



16ST6148

100Base-T Ethernet Isolation Transformer

General Information

1. 16 Pin, SMD Package with common choke to meet 100 MB/S specification
2. Low leakage inductance and winding capacitances for fast rise time
3. More economical than discrete transformers
4. High isolation voltages to comply with international safety requirements for LAN
5. Operating temperature range: 0°C to 70°C
6. Storage temperature range: -25° to 125° C

Electrical Characteristics

1. Turn Ratios: 1CT: 1CT $\pm 5\%$ (1-3-2 TO 7-5-6)
1.41CT: 1.41CT $\pm 5\%$ (16-15-15 TO 10-12-11)
2. OCL Inductance (Min) at 100KHz/0.1Vrms 8mA DC, 350 μ H
3. CW/W (pF Max.): 28 (1-2 TO 7-6) & 25 (16-15 TO 10-11)
4. Leakage Inductance (μ H Max) at 1MHZ: 0.5(1-2 short 6-7) 0.8(16-15 short 10-11)
5. DCR (OHM Max): 0.7(1-2) & 0.5(16-15) & 1.1(1-2=10-11)
6. Hi-pot Isolation (Vrms): 1500 (PRI-SEC)
7. Insertion Loss (0.1 MHz-100MHz): -1.1dB Max
8. Return Loss (dB Min):
-16dB Min AT 500KHz to 30MHz
-14dB Min at 31MHz to 46MHz
-12dB Min At 46MHz to 60MHz
-10dB MIN AT 61MHz TO 80MHz
9. CMDR: -40dB Min at 100KHz to 30MHz
-30dB Min at 50MHz to 100MHz
10. CMRR: -40dB Min at 100KHz to 60MHz
-35dB Min at 60MHz to 100MHz
11. Crosstalk: 30 dB Min at 1MHz to 100MHz

Schematic & Dimensions & Marking (Unit mm):

