

**“LAN-MATE”SERIES
SINGLE RJ45 CONNECTOR MODULE WITH INTEGRATED
10/100 BASE-TX MAGNETICS & XLEDs**

- J-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: -40°C to +85°C.



Electrical specifications @ 25°C

OCL(100KHz, 0.1Vrms with 8mA/DC Bias) : 350 uH Min.

Part Number	Insertion Loss (dB Max)	Return Loss (dB Min)					Cross talk (dB Min)			Differential to Common Mode Rejection (dB Min)
		0.3~100MHz	30MHz	40MHz	50MHz	60MHz	80MHz	0.3-80MHz	0.3-60MHz	
NU1S041-XXX	-1.15	-16	-14	-13.5	-13	-10	-35			-30
NU1S041A- XXX	-1.15	-16	-14	-13.5	-13	-10	-	-40	-38	
NU1S041B- XXX	-1.15	-16	-14	-13.5	-13	-10	-	-40	-38	-
NU1S041C- XXX	-1.15	-16	-14	-13.5	-13	-10	-	-40	-38	-
NU1S041D- XXX	-1.15	-16	-14	-13.5	-13	-10	-	-40	-38	-
NU1S112- XXX	-1.15	-16	-14	-13.5	-13	-10	-	-40	-38	-
NU1S114- XXX	-1.15	-16	-14	-13.5	-13	-10	-35	-	-	-30
NU1S114A- XXX	-1.15	-16	-14	-13.5	-13	-10	-35	-	-	-
NU1S214A- XXX	-1.15	-16	-14	-13.5	-13	-10	30MHz	50MHz	100MHz	-
							-55	-45	-35	
NU1S515- XXX	-1.15	-16	-14	-13.5	-13	-10	-35	-	-	-30
NU1S516- XXX	-1.15	-16	-14	-13.5	-13	-10	-35	-	-	-30
NU1S516 A- XXX	-1.15	-16	-14	-13.5	-13	-10	30MHz	50MHz	100MHz	-
							-55	-45	-35	
NU1S517- XXX	-1.1	-16	-14	-13.5	-13	-10	-	-40	-38	-

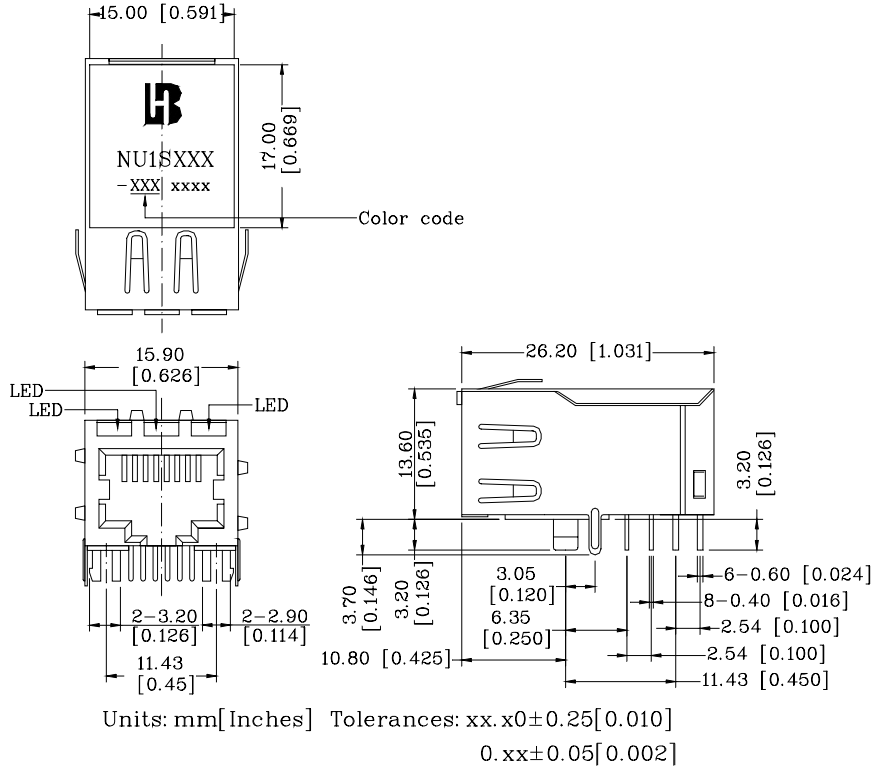
Part Number	CW/W (pF Max)	L.L TX/RX (uH Min)	HI-POT (Vrms)	Rise time (10-90%) (nS Typ)	Turn Ratios (TX/RX) ±5%	CMRR TX/RX (dB Min)	
						0.3-60MHz	60-100MHz
NU1S041-XXX	28	0.5	1500	2.5	1CT:1CT	-	-
NU1S041A- XXX	28	0.5	1500	-	1CT:1CT	-45/-40	-40/-35
NU1S041B- XXX	28	0.3	1500	-	1CT:1CT	-45/-40	-40/-35
NU1S041C- XXX	28	0.4	1500	-	1CT:1CT	-45/-40	-40/-35
NU1S041D- XXX	28	0.4	1500	-	1CT:1CT	-45/-40	-40/-35
NU1S112- XXX	30	1.3/0.5	1500	-	1CT:2CT/1CT:1CT	-45/-40	-40/-35
NU1S114- XXX	28	0.8/0.5	1500	2.5	1CT:1.414CT/1CT:1CT	-	-
NU1S114A- XXX	28	0.8/0.5	1500	2.5	1CT:1.414CT/1CT:1CT	-30	
NU1S214A- XXX	28	0.4	1500	2.5	1CT:1.414/1CT:1CT	-	-
NU1S515- XXX	28	0.4	1500	2.5	1CT:1CT	-	-
NU1S516- XXX	28	0.4	1500	2.5	1CT:1/1CT:1CT	-	-
NU1S516 A- XXX	28	0.4	1500	2.5	1CT:1/1CT:1CT	-	-
NU1S517- XXX	28	0.4	1500	2.5	1CT:1/1CT:1CT	-45/-40	-40/-35

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

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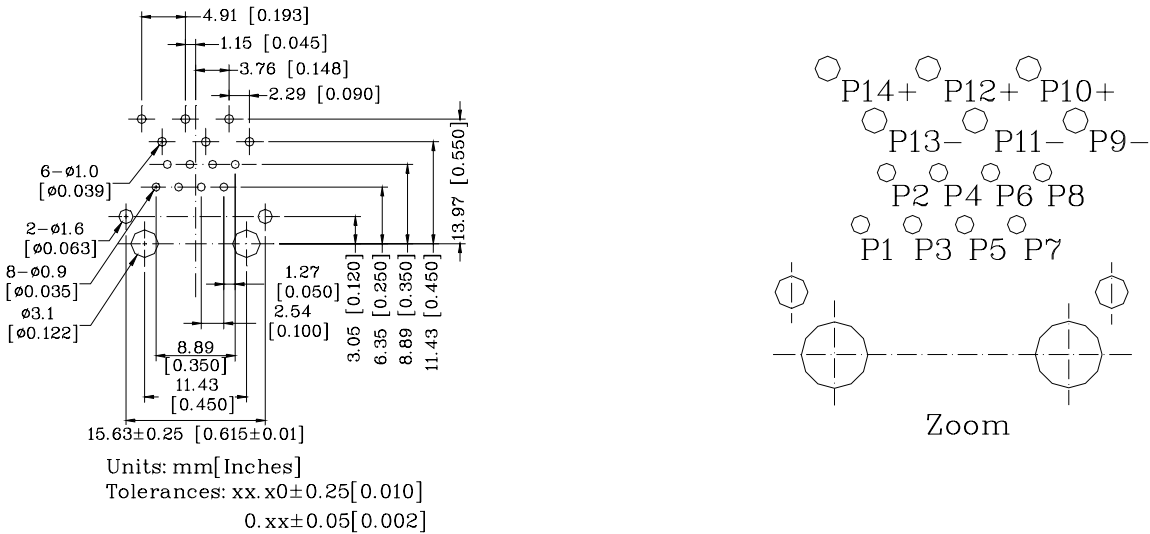
Mechanicals

NU1SXXX-XXX



- Physical char :
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 over with 6u gold plated.
 4. Solder Pin : 0.4x0.4mm, Phosphor bronze with solder Solder plated.
 5. Durability : 300 Mating cycles Min.

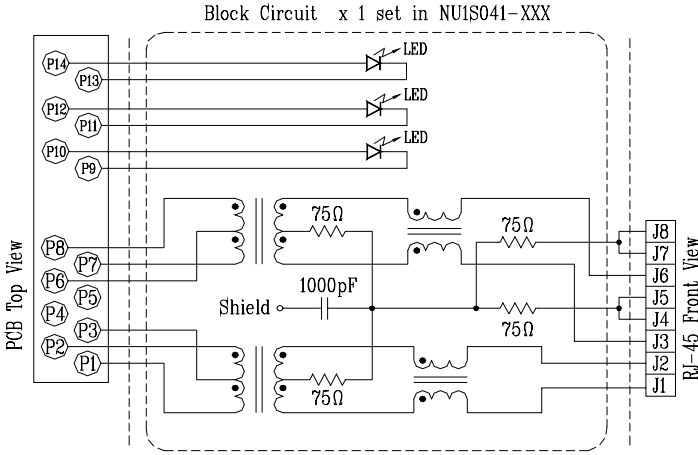
PCB Layout Mounting Hole (Top view)



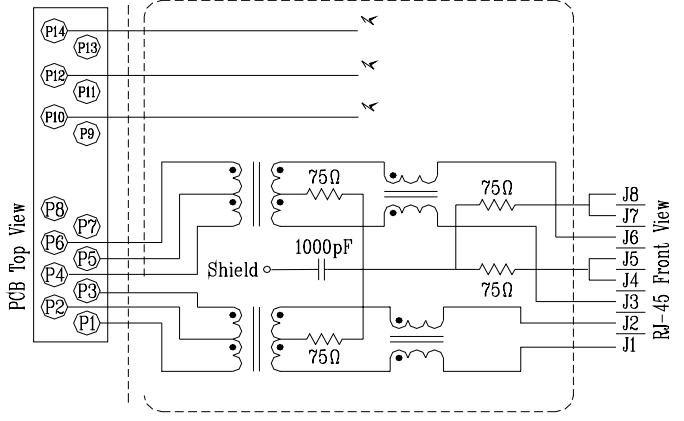
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Schematics

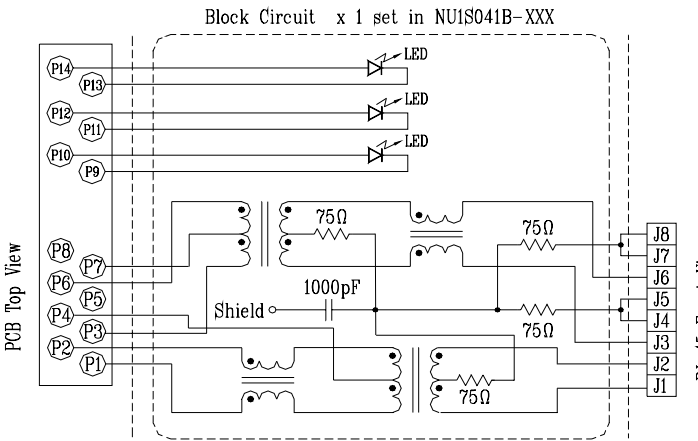
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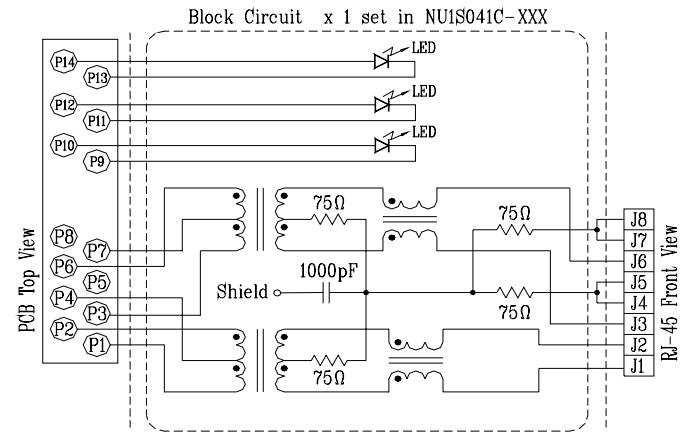
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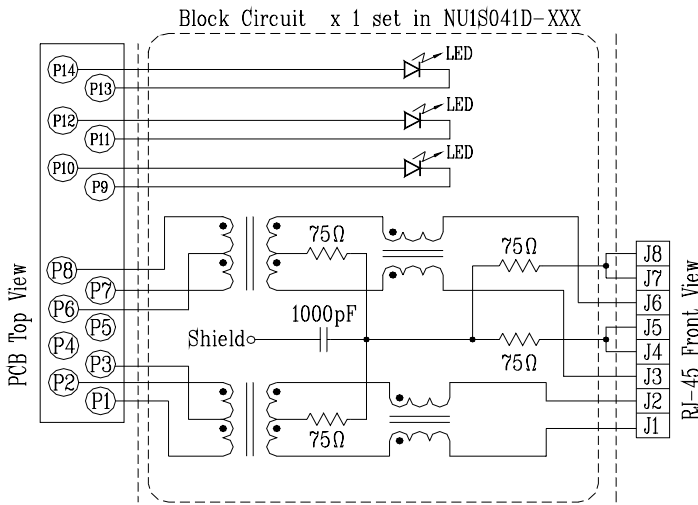
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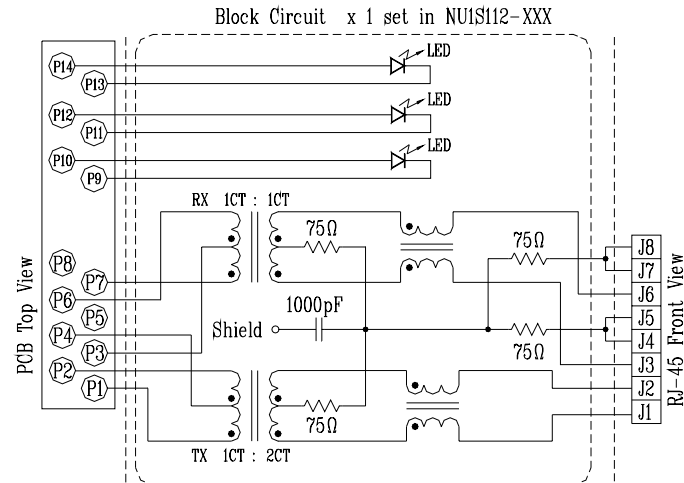
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NU1S041D-XXX

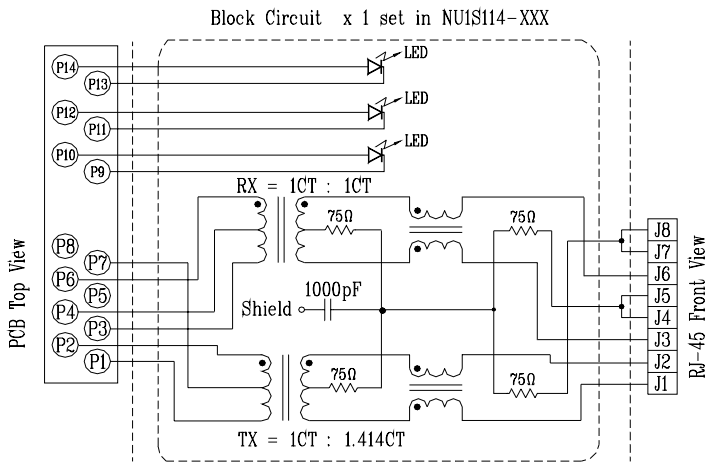


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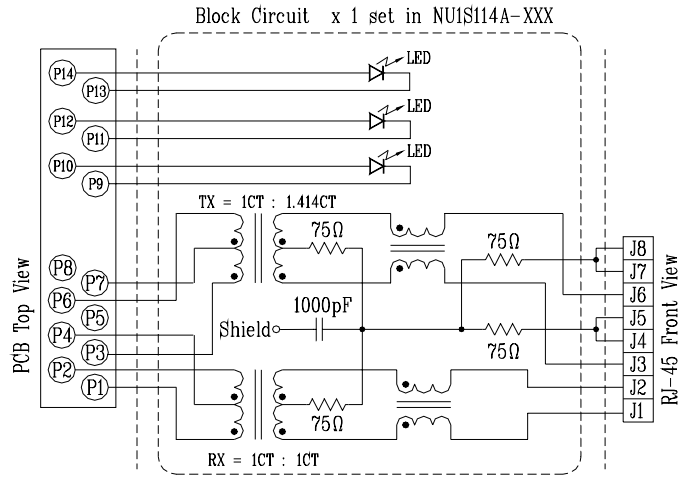


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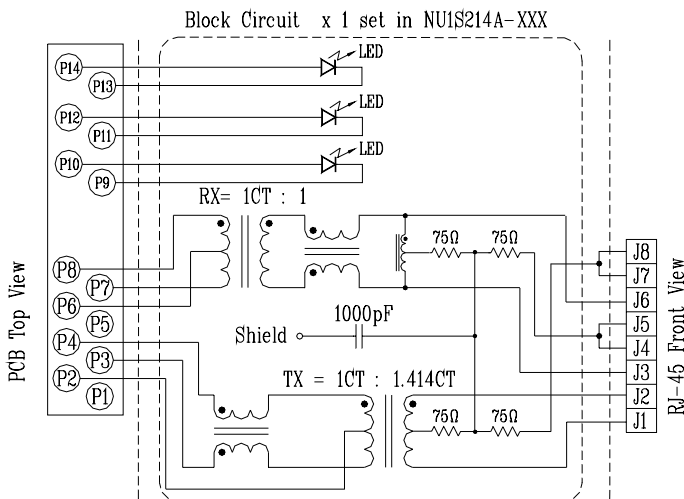
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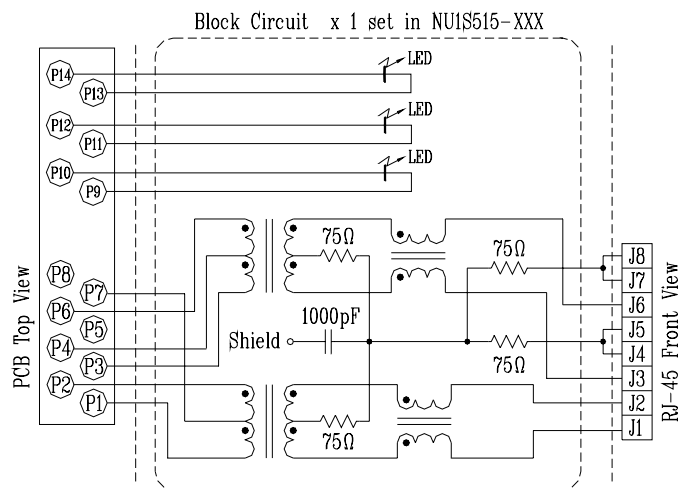
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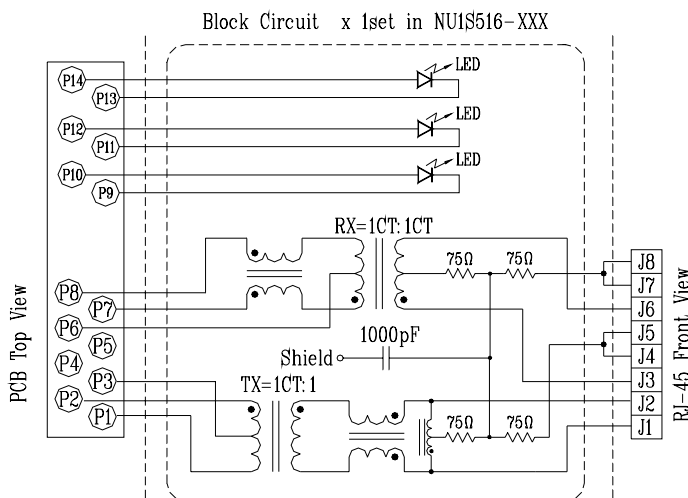
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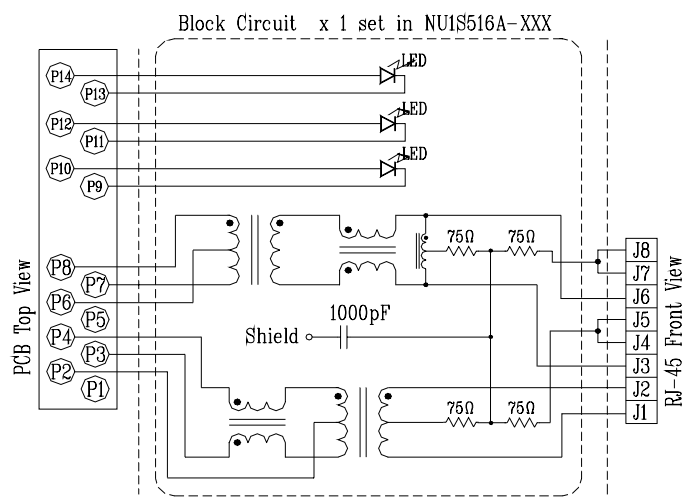
NU1S515-XXX



NU1S516-XXX



NU1S516A-XXX



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NUIS517-XXX

