

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

P/N: NU1S041E-XXX

**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 10/100 BASE transmission over UTP-5 cable
- Operating temperature range: 0°C to +70°C.
- Storage temperature range: -40°C to +85°C.

Code	1	3	4	Empty
LED Color	Red	Yellow	Green	No LED

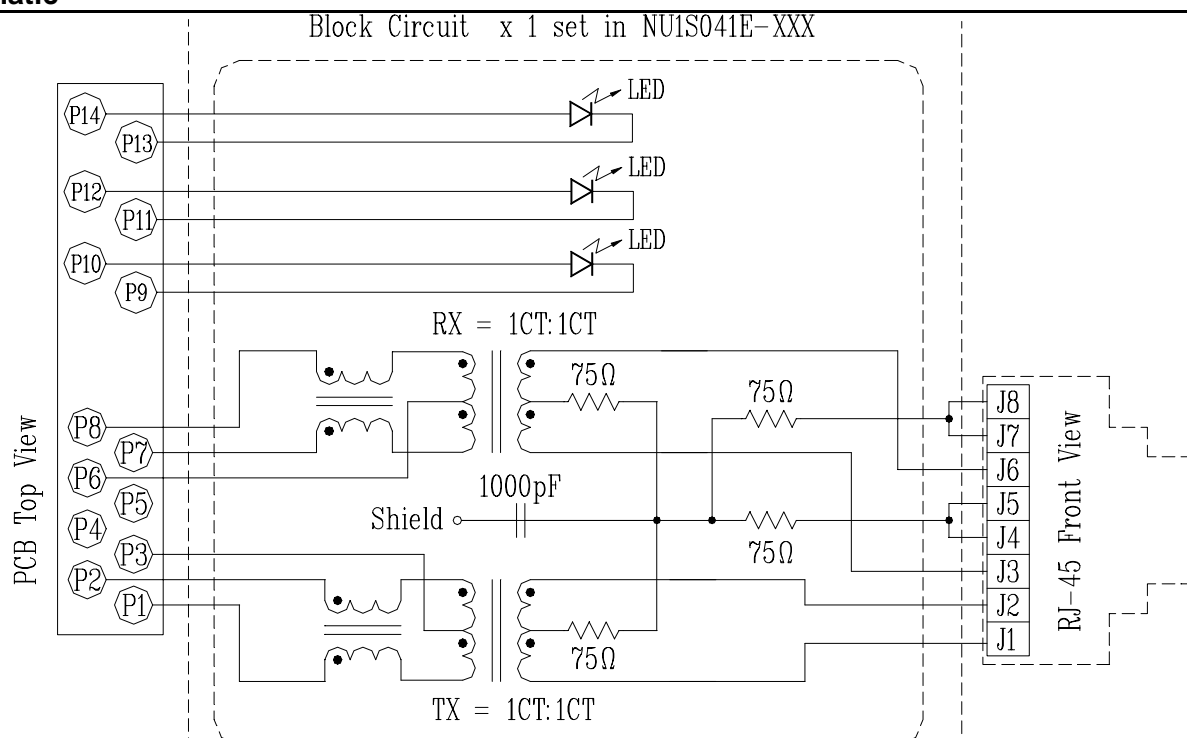
**Electrical Specifications @ 25°C**

Part Number	Turns Ratio (±5%)		Inductance(uH Min) @ 100 KHz/0.1V with 8mA DC Bias	CW/W (pF Max)	Leakage Inductance (uH Max)	Voltage isolation (Vrms)
	TX	RX				
NU1S041E-XXX	1CT:1CT	1CT:1CT	350	28	0.5	1500

**Continue**

Part Number	Insertion Loss (dB Max)	Return Loss (dB Min)					Cross talk (dB Min)	Differential to Common Mode Rejection TX/RX(dB Min)
		0.3-100MHz	30MHz	40MHz	50MHz	60MHz		
NU1S041E-XXX	-1.15	-16	-14	-13.5	-13	-10	-40	-30

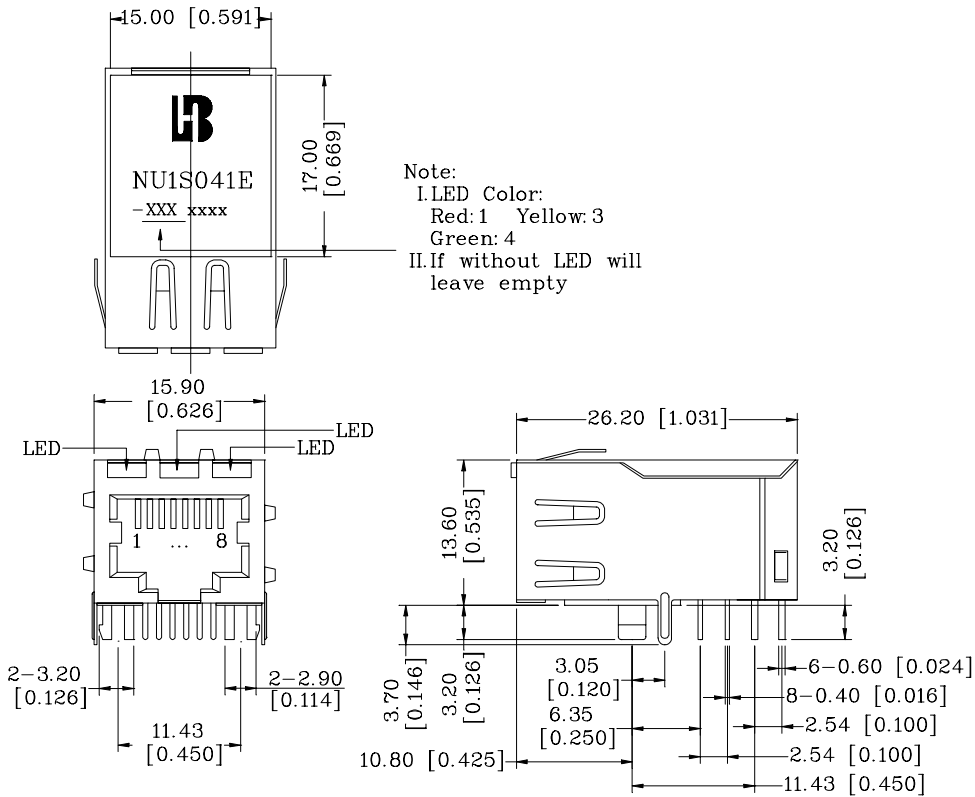
**Schematic**



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**Mechanical**

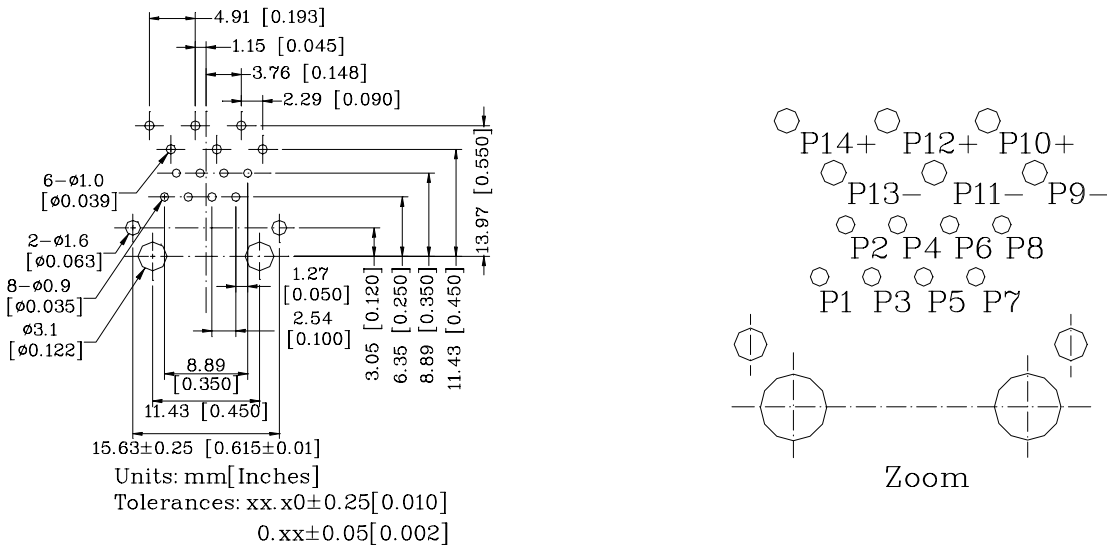


Note:  
 I.LED Color:  
 Red: 1 Yellow: 3  
 Green: 4  
 II.If without LED will  
 leave empty

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)**



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