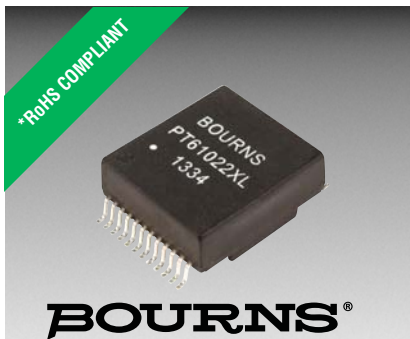




Features

- Compliant with IEEE 802.3 standards
- Designed for 10/100/1000 Base-T full duplex
- Supports four pairs of Category 5 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

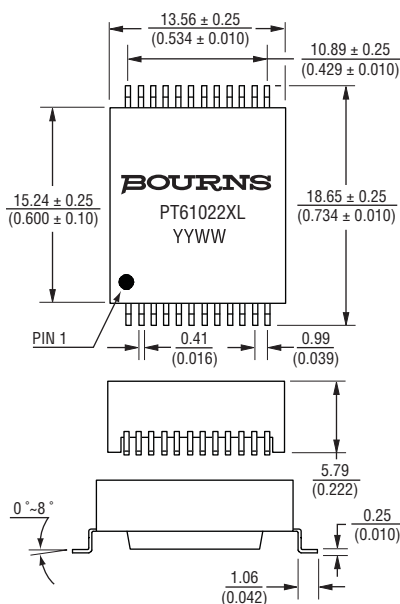
Tape & Reel 500 pcs./reel

How To Order

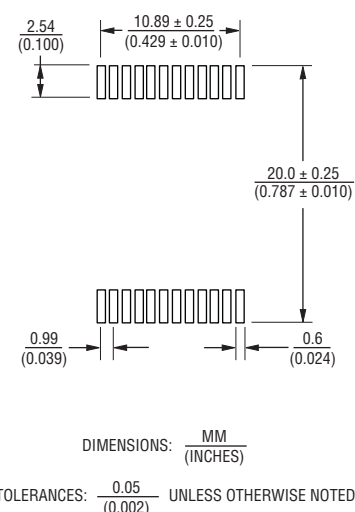
PT61022 X E L

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

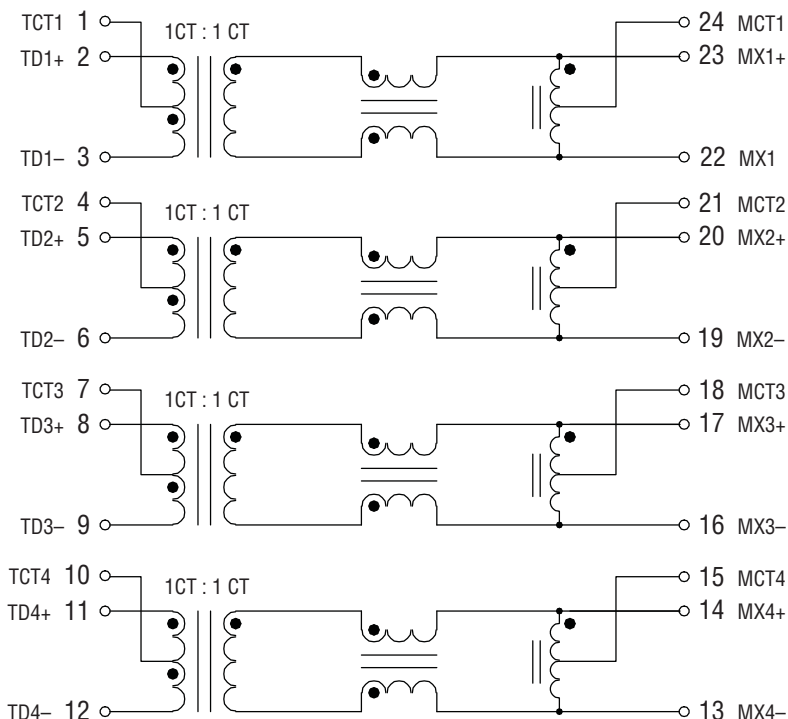
Product Dimensions



Recommended Layout



Electrical Schematic



*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.

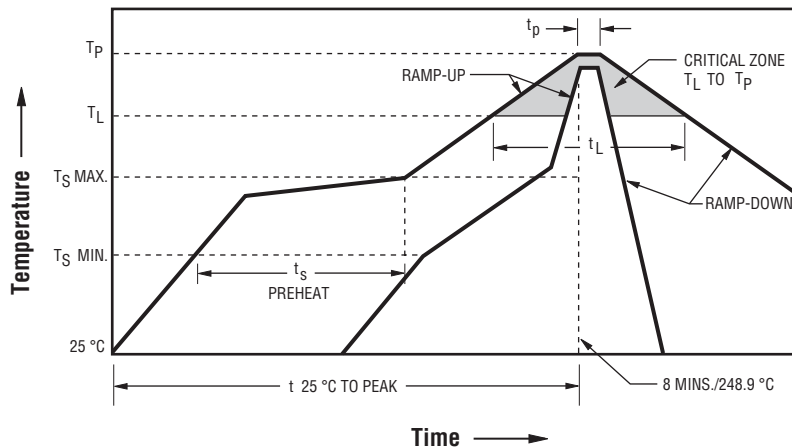
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

PT61022XEL 10/100/1000 Base-T Transformer

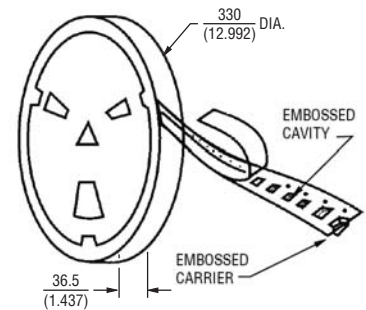
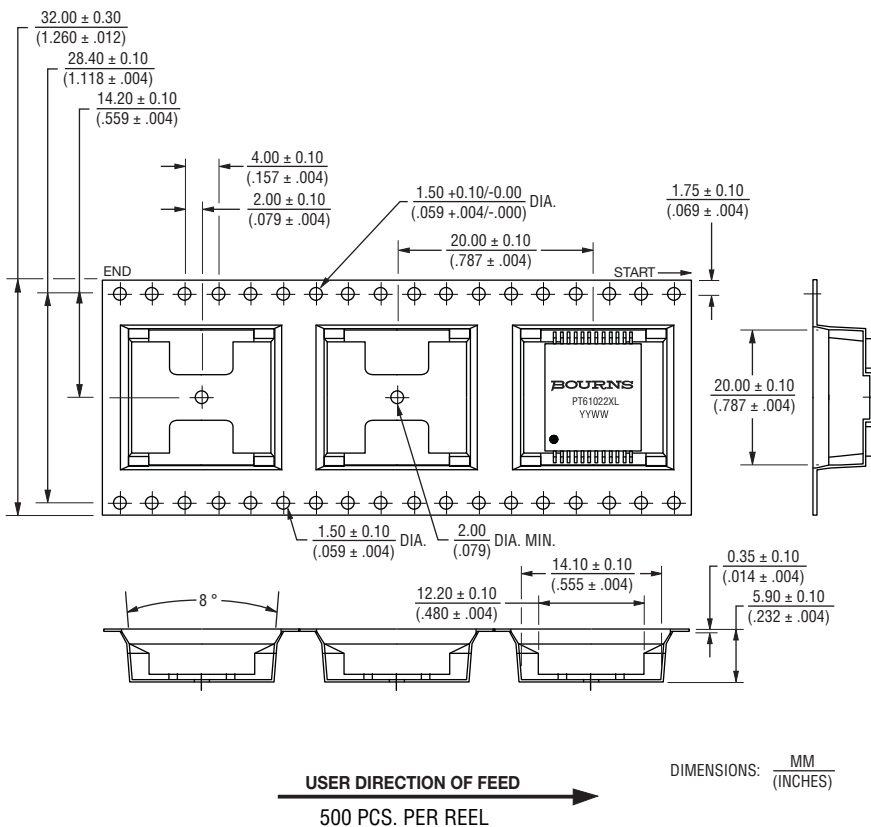
BOURNS®

Soldering Profile



Ramp up rate = 3 °C/second max.
 Ramp down rate = 6 °C/second max.
 $T_L = 217\text{ °C}$
 $t_L = 60\text{ seconds to }150\text{ seconds}$
 $T_p = 250 \pm 3\text{ °C}$
 Time within 5 °C of Actual Peak Temperature (t_p) = 20~40 seconds
 $T_{s\text{ min}} = 150\text{ °C}$
 $T_{s\text{ max}} = 200\text{ °C}$
 $T_{s\text{ min to }T_{s\text{ max}}} = 60\text{ seconds to }180\text{ seconds}$
 25 °C to Peak Temperature = 8 minutes max.

Packaging Specifications



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