

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..... -40 °C to +85 °C
 Storage Temperature..... -40 °C to +85 °C

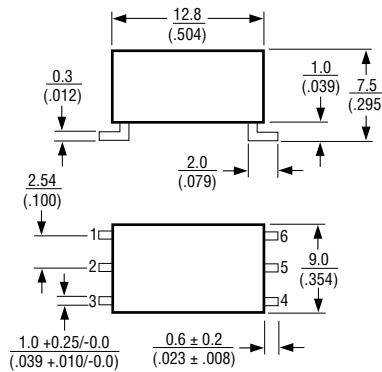
Materials

Terminal Plating Sn/Ag/Cu

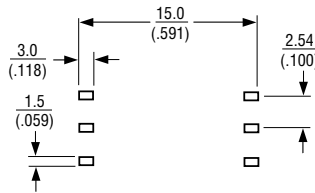
*For use with recommended circuit (BS6305 impedance Class A non-speech or Class B speech).

**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: $\frac{0.15}{(0.006)}$ MAX.

UNLESS OTHERWISE SPECIFIED, TOLERANCE $\frac{0.25}{(0.010)}$ MAX.

Additional Information

Click these links for more information:

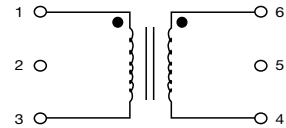


How To Order

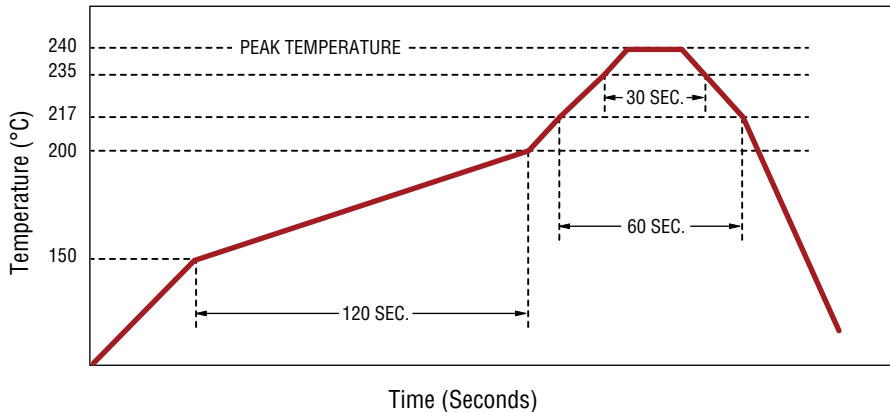
Model SM-LP-5001

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 2015/863, Mar 31, 2015 and Annex. Specifications are subject to change without notice.

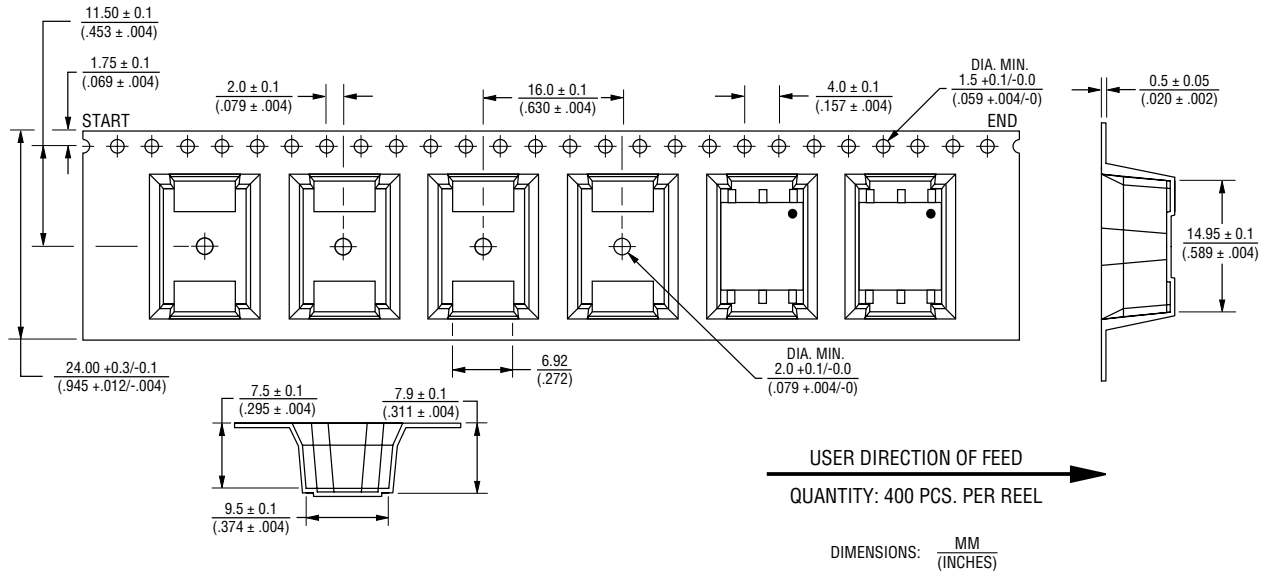
Users should verify actual device performance in their specific applications.

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

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Packaging Specifications



BOURNS®

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Asia: Tel: +886-2-2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

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REV. 07/25

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