

## “LAN-MATE” SERIES

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

P/N: LU1S515

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#### A. General Specifications

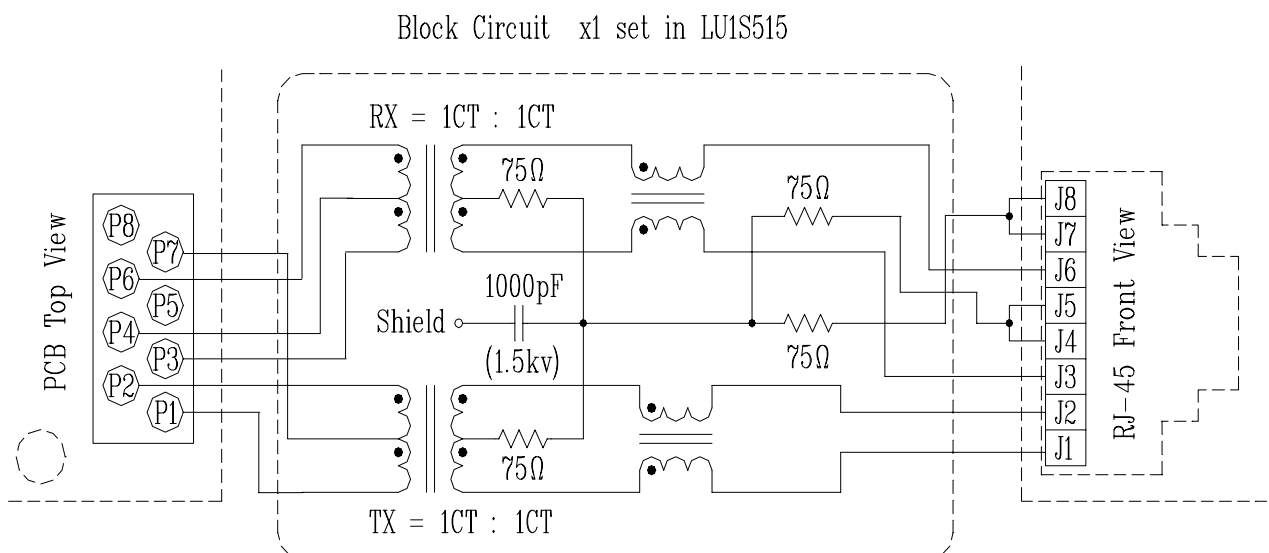
1. RJ-45 connector integrated with X'FMER /Impedance resistor/High voltage capacitor
2. Size same as RJ-45 connector to save PCB Board space.
3. Reduce EMI Radiation, Improve EMI performance.
4. Design for 100 BASE transmission over UTP-5 CABLE.
5. Operating temperature range: 0 °C to +70 °C.

#### B. Electrical Specifications@25°C:

1. Turns Ratio ( $\pm 5\%$ ): RX = 1CT:1CT & TX=1CT:1CT
2. Primary OCL Inductance : 350 H MIN@100KHz /0.1Vrms with 8.0mA DC Bias
3. CW/W : 28 pF MAX
4. Leakage Inductance(TX &RX): 0.4 H MAX
5. Insertion loss (0.3 to 100 MHz): -1.15 dB Max.
6. Return Loss (dB Min):

30MHz	40MHz	50MHz	60MHz	80MHz
-16	-14	-13.5	-13	-10
7. Differential to Common Mode Rejection(dB MIN): -30@ 0.3-100MHz
8. Cross Talk (dB MIN): -35@0.3-80 MHz
9. Rise Time (10-90%): 2.5 nS Typ.
10. HI-POT Isolation: 1500 Vrms

#### C. Schematic:



Prepared :Luo Ming Li

Checked by: Xu Wenbing

Approved : Alexander Wu

Drawing no.: Pulse Transformer

REV.:A6

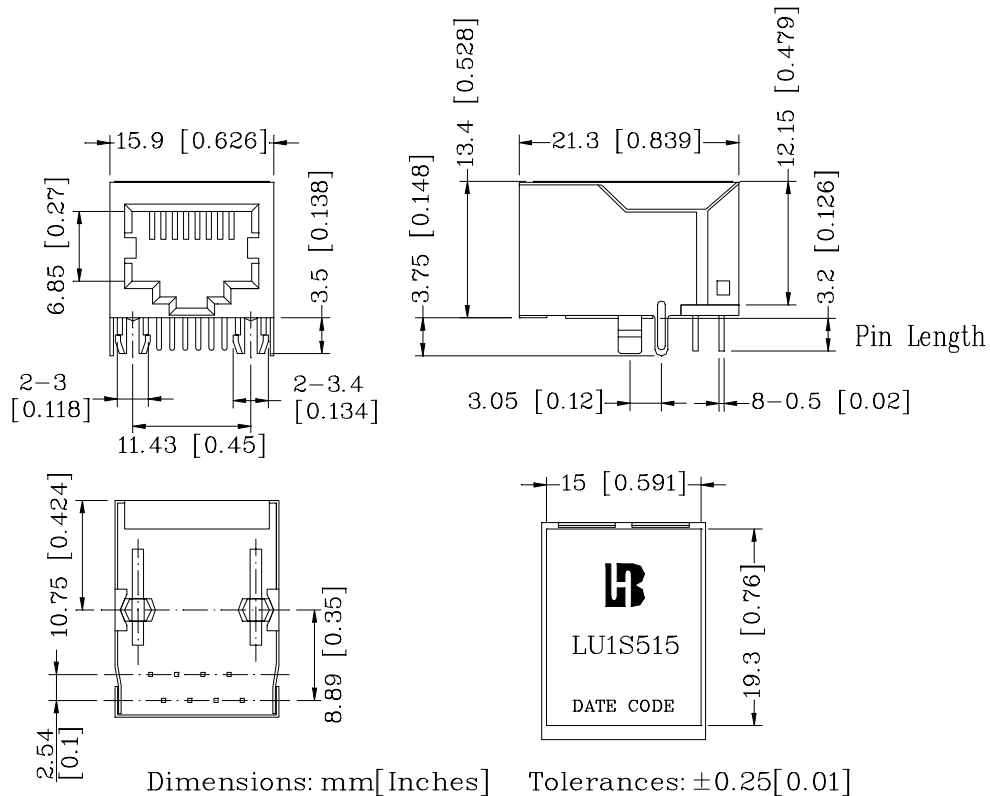
Date : 2001/08/06

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**D. Mechanical:**



1. Plastic Material : PBT 15% Glass Filled (UL 94V-0) , Black Housing
2. Metal Shield : Brass C2680-H, 20u Nickle 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 .

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

