Features
- Compliant with IEEE 802.3 standards
- Designed for 10/100/1000 Base-T full duplex
- Supports four pairs of Category 5 UTP/6 UTP cables
- Extended operating temperature range
- RoHS compliant*

Applications
- Ethernet

PT61022XEL 10/100/1000 Base-T Transformer

Electrical Specifications @ 25 °C
- Turns Ratio (±5 %) ...............1xCT:1xCT*
- Inductance ...........350 µH min. @ 100 KHz, 0.1 Vrms, 8 mA DC Bias
- Leakage Inductance ..........0.5 µH max. @ 100 KHz, 0.1 Vrms
- Cww ......................25 pF typ. @ 100 KHz, 0.1 Vrms
- DCR ......................0.9 Ω max.

Insertion Loss
- 0.3-100 MHz ..............-1.1 dB max.
- Return Loss
  - 0.3-30 MHz ..............-18 dB min.
  - 30-60 MHz ..............-14 dB min.
  - 60-80 MHz ..............-12 dB min.
  - 80-100 MHz ............-10 dB min.
- Common Mode Rejection
  - 0.3-60 MHz ..............-35 dB Min.
  - 60-100 MHz .............-30 dB Min.
- Crosstalk
  - 0.3-60 MHz ..............-35 dB Min.
  - 60-100 MHz .............-28 dB Min.
- Hipot
  - 1 mA, 60 sec. ...........1500 Vrms
- Operating Temperature
  - -40 °C to +85 °C
- Storage Temperature
  - -40 °C to +125 °C

*CT: Center tap

Material
- Terminal Finish .........................Tin

Packaging Specifications
- Tape & Reel ................500 pcs./reel

How To Order
- PT61022 X E L
  - Model
  - Type
    - X = Extended Temperature Range
  - Packaging
    - E = Tape and Reel (500 pcs./reel)
  - Termination
    - L = Tin only (RoHS Compliant)

Recommended Layout

Electrical Schematic

Warning: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
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PT61022XEL 10/100/1000 Base-T Transformer

Soldering Profile

Ramp up rate = 3 °C/second max.
Ramp down rate = 6 °C/second max.
TL = 217 °C
TL = 60 seconds to 150 seconds
TP = 250 ±3 °C
Time within 5 °C of Actual Peak Temperature (Tp) = 20-40 seconds
Ts min = 150 °C
Ts max = 200 °C
Ts min to Ts max: 60 seconds to 180 seconds
25 °C to Peak Temperature = 8 minutes max.

Packaging Specifications

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