

Features

- 7.5 mm seated height
- Distortion of only 0.015 %
- Vacuum encapsulated
- Weight - 2 g
- UL60950 approved
- RoHS compliant*

Applications

- Modems (V34 and V92)
- Laptop Computers
- Telecommunications
- Instrumentation

SM-LP-5002 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 -85 dB max.
 @ 600 Hz, -10 dBm
 Dielectric Strength...2000 VRMS for 1 min.
 Insulation Resistance 100 MΩ @ 500 V
 DC Resistance**
 Primary 136 Ω ±12 %
 Secondary 136 Ω ±12 %
 Shunt Inductance 3.8 H min.
 Shunt Loss 7500 Ω min.
 Leakage Inductance ...6-7 mH typ. @ 1 kHz
 Power Level 10 dBm
 Operating Temperature... -20 °C to +85 °C
 Storage Temperature..... -40 °C to +85 °C

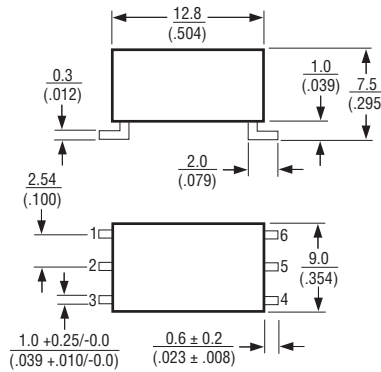
Materials

Terminal Plating Sn/Ag/Cu

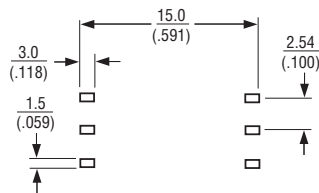
*For use with recommended circuit (BS6305 impedance Class A non-speech or Class B speech).

**SM-LP-5002 is symmetrical, meaning there is no real primary nor secondary winding.

Product Dimensions



Suggested PCB Layout



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

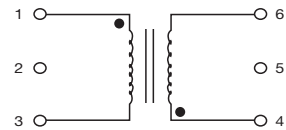
LEAD COPLANARITY: $\frac{0.15}{(0.006)}$ MAX.

UNLESS OTHERWISE SPECIFIED, TOLERANCE: ± 0.25 (0.010) MAX.

How To Order

Model **SM-LP-5002**
 Packaging _____
 Blank = Packaged in tubes
 E = Tape and reel (400 pcs. per reel)

Schematic



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bourns:

[SM-LP-5002](#) [SM-LP-5002E](#) [SM-LP-5000E](#)