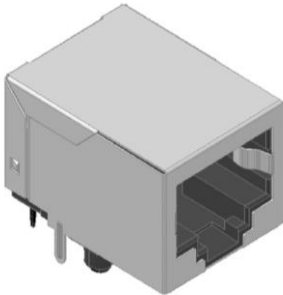


**“LAN-MATE” SERIES :**  
**1x1 10/100 Base-T ICM (Integrated**  
**Connector Module)**



**Features**

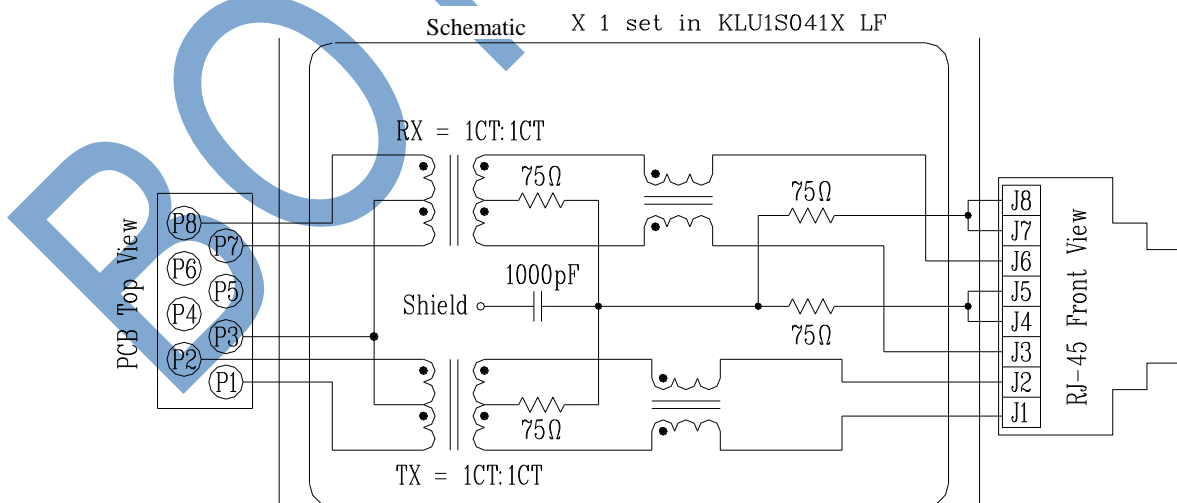


- Complying with FCC standard.
- Complying with requirement of IEEE 802.3u standards.
- RJ-45 connector integrated with transformer/impedance resistor/high voltage capacitor.
- Size same as RJ-45 connector to save PCB board space.
- Reduced EMI radiation to improve EMI performance.
- Design for 10/100 BASE transmission over UTP-5 cable.
- Complying 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) @ 100KHz/0.1V with 8mA DC Bias	C <sub>ww</sub> (pF Max)	L.L (uH Max)	Insertion Loss (dB Max) 0.3-100MHz	HI-POT
	TX	RX					
KLU1S041X LF	1CT:1CT	1CT:1CT	350	56	0.4	-1.15	AC1500V/1mA

Continued											
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
KLU1S041X LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20

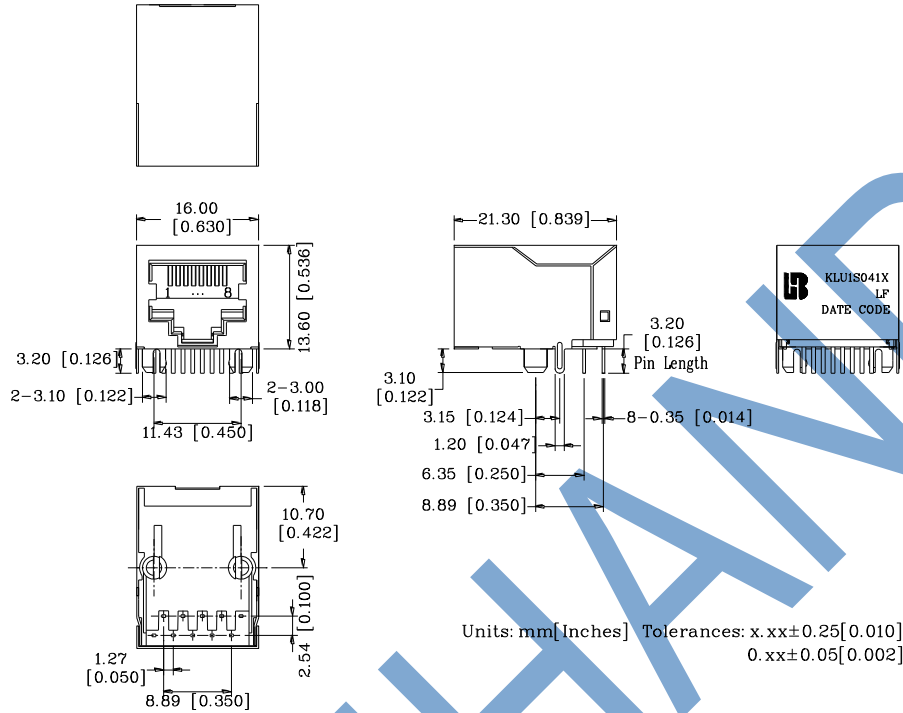
**Schematic**



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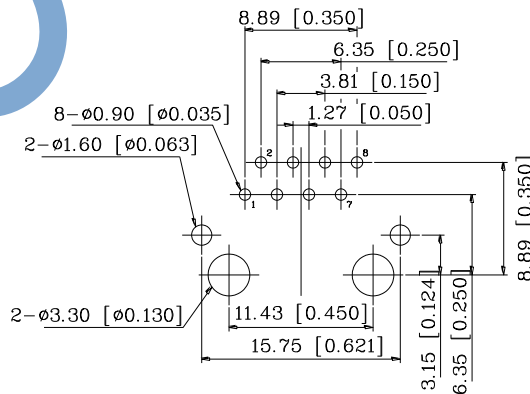


**Mechanical**



- 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\*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)**



Unless otherwise specified,  
 all dimension tolerance are: ±0.08 [±0.003]