

# 10/100 BASE PULSE TRANSFORMER

## P/N:16ST8515 DATE SHEET

### A.GENERAL SPECIFICATIONS:

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

### B.ELECTRICAL SPECIFICATIONS:

- TURN RATIO: 1CT: 1CT
- INSERTION LOSS 0.1 TO 100 MHz (dB MAX.)-1.1
- RISE TIME:(10-90%): 2.5 nS TYP
- RETURN LOSS (dB MIN):
 

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

| FREQUENCY  | TX  | RX  |
|------------|-----|-----|
| 0.1-60 MHz | -42 | -40 |
| 60-100 MHz | -40 | -35 |
- CROSS TALK (dB MAX.):
 

|            |     |
|------------|-----|
| 0.1-60 MHz | -40 |
| 60-100MHz  | -38 |
- VOLTAGE ISOLATION(Vrms MIN.):1500
- PRI.DCR(Ω)MAX:TX&RX=0.9
- PRI.OCL(uH min):TX&RX=350 WITH 8mA DC BIAS
- PRI L.L(uH Max) TX&RX :0.6
- PRI Cw/w(pF Max) TX&RX :28

### C. SCHEMATIC & DIMENSIONS & MARKING (UNITmm)

