

**“LAN-MATE” SERIES**

**1X8 RJ45 CONNECTOR MODULE WITH INTEGRATED 10/100 BASE-TX MAGNETICS**

**P/N: LU8T041Q1 LF**

**Feature**



- RJ-45 needs to be matched FCC standard
- 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.
- Comply with RoHS requirements-whole part No Cd, No Hg, No Cr6+, No PBB and PBDE and No Pb on external pins.
- Operating temperature range: 0 to +70 .
- Storage temperature range: -25 to +125 .

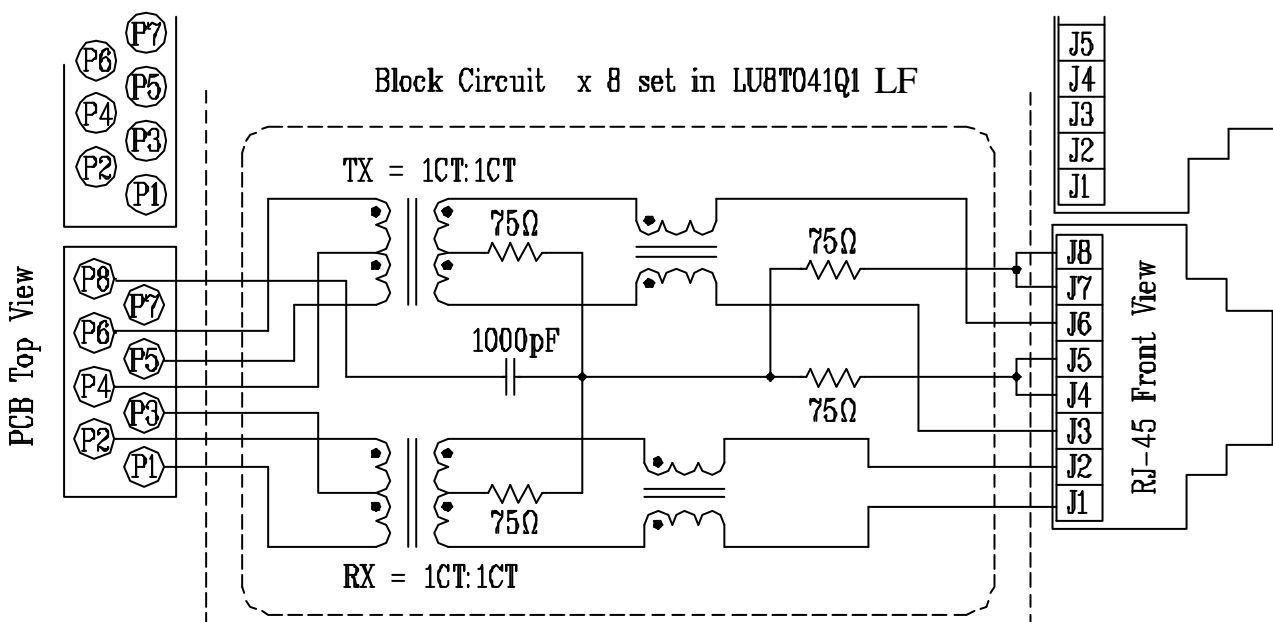
**Electrical Specifications @ 25°C**

Part Number	Turns Ratio (±5%) TX/RX	OCL(uH Min) @ 100 KHz/0.1V with 8mA DC Bias	C <sub>ww</sub> (pF Max)	L.L (uH Max)	Insertion Loss (dB Max)	HI-POT (Vrms)
					0.3-100MHz	
LU8T041Q1 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	60-125MHz
LU8T041Q1 LF	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20

**Schematic**

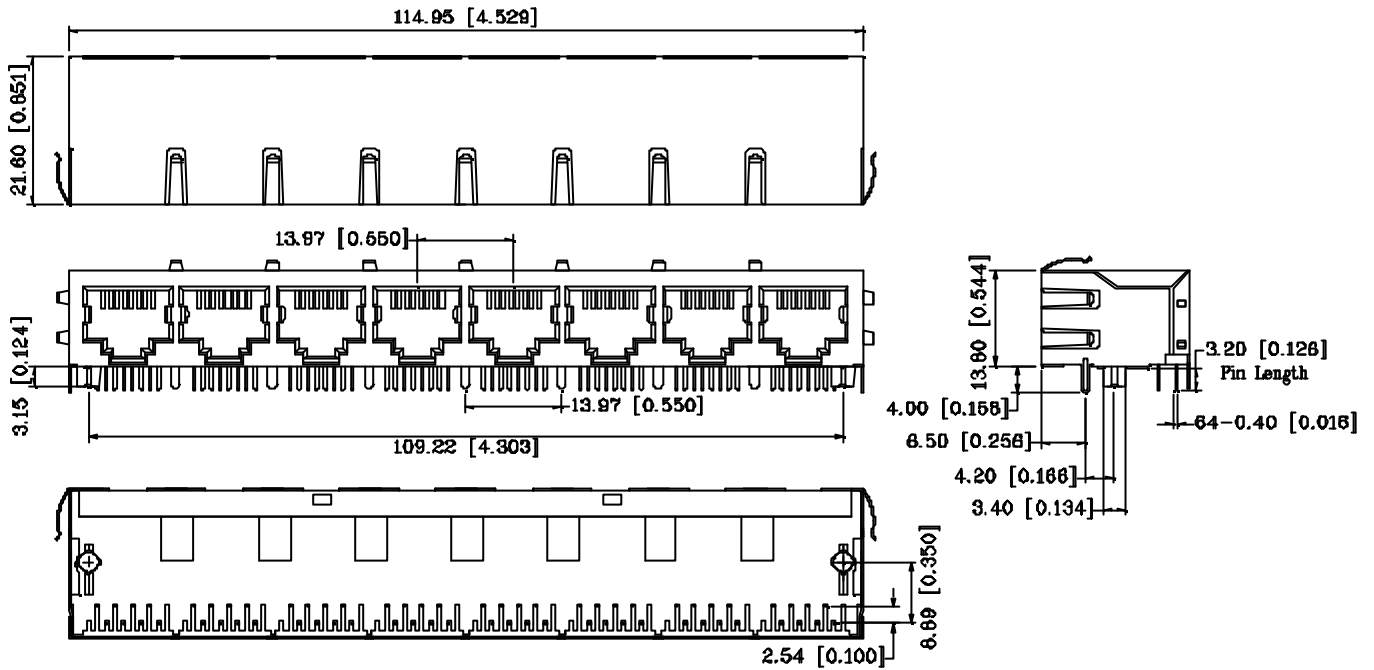


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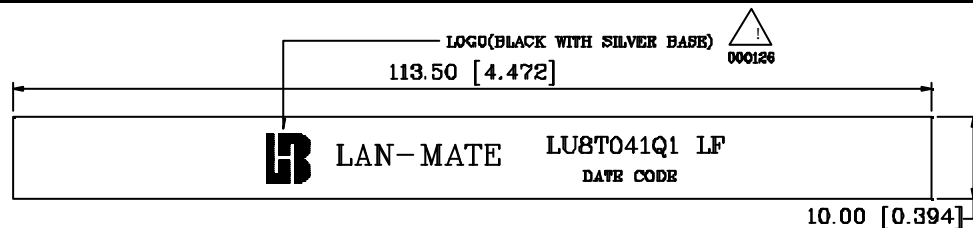
**Mechanical**



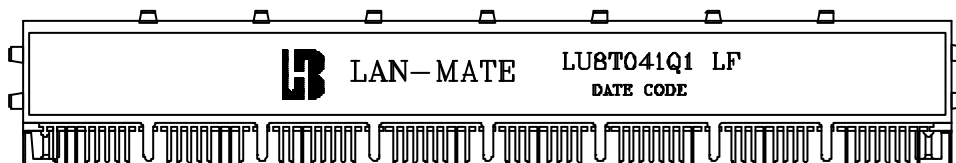
Units: mm[Inches] Tolerances: xx.x0±0.25[0.010]  
0.xx±0.05[0.002]

- |                     |   |   |
|---------------------|---|---|
| 1. Plastic Material | : | Thermoplastic (UL 94V-0), Black Housing       |
| 2. Metal Shield     | : | Brass, 20u" inches thick Nickel               |
| 3. Spring Wire      | : | Phosphor bronze with selective gold plating   |
| 4. Solder Pin       | : | 0.4x0.4mm, Phosphor bronze with solder Plated |
| 5. Durability       | : | 750 Mating cycles Min.                        |

**Label position**



**Lable Drawing**



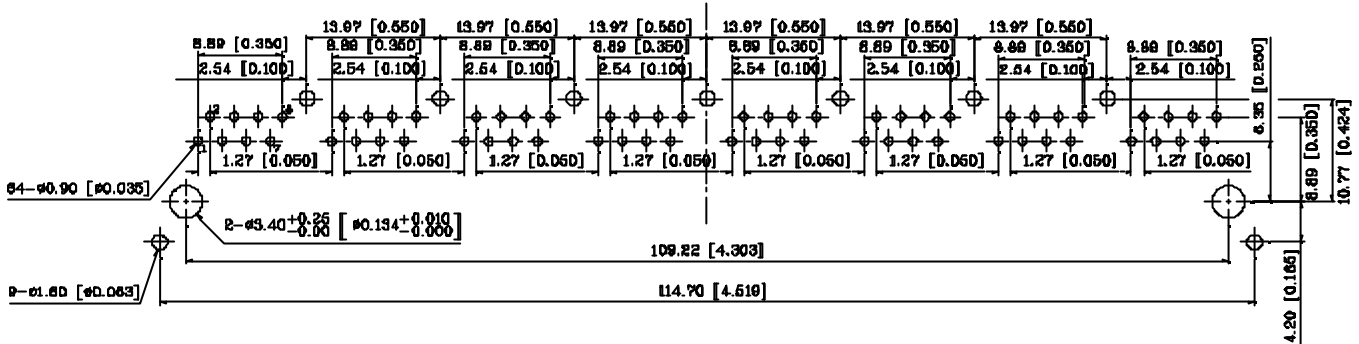
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PCB Layout Mounting Hole(Top View)



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0.xx±0.05[0.002]