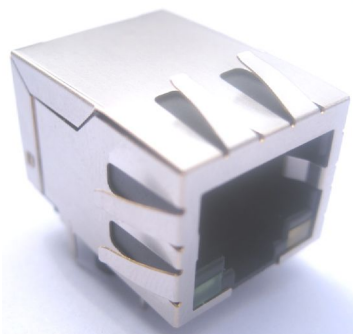


**“LAN-MATE” SERIES DESCRIPTION :**  
**10/100 BASE-T RJ45 1 x 1 INTEGRATED**  
**MAGNETICS CONNECTOR**



P/N: KLU1T041C-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.
- RJ 45 connector with 10/100 BASE-TX magnetic.
- Includes integrated 2 LEDS(option).
- LEDS are isolated to reduce cross talk and electro-magnetics interference.
- 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)
4	GREEN	2.6V	2.2V
3	YELLOW	2.6V	2.1V

\*with a forward current of 20mA

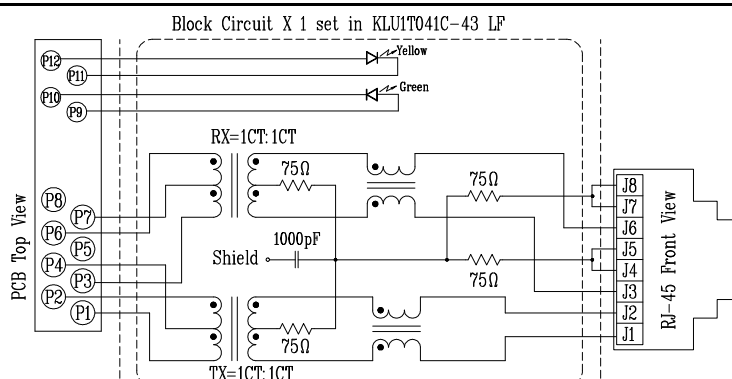
**Electrical Specifications @ 25°C**

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)TX/RX 0.3-100MHz	HI-POT (V <sub>Ac</sub> )
	TX	RX					
KLU1T041C-43 LF	1CT:1CT	1CT:1CT	350	28	0.4	-1.15	1500

**Continue**

Part Number	Return Loss (dB Min)					Cross talk (dB Min)TX/RX			CMR (dB Min)		
	30MHz	40MHz	50MHz	60MHz	80MHz	0.3-30MHz	30-60MHz	60-100MHz	1-30MHz	30-60MHz	60-125MHz
KLU1T041C-43 LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20

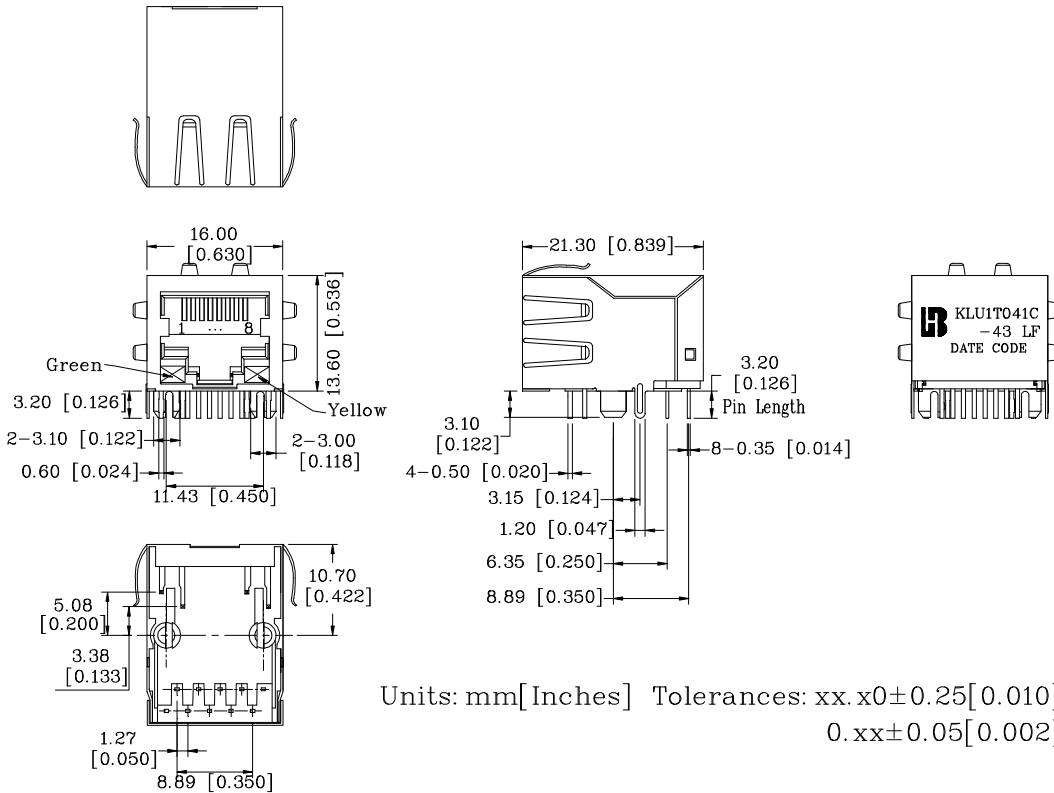
**Schematic**



**“LAN-MATE” SERIES DESCRIPTION :**  
**10/100 BASE-T RJ45 1 x 1 INTEGRATED**  
**MAGNETICS CONNECTOR**  
**P/N: KLU1T041C-43 LF**

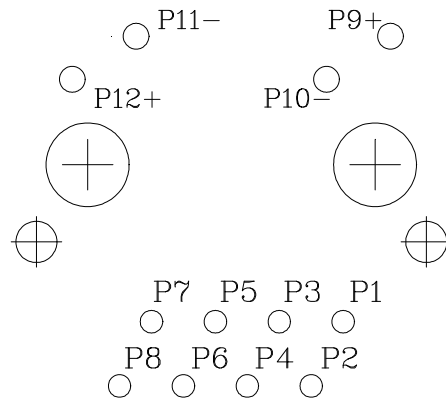
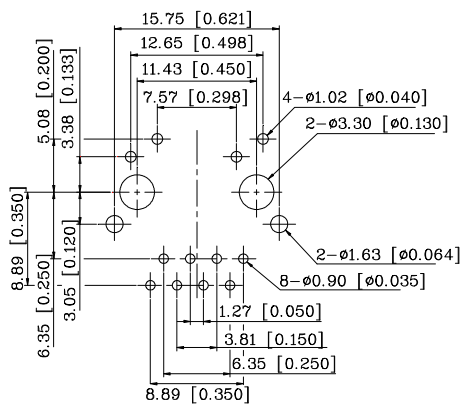


**Mechanical**



- |                     |   |   |
|---------------------|---|---|
| 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)**



ZOOM