

## Features

- Compliant with IEEE802.3ab Draft Standards for 1000 Base-T
- Designed for Long Haul Gigabit Ethernet 10/100/1000 Base-T Full Duplex applications
- Low profile surface mount packaging designed for reflow process (245 ° peak)
- Supports 4 pairs of Category 5 UTP cables

- RoHS compliant\*

## Applications

- LAN
- Ethernet

# PT61020EL LAN 10/100/1000 Base-T Transformer Modules

### Electrical Specifications @ 25 °C

Inductance.....	350 $\mu$ H min.
with 8 mA DC bias @ 100 KHz, 0.2 V	
Leakage Inductance.....	0.50 $\mu$ H max.
@ 100 KHz, 0.2 V	
Interwinding Capacitance.....	25 pF typ.
@ 100 KHz, 0.2 V	
DC Resistance.....	0.90 $\Omega$ max.
Insertion Loss.....	0.3-100 MHz
	-1.1 dB max.
Return Loss (dB min.)	
0.3-30 MHz.....	-18
40 MHz.....	-14.4
50 MHz.....	-13.1
60-80 MHz.....	-12
Cross Talk (dB min.)	
0.3-30 MHz.....	-35
60-100 MHz.....	-28
Common Mode Rejection (dB min.)	
0.3-30 MHz.....	-40
60 MHz.....	-35
80-100 MHz.....	-30
Turns Ratio.....	1 CT:1 $\pm$ 5 %
PoE+ Current	
.....	Up to 650 mA for 1000 Base-T
Isolation Hi-Pot....	1500 VAC 1 mA 1 sec.
Operating Temperature	
.....	-40° C to +85 °C

PT61020EL is the extended temperature version of PT61024L.

### Environmental Specifications

Moisture Sensitivity Level.....	1
ESD Classification (HBM).....	N/A

### Packaging Specifications

Tape & Reel..... 400 pcs./reel

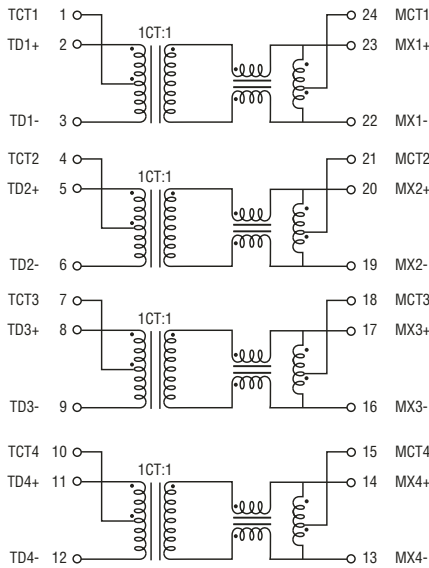
### How To Order

Model PT61020E **L**

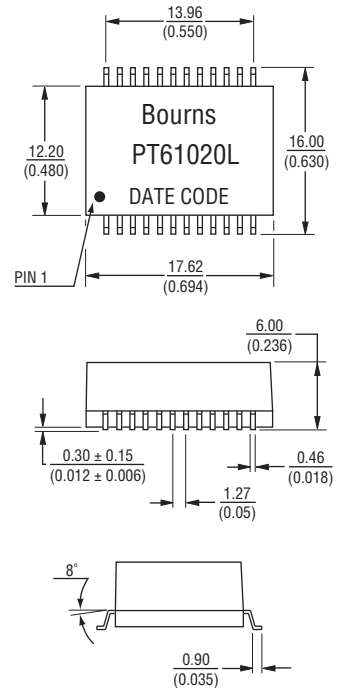
Termination \_\_\_\_\_

L = Tin only (RoHS Compliant)

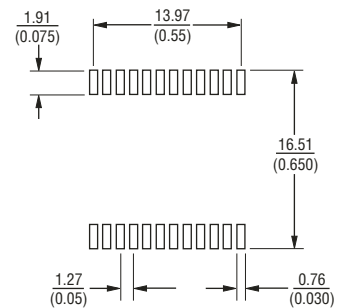
### Electrical Schematic



### Product Dimensions



### Recommended Layout



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

TOLERANCES:  $\pm \frac{0.25}{(.010)}$

REV. 05/18



**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://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. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf).

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