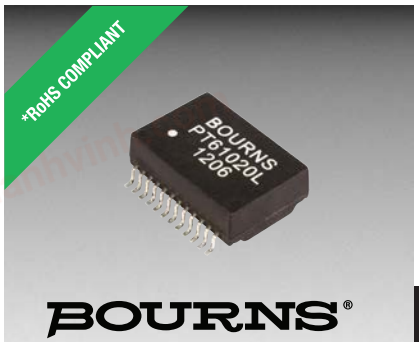
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Features

- 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 µH min.
with 8 mA DC bias @ 100 KHz, 0.2 V
Leakage Inductance ..... 0.50 µH max.
@ 100 KHz, 0.2 V
Interwinding Capacitance ..... 25 pF typ.
@ 100 KHz, 0.2 V
DC Resistance ..... 0.90 Ω 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±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

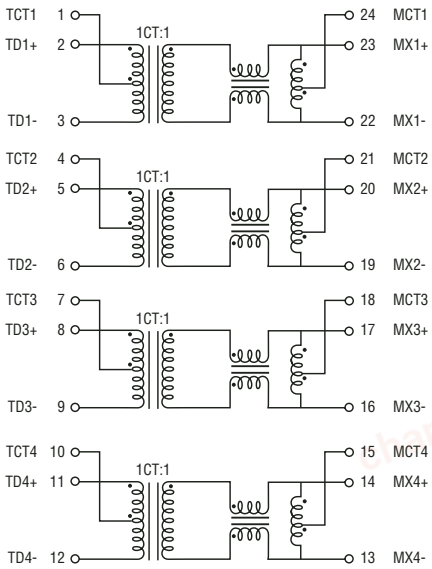
Tape & Reel ..... 350 pcs./reel

How To Order

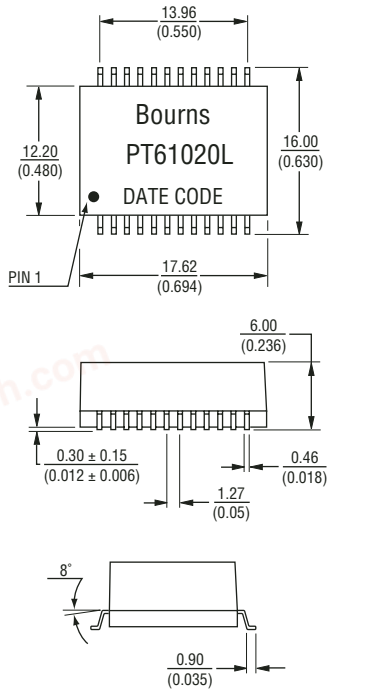
PT61020E L

Model
Termination
L = Tin only (RoHS Compliant)

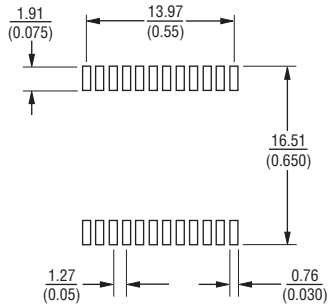
Electrical Schematic



Product Dimensions



Recommended Layout



DIMENSIONS: MM (INCHES)

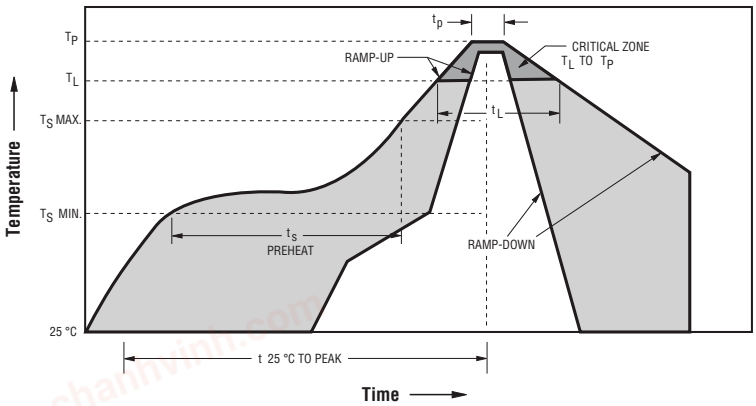
TOLERANCES: ± 0.25 (.010)

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

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
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Users should verify actual device performance in their specific applications.
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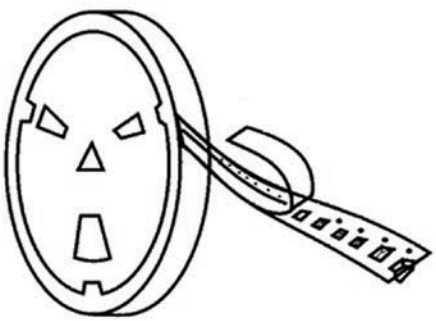
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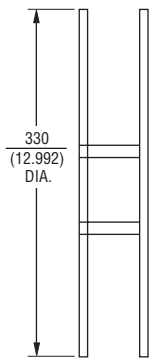
Solder Profile

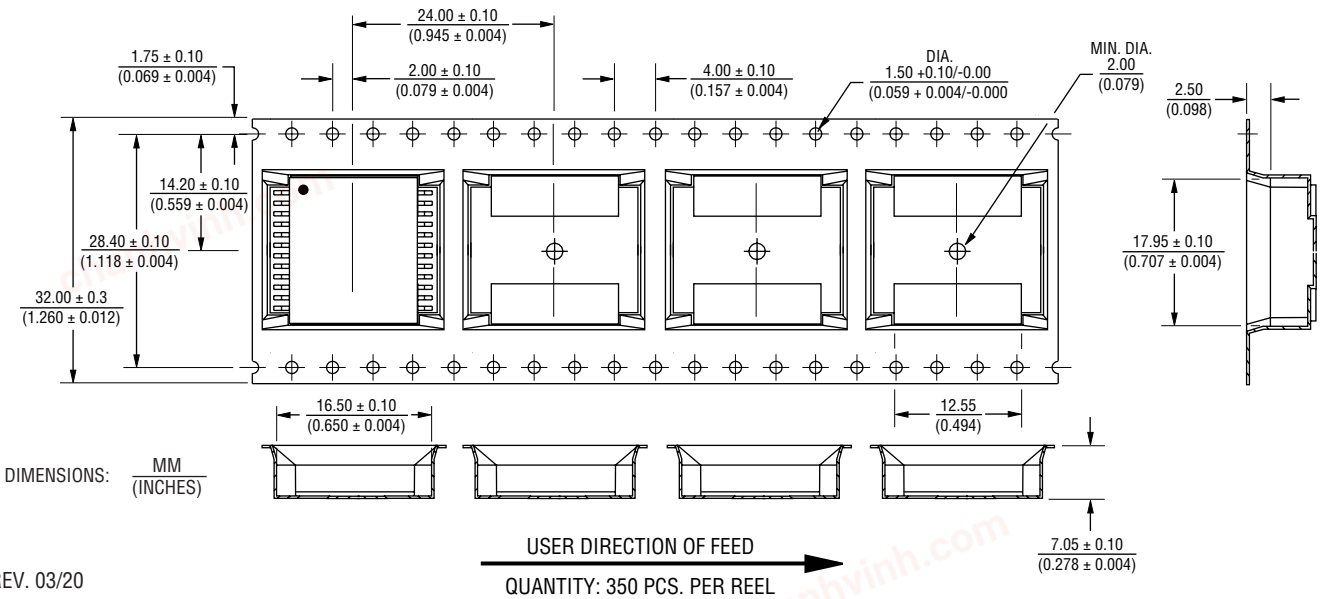


Ramp-up rate = 3 °C/sec. max.
Ramp-down rate = 6 °C/sec. max.
T_L = 217 °C t_L = 60-150 sec.
T_p = 250 °C ±3 °C
Time within 5 °C of actual Peak Temp (t_p)2 = 20~40 sec.
T_S min = 150 °C Ts max = 200 °C
T_S min to T_S max = 60-180 sec., 25 °C to Peak Temperature = 8 min. max.

Packaging Specifications







DIMENSIONS: MM / (INCHES)

REV. 03/20

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