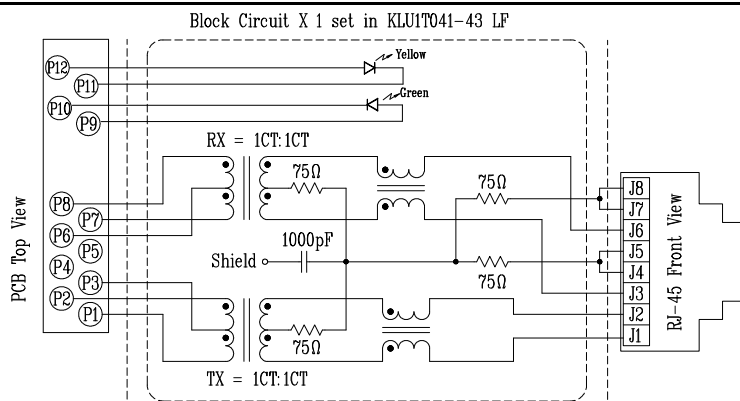
**Electrical Specifications @ 25°C**

Part Number	Turns Ratio (±5%) TX/RX	OCL (uH Min) @ 100 KHz/0.1V with 8mA DC Bias	C <sub>w/w</sub> (pF Max)	L.L (uH Max)	Insertion Loss (dB Max)		HI-POT (Vrms)
					0.3-100MHz		
KLU1T041-43 LF	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	60-125M Hz
KLU1T041-43 LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20

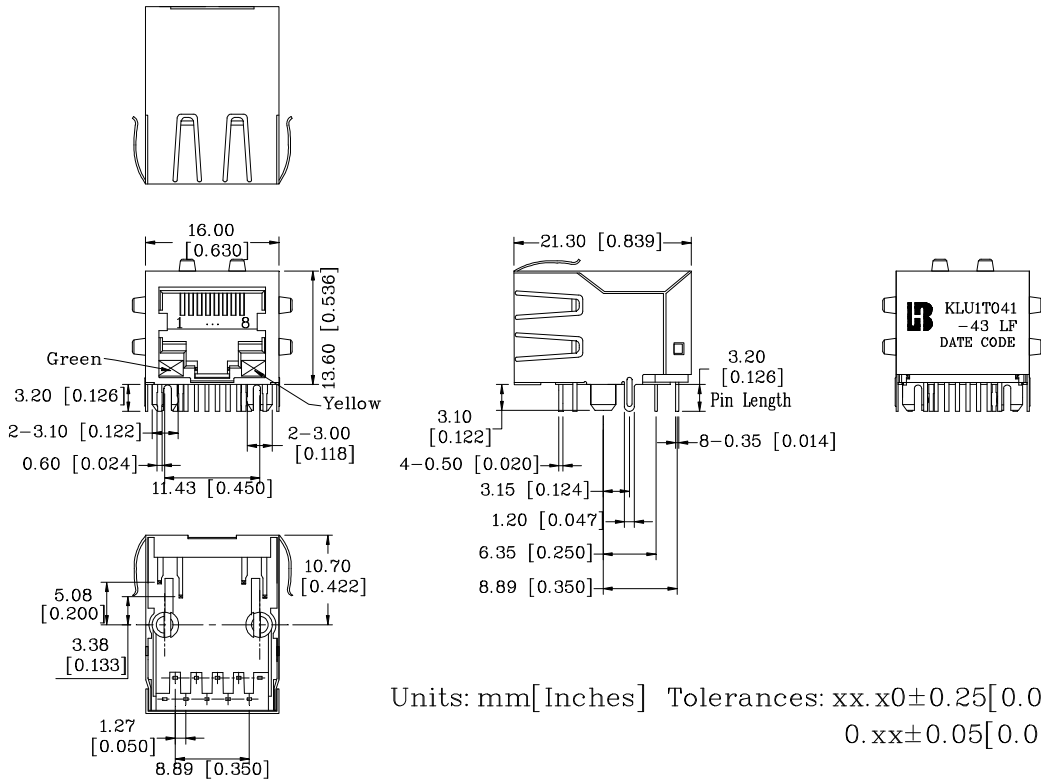
**Schematic**



**“LAN-MATE” SERIES DESCRIPTION :**  
**10/100 BASE-T RJ45 1 x 1 INTEGRATED**  
**MAGNETICS CONNECTOR**  
**P/N: KLU1T041-43 LF**



**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)**

