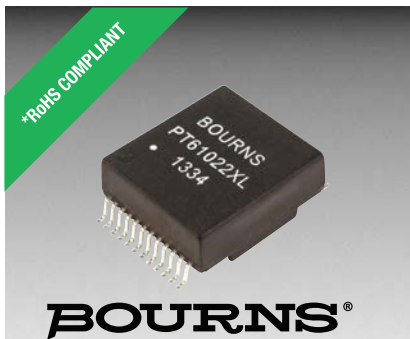




Features

- 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

PT61022XL 10/100/1000 Base-T Transformer

Electrical Specifications @ 25 °C

Turns Ratio ($\pm 5\%$)	1CT*:1CT*
Inductance	350 μ H min. @ 100 KHz, 0.1 Vrms, 8 mA DC Bias
Leakage Inductance	0.5 μ H 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

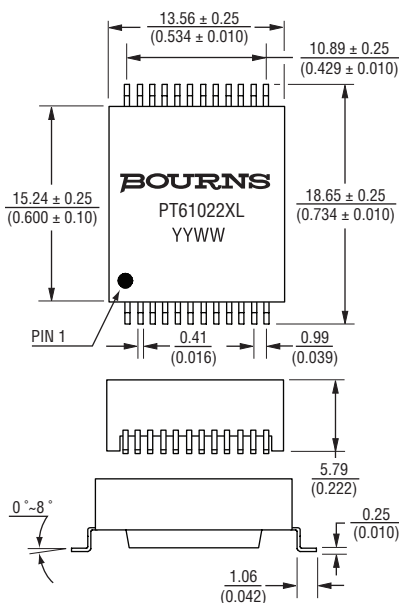
Tape & Reel 500 pcs./reel

How To Order

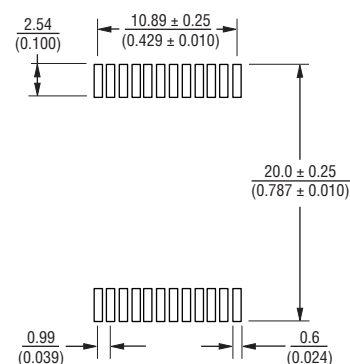
PT61022 X E L

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

Product Dimensions



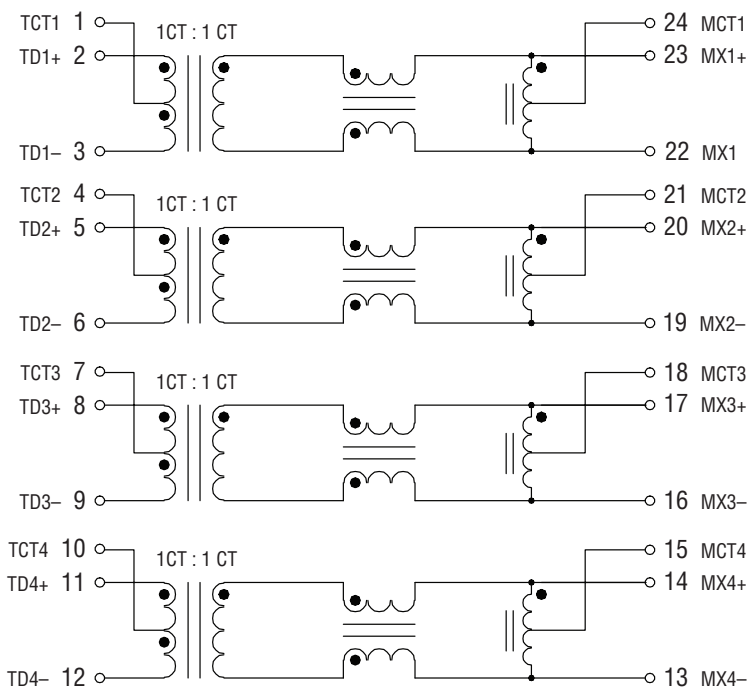
Recommended Layout



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

TOLERANCES: $\frac{0.05}{(0.002)}$ UNLESS OTHERWISE NOTED

Electrical Schematic



WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

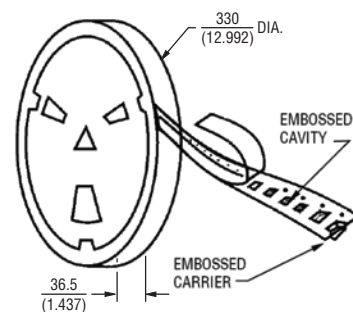
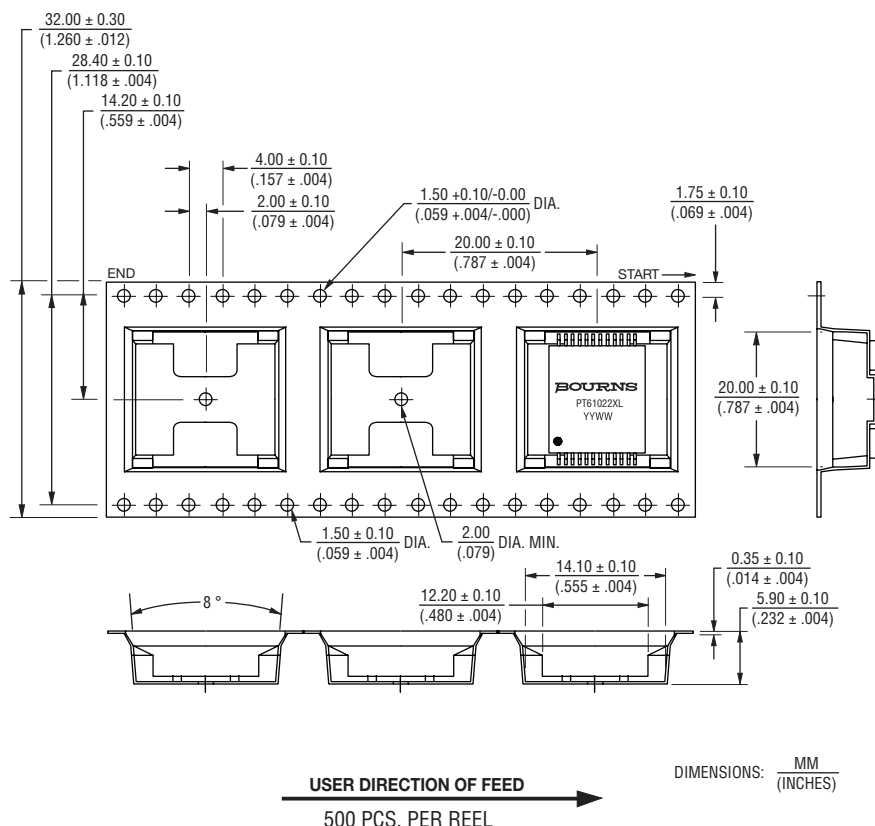
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The graph illustrates a heat treatment cycle with the following parameters and phases:

- Temperature Axis:** Markers include $25\text{ }^{\circ}\text{C}$, $T_S\text{ MIN.}$, $T_S\text{ MAX.}$, T_L , and T_P .
- Time Axis:** Markers include t_s (PREHEAT), t_p (total time to peak), and t_L (dwell in critical zone).
- Phases:**
 - PREHEAT:** Duration t_s from $25\text{ }^{\circ}\text{C}$ to $T_S\text{ MAX.}$
 - RAMP-UP:** Heating from $T_S\text{ MAX.}$ to T_P .
 - CRITICAL ZONE:** Temperature range from T_L to T_P .
 - Dwell:** Duration t_L at temperature T_L within the critical zone.
 - RAMP-DOWN:** Cooling from T_P back to $25\text{ }^{\circ}\text{C}$.
- Additional Information:** A note specifies $8\text{ MINS./}248.9\text{ }^{\circ}\text{C}$ for the dwell phase.

Packaging Specifications



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