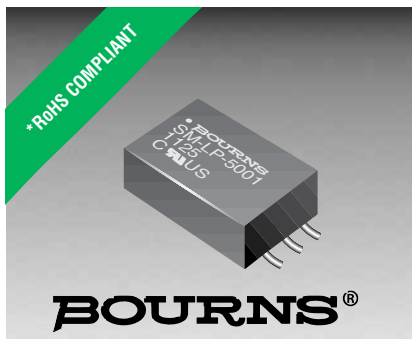




Features

- 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 Loss2.0 dB max. at 2 kHz
 Frequency Response
 ± 0.25 dB max. 200-4 kHz
 Return Loss24 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 $\Omega \pm 15$ %
 Secondary..... 115 $\Omega \pm 15$ %
 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

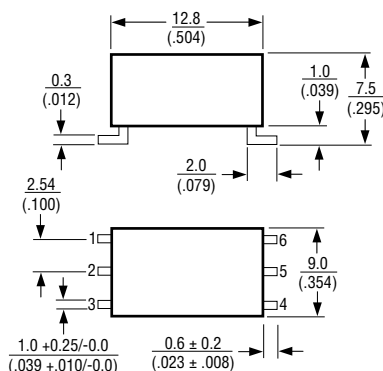
Materials

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

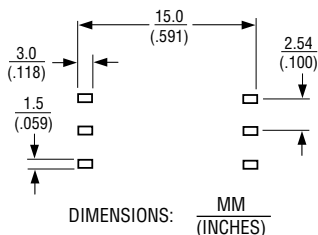
*For use with recommended circuit
 (BS6305 impedance Class A non-speech
 or Class B speech).

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

Product Dimensions



Suggested PCB Layout



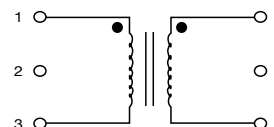
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$
 LEAD COPLANARITY: $\frac{0.15}{(.006)}$ MAX.
 UNLESS OTHERWISE SPECIFIED, TOLERANCE: ± 0.25 (.010) MAX.

How To Order

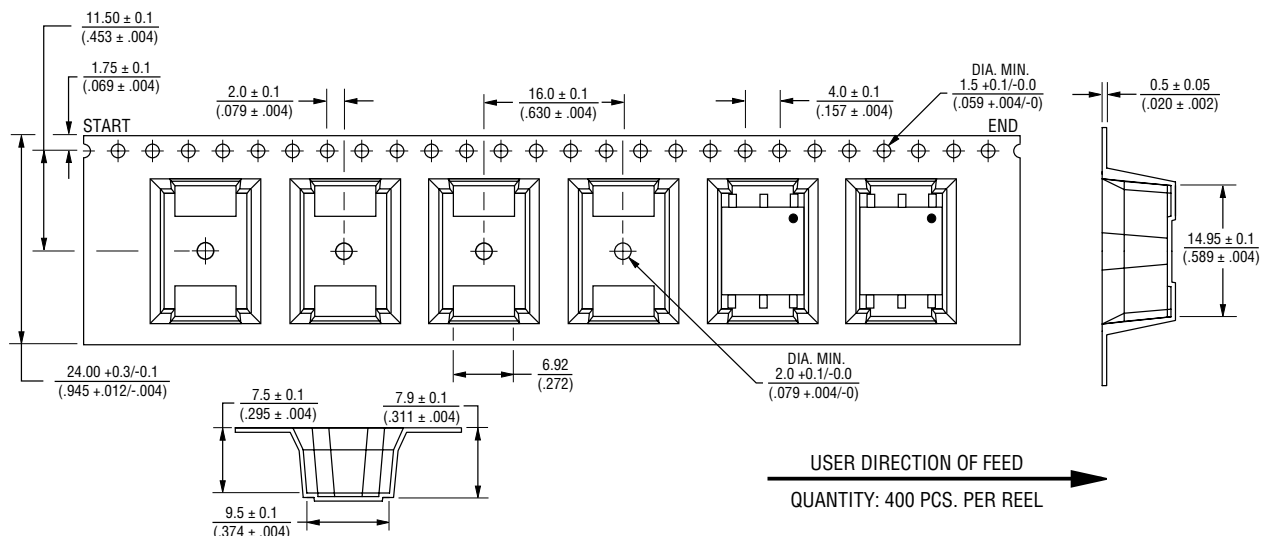
SM-LP-5001

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

Schematic



Packaging Specifications



REV. 07/16

*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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Bourns:

[SM-LP-5001](#) [SM-LP-5001E](#)