

Features

- IEEE 802.3 Ethernet compatible
- Fully integrated for adapter, hub and motherboard applications
- Extended temperature range: -40 to +85 °C
- AEC-Q200 Qualified, automotive grade
- RoHS compliant*

Applications

- Automotive
- LAN
- Ethernet

PT61018AAPL - 10/100 Base-T Transformer

Electrical Specifications @ 25 °C

Inductance - OCL
 350 μ H min. @ 100 kHz,
 0.1 Vrms, 8 mA DC Bias

Turns Ratio ($\pm 5\%$) 1CT*:1CT*

DCR..... 1.2 Ω Max.

Insertion Loss
 1-100 MHz -1.15 dB Max.

Return Loss
 1-30 MHz -18 dB Min.
 30-60 MHz -13 dB Min.
 60-80 MHz -12 dB Min.

Common Mode Rejection
 1-60 MHz -37 dB Min.
 60-100 MHz -28 dB Min.

Cross Talk
 1-60 MHz -40 dB Min.
 60-100 MHz -35 dB Min.

Hipot
 @1 mA, 60 sec. 1.5k Vrms

Operating Temperature -40 to +85 °C

Storage Temperature..... -40 to +125 °C

*CT: Center tap

Material

Termination.....Cu/Ni/Sn

Packaging Specifications

Tape & Reel 600 pcs./reel

How To Order

PT61018A A P E L

Model _____

AEC-Q200 Qualified _____

Automotive Grade _____

Construction _____

P = Potted

Packaging _____

E = Tape and Reel (600 pcs./reel)

Termination _____

L = Cu/Ni/Sn (RoHS Compliant)



Asia-Pacific:

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 Email: asiacus@bourns.com

Europe:

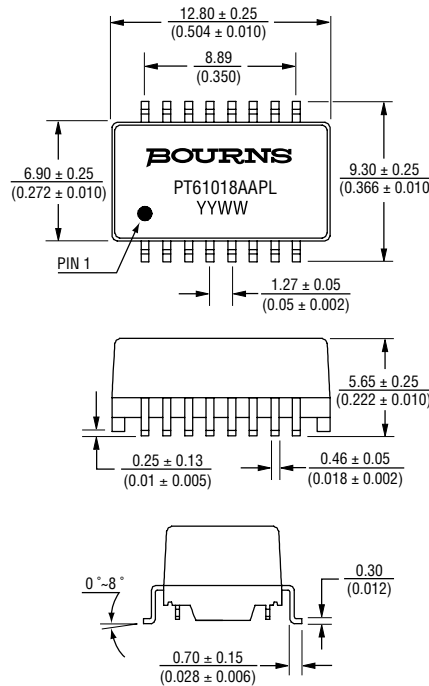
Tel: +36 88 520 390
 Email: eurocus@bourns.com

The Americas:

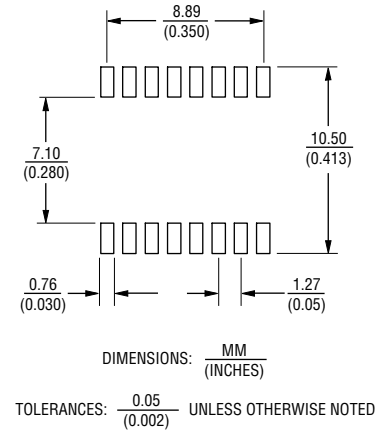
Tel: +1-951 781-5500
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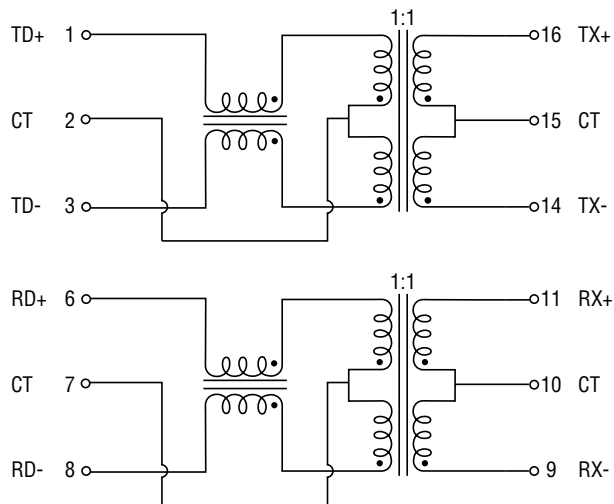
Product Dimensions



Recommended Layout



Electrical Schematic

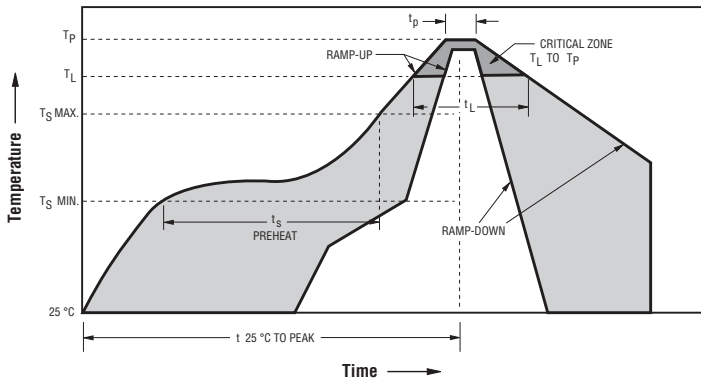


*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

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Solder Profile



Ramp-up rate = 3 °C/sec. max.
Ramp-down rate = 6 °C/sec. max.
 $T_L = 217\text{ °C}$ $t_L = 60\text{-}150\text{ sec.}$
 $T_P = 245\text{ °C} \pm 5\text{ °C}$
Time within 5 °C of actual Peak Temp (t_p) = 20-40 sec.
 $T_S \text{ min} = 150\text{ °C}$ $T_S \text{ max} = 200\text{ °C}$
 $T_S \text{ min to } T_S \text{ max} = 60\text{-}180\text{ sec.}$ $25\text{ °C to Peak Temperature} = 6\text{ min. max.}$

Packaging Specifications

