

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 M Ω @ 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 $^{\circ}$ C to +85 $^{\circ}$ C
 Storage Temperature..... -40 $^{\circ}$ C to +85 $^{\circ}$ C

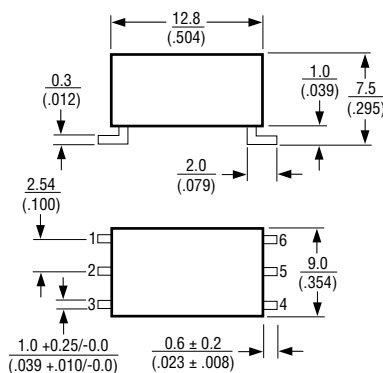
Materials

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

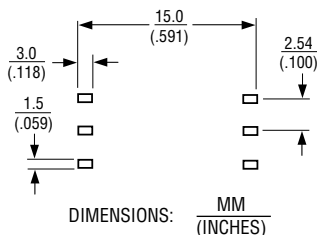
*For use with recommended circuit
 (BS6305 impedance Class A non-speech
 or Class B speech).

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

Product Dimensions



Suggested PCB Layout



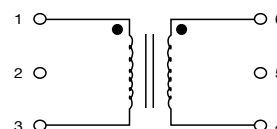
DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$
 LEAD COPLANARITY: $\frac{0.15}{(.006)}$ MAX.
 UNLESS OTHERWISE SPECIFIED, TOLERANCE: $\frac{\pm 0.25}{(.010)}$ MAX.

How To Order

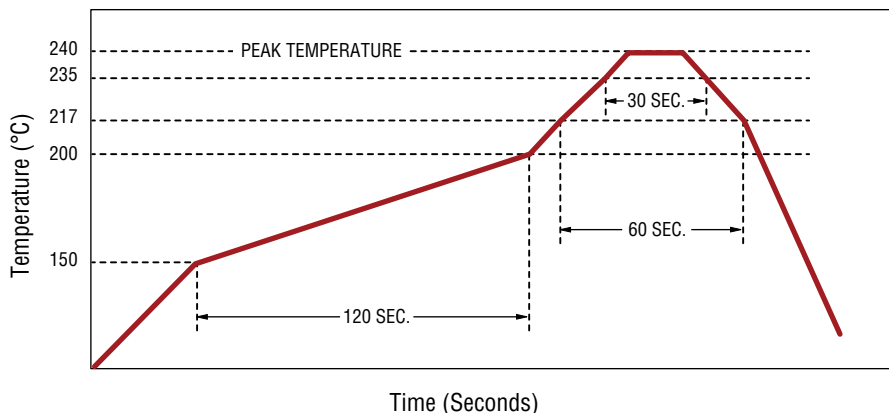
SM-LP-5001

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

Schematic



Solder Profile



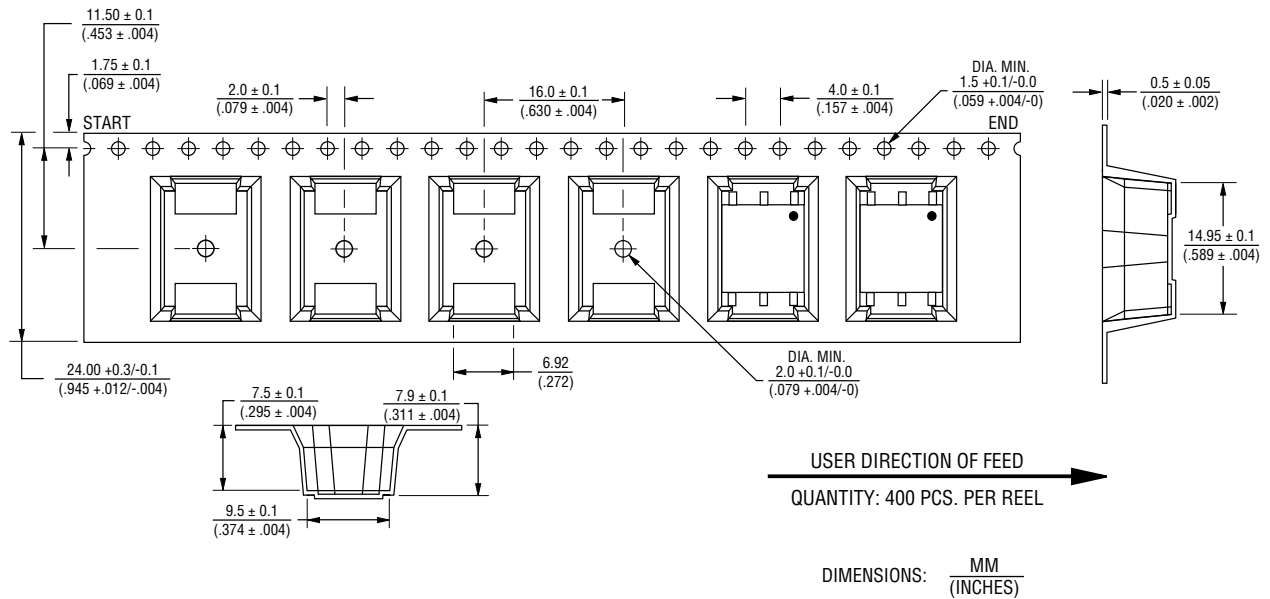
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
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SM-LP-5001 Series - Surface Mount Line Matching Transformers

BOURNS®

Packaging Specifications



BOURNS®

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

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REV. 05/17

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