

“LAN-MATE” SERIES

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

P/N: KHU1S041Q7 LF

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Feature



- Complies with requirement of IEEE 802.3u standards.
- 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.
- Compliance with ROHS requirements.
- Operating temperature range: 0 to +70 .
- Storage temperature range: -25 to +85 .

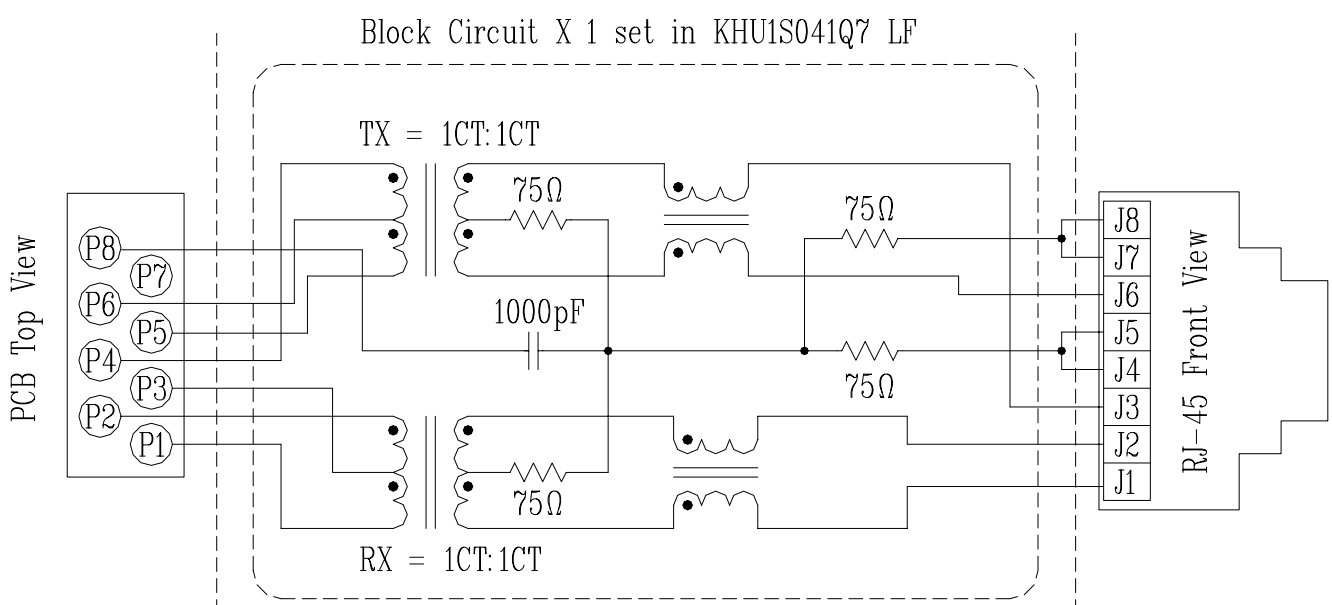
Electrical Specifications @ 25°C

| Part Number | Turns Ratio (±5%) TX/RX | OCL (uH Min) @ 100KHz/0.1V with 8mA DC Bias | C _{www} (pF Max) | L.L (uH Max) | Cross talk (dB Min) | | | HI-POT (Vrms) |
|---------------|-------------------------|---|---------------------------|--------------|---------------------|----------|-----------|---------------|
| | | | | | 0.3-30MHz | 30-60MHz | 60-100MHz | |
| KHU1S041Q7 LF | 1CT:1CT | 350 | 28 | 0.4 | -40 | -35 | -30 | 1500 |

Continue

| Part Number | Insertion Loss (dB Max) | Return Loss (dB Min) | | | | | CMR (dB Min) | | |
|---------------|-------------------------|----------------------|-------|-------|-------|-------|--------------|---------|----------|
| | | 0.3-100MHz | 30MHz | 40MHz | 50MHz | 60MHz | 80MHz | 1-30MHz | 30-60MHz |
| KHU1S041Q7 LF | -1.15 | -16 | -14 | -13.5 | -13 | -10 | -30 | -25 | -20 |

Schematic

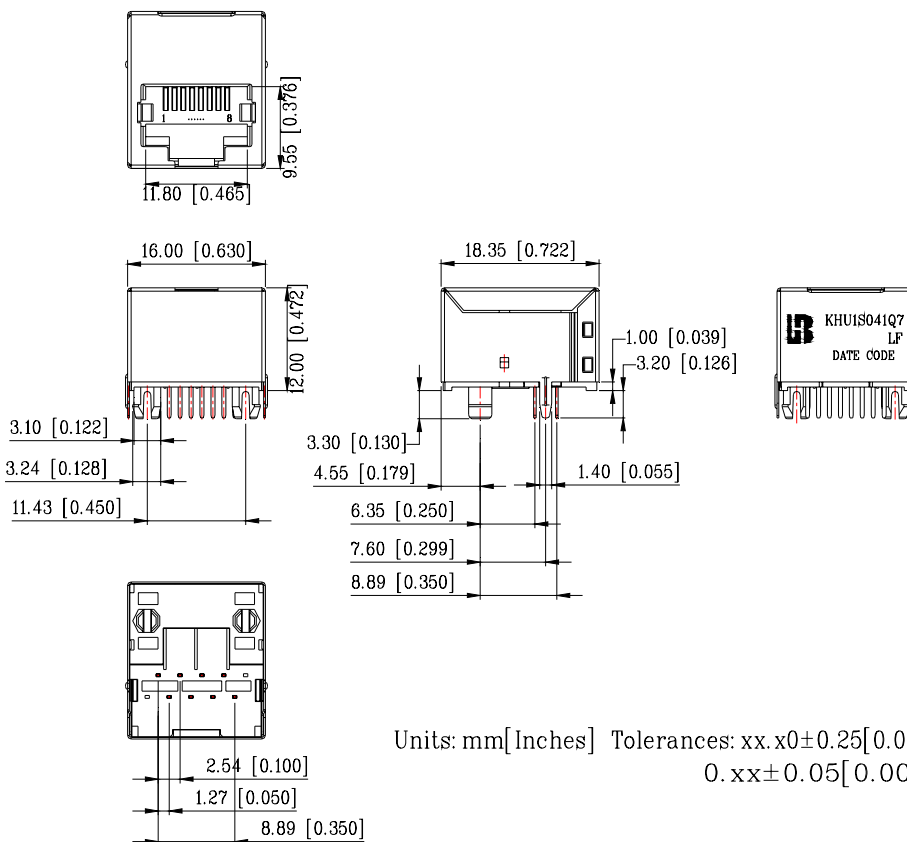


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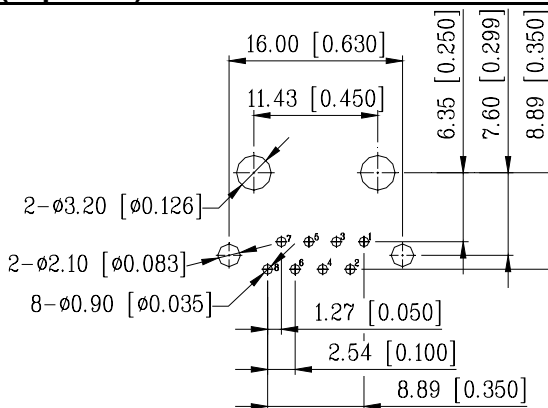
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Mechanical



- 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 : 0.46x0.3 mm, Phosphor bronze with solder Plated
- 5. Durability : 750 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]