

# 10/100 BASE-T ETHERNET ISOLATION TRANSFORMER

## P/N: 16ST6122B DATA SHEET

### A. GENERAL SPECIFICATIONS:

1. 16 PIN, SMD PACKAGE TO MEET 10/100 MB/S T SPECIFICATION.
2. LOW LEAKAGE INDUCTANCE AND WINDING CAPACITANCES FOR FAST RISE TIME.
3. HIGH ISOLATION VOLTAGES TO COMPLY WITH INTERNATIONAL SAFETY REQUIRMENTS FOR LAN.
4. OPERATING TEMPANGE:0°C TO 70°C.
5. STORAGE TEMP RANG: -25°C TO + 125°C.

### B. ELECTRICAL SPRCIFICATIONS: (25°C)

1. TURN RATIOS: 1CT: 1CT (RX 6-8:11-9) & 1.41CT: 1CT (TX 1-3: 16-14)
2. PRIMARY OCL INDUCTANCE (MIN.) AT 0.1 Vrms, 100 KHz, 8mA DC: 350 uH (6-8)&16-14)
3. CW/W (pF TYP123.): 30 pF (1-3 TO 16-14) & (6-8 TO 11-9)
4. LEAKAGE INDUCTANCE( uH Max)AT 100 KHz: (16-14 SHORT) 1-3=1.0 uH MAX  
(11-9 SHORT) 6-8=1.0 uH MAX
5. DCR (OHM MAX): 1.7 (14-16)
6. HI-POT ISOLATION (Vrms Min): 1500 V (100% TEST)
7. RISE TIME (ns TYP 10-90%): 3
8. INSERTION LOSS (dB Max): -1 dB AT 100 KHz-80 MHz
9. RETURN LOSS (dB MIN): 1MHz - 30 MHz -18 dB  
30 -60 MHz -14 dB  
60-80 MHz -13 dB
10. CROSSTALK (dB Min) : 30 dB AT 100 KHz-100 MHz
11. COMMON TO DIFFERENTIAL MODE REJ (dB) MIN:  
-40 AT 100 KHz-50 MHz & 30 AT 50 MHz- 155 MHz
12. COMMON TO COMMON MODE REJ (dB) MIN: -40AT 100KHz-155MHz

### C. DIMENSIONS & SCHEMATIC & MARKING:

