

**SINGLE RJ45 CONNECTOR MODULE WITH INTEGRATED 10/100 BASE-TX MAGNETICS**

**P/N: LU1T041**

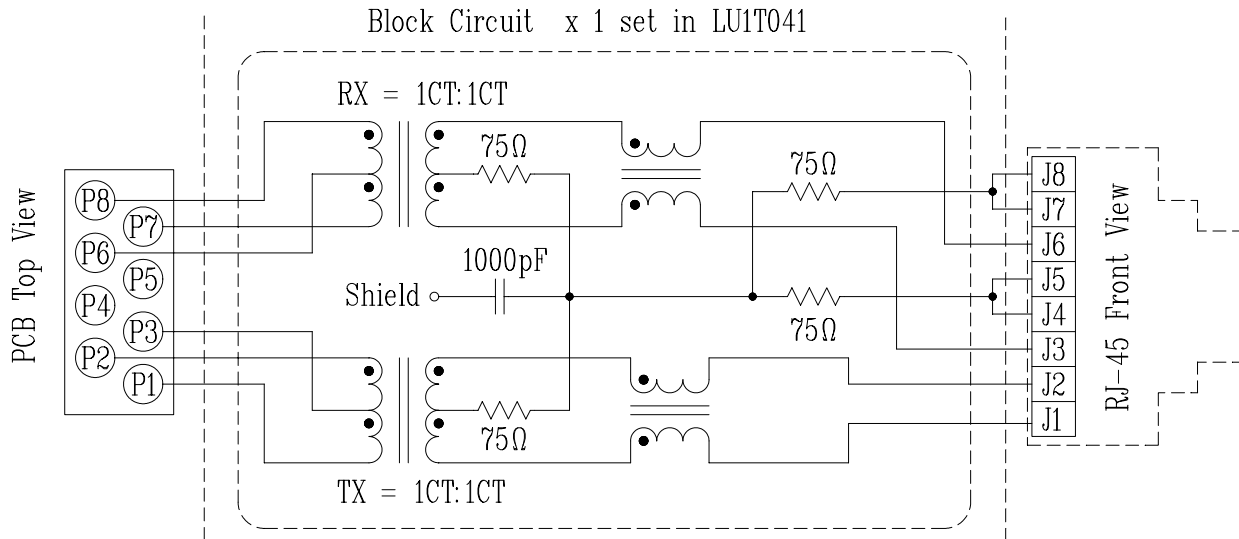
**Feature**



- RJ-45 connector integrated with transformer/impedance resistor/high voltage capacitor.
- Size same as RJ-45 connector to save PCB board space.
- Reduce EMI radiation improve EMI performance.
- Design for 100 BASE transmission over UTP-5 cable.
- Operating temperature range: 0°C to +70°C.
- Storage temperature range: -25°C to +125°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)	Rise Time 10-90%(ns Typ)	Insertion Loss (dB Max) 0.3-100MHz	HI-POT (Vrms)			
	TX	RX									
LU1T041	1CT:1CT	1CT:1CT	350	28	0.4	2.5	-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
LU1T041	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20

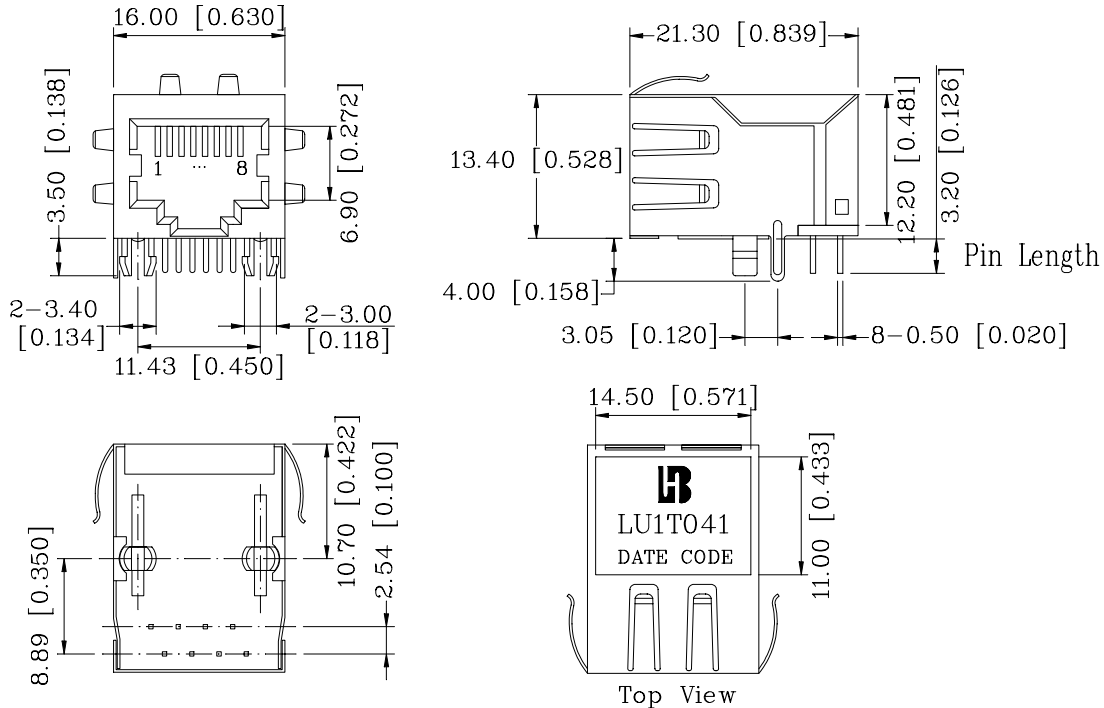
**Schematic**



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**Mechanical**



Units: mm[Inches] Tolerances: xx.x0±0.25[0.010]  
0.xx±0.05[0.002]

1. Plastic Material : PBT 15% Glass Filled(UL 94V-0), Black Housing
2. Metal Shield : Brass C2680-H, 20u Nickel Plated, t=0.25mm
3. Spring Wire : 0.45mm Dia. Phosphor bronze with 6u gold plated
4. Solder Pin : 0.4x0.4mm, Phosphor bronze with solder Plated
5. Durability : 300 Mating cycles Min.

**PCB Layout Mounting Hole(Top View)**

