



16PT8520X

### 10/100 BASE-T TRANSFORMER

#### Feature



- 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 temperature range: 0°C to +70°C.
- Storage temperature range: -25°C to +105°C.

#### Electrical Specifications @ 25°C

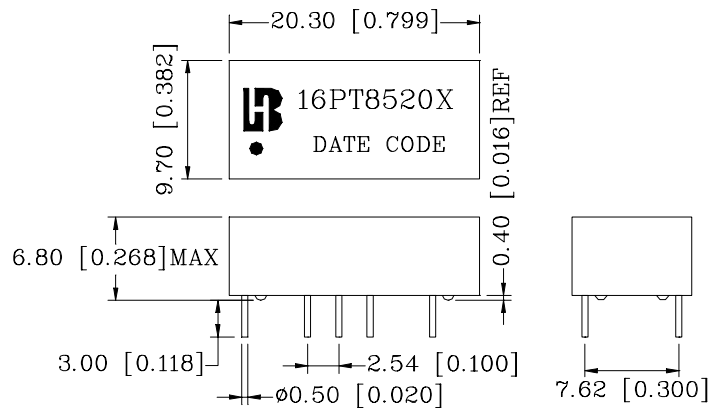
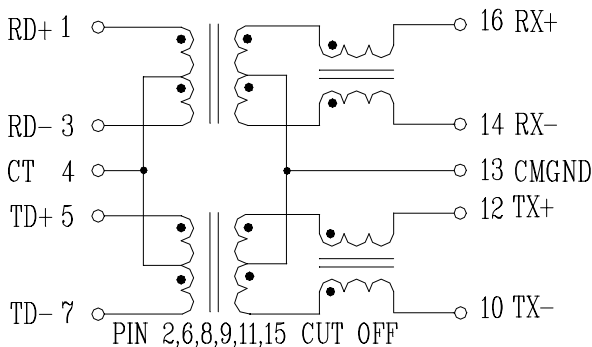
| Part Number | Turns Ratio (±5%) |         | OCL (uH Min)<br>@100KHz/0.1V<br>with 8mA DC Bias | C <sub>w/w</sub><br>(pF Max) | L.L.<br>(uH Max) | DCR<br>(Ω Max) | HI-POT<br>(Vrms) |
|-------------|-------------------|---------|--|------------------------------|------------------|----------------|------------------|
|             | TX                | RX      |  |                              |                  |                |                  |
| 16PT8520X   | 1CT:1CT           | 1CT:1CT | 350  | 50                           | 0.6              | 0.9            | 1500             |

#### Continue

| Part Number | Insertion Loss<br>(dB Max) | Return Loss<br>(dB Min) |       |       |          | Cross talk<br>(dB Min) | DCMR<br>(dB Min) |
|-------------|----------------------------|-------------------------|-------|-------|----------|------------------------|------------------|
|             |                            | 30MHz                   | 40MHz | 50MHz | 60-80MHz |                        |                  |
| 16PT8520X   | 0.3-100 MHz                | -16                     | -15   | -13   | -11      | 0.3-100MHz             | 0.3-100MHz       |
|             | -0.8                       |                         |       |       |          | -35                    | -30              |

#### Schematic

#### Mechanical



Units: mm [Inches] Tolerances: xx.x0±0.25 [0.010]  
0.xx±0.05 [0.002]