

10/100 BASE PULSE TRANSFORMER

P/N: 16ST8515 DATA SHEET

A. GENERAL SPECIFICATIONS:

1. DESIGNED FOR 10/100 MB/s TRANSMISSION OVER UTP-5 CABLE.
2. TESTED & QUALIFIED FOR USE WITH NATIONAL SEMICONDUCTOR'S DP83840 ETHERNET 10/100 PHY CHIP.
3. CABLE INTERFACE FOR ISOLATION AND LOW COMMON MODE EMISSIONS.
4. 16-PIN DIP PACKAGE FOR ECONOMIC COST.
5. OPERATING TEMP RANGE: 0°C TO +70°C
6. STORAGE TEMP RANGE: -25°C TO +125°C

B. ELECTRICAL SPECIFICATIONS:

1. TURN RATIO: 1CT: 1CT
2. INSERTION LOSS 0.1 TO 125 MHz (dB MAX.)-1.1
3. RISE TIME: (10-90%): 2.5 nS TYP
4. RETURN LOSS (dB MIN):

FREQUENCY	TX&RX	FREQUENCY	TX&RX
0.1MHz-10MHz	-20	10MHz-30MHz	-19
30MHz-60MHz	-14	60MHz-100MHz	-12
5. DIFFERENTIAL TO COMMON MODE REJECTION (dB MIN.):

FREQUENCY	TX	RX
0.1-60 MHz	-42	-40
60-100 MHz	-40	-35
6. CROSS TALK (dB MAX.): 0.1-60 MHz -40
60-100MHz -38
7. VOLTAGE ISOLATION (Vrms MIN.): 1500
8. PRI DCR (Ω)MAX:TX&RX=0.9
9. PRIOCL (uH min): TX&RX=350 WITH 8mA DC BIAS
10. PRI L.L (uH Max) TX&RX: 0.6
11. PRI Cw/w (pF Max) TX&RX: 28

C. SCHEMATIC & DIMENSIONS & MARKING (UNIT mm)

