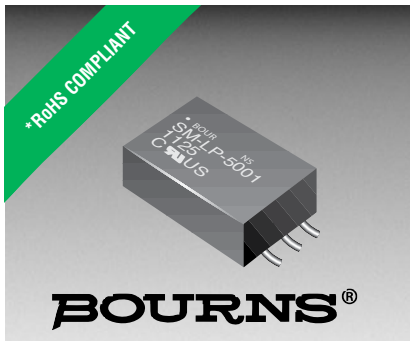




**THE DATASHEET OF
SM-LP-5001E**





Features

- Subminiature in SMT
- 7.5 mm seated height
- Distortion of only 0.015 %
- Vacuum encapsulated
- UL60950 certified
- RoHS compliant*

Applications

- Modems (V32)
- Laptop Computers
- Telecommunications
- Instrumentation

SM-LP-5001 Series - Surface Mount Line Matching Transformers

Electrical Specifications

Nominal Impedance..... 600 Ω
 Turns Ratio 1:1
 Insertion Loss 2.0 dB max. at 2 kHz
 Frequency Response
 ±0.25 dB max. 200-4 kHz
 Return Loss 24 dB min. 200-4 kHz*
 Balance..... 80 dB min.
 Distortion -76 dB max.
 @ 600 Hz, -10 dBm
 Dielectric Strength...2000 VRMS for 1 min.
 Insulation Resistance 100 MΩ @ 500 V
 DC Resistance**
 Primary..... 115 Ω ±15 %
 Secondary..... 115 Ω ±15 %
 Shunt Inductance..... 3.8 H min.
 Shunt Loss..... 7500 Ω min.
 Leakage Inductance..... 6 mH typ. @ 1 kHz
 Power Level..... 10 dBm
 Operating Temperature..... -20 °C to +85 °C
 Storage Temperature..... -40 °C to +85 °C

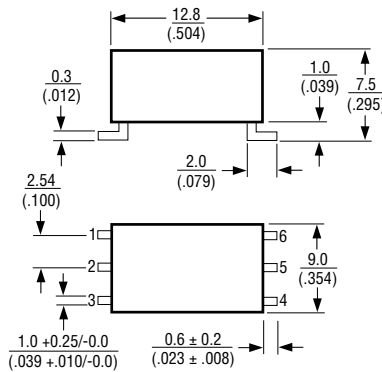
Materials

Terminal Plating.....Sn/Ag/Cu

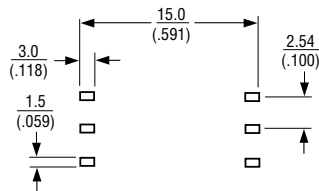
*For use with recommended circuit (BS6305 impedance Class A non-speech or Class B speech).

**SM-LP-5001 is symmetrical, meaning there is no real primary nor secondary winding.

Product Dimensions



Suggested PCB Layout



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

LEAD COPLANARITY: $\frac{0.15}{(.006)}$ MAX.

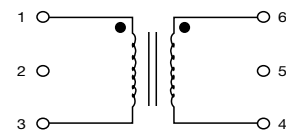
UNLESS OTHERWISE SPECIFIED, TOLERANCE: $\frac{\pm 0.25}{(.010)}$ MAX.

How To Order

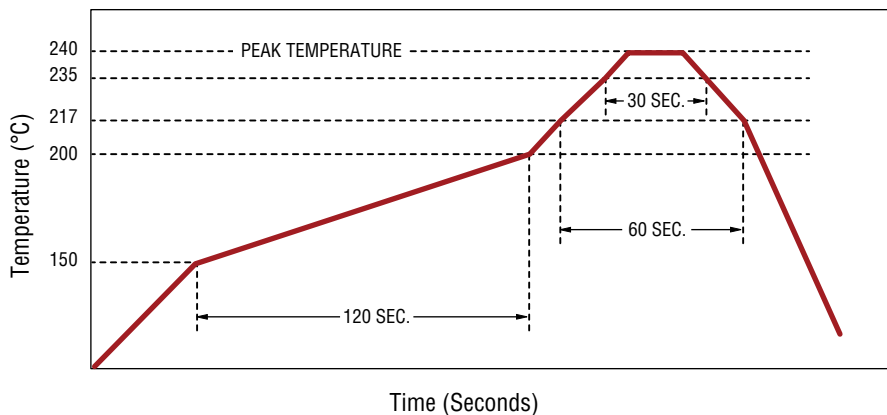
SM-LP-5001

Model _____
 Packaging _____
 Blank = Packaged in tubes
 E = Tape and reel (400 pcs. per reel)

Schematic



Solder Profile



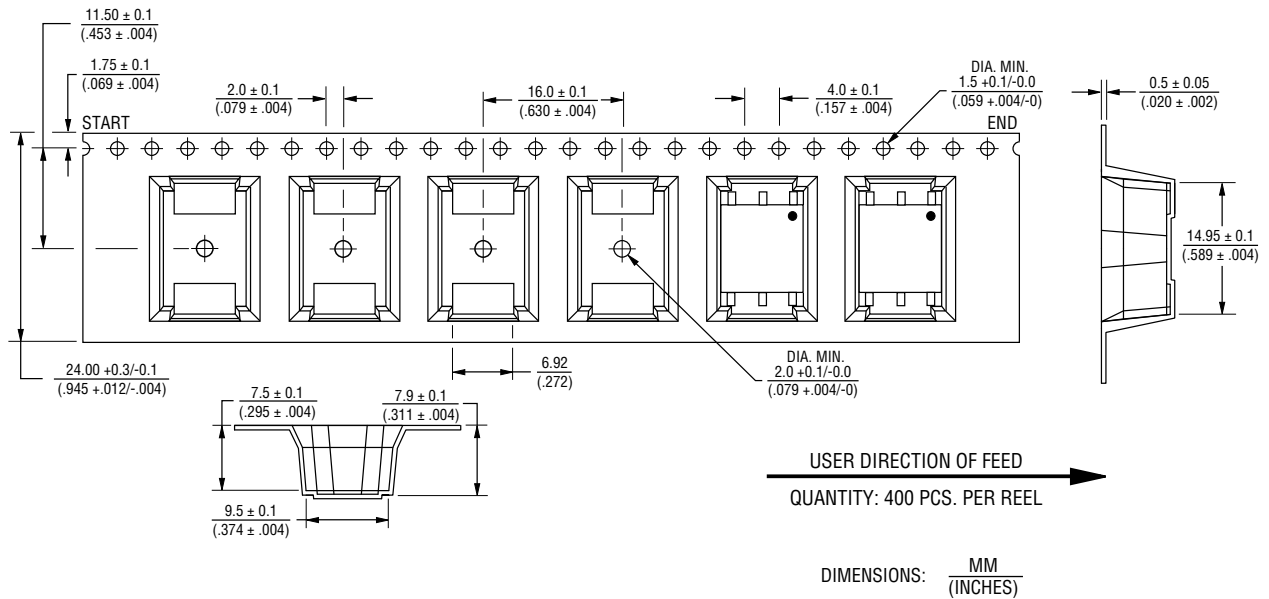
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*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. 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.

SM-LP-5001 Series - Surface Mount Line Matching Transformers

BOURNS®

Packaging Specifications



BOURNS®

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

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

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REV. 05/17

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 [Bourns Inc. Information](#)

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-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management