

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

**P/N: LU1S516**

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**Feature**



- RJ-45 connector integrated with X'FMR /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.

<b>Electrical Specifications @ 25°C</b>											
Part Number	Turns Ratio (±5%)		OCL (uH Min) @ 100 KHz/0.1V with 8mA DC Bias			C <sub>w/w</sub> (pF Max)	L.L (uH Max)	Rise Time 10-90%(nSTyp)	Insertion Loss (dB Max)		HI-POT (Vrms)
	TX	RX			0.3-100MHz						
LU1S516	1CT:1	1CT:1CT	350			28	0.4	2.5	-1.15		1500
<b>Continue</b>											
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
LU1S516	-16	-14	-13.5	-13	-10	-40	-35	-30	-30	-25	-20

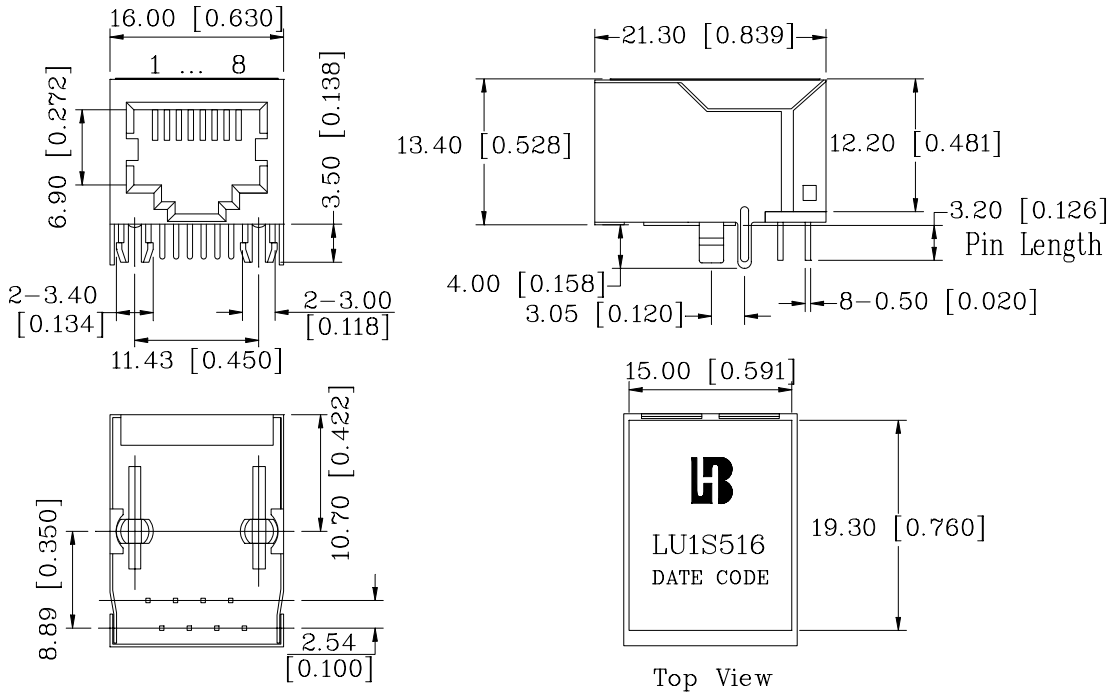
**Schematic**

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**Mechanical**

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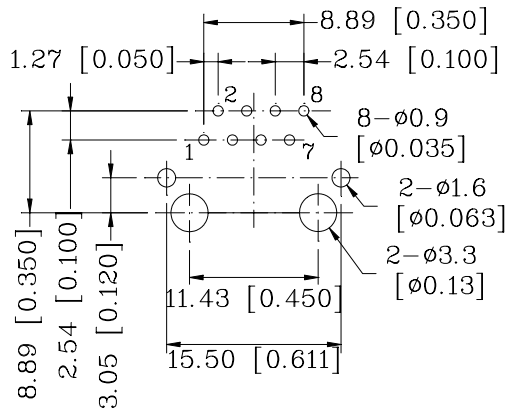


Units: mm[Inches] Tolerances: xx.x0±0.25[0.010]

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)**



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