

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

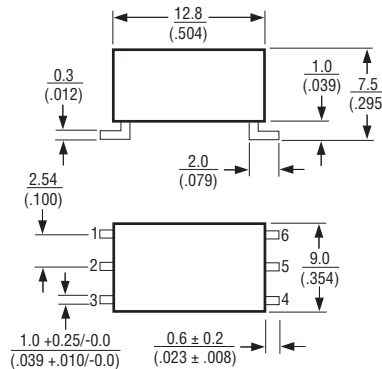
Materials

Terminal Plating Sn/Ag/Cu

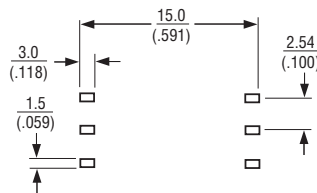
*For use with recommended circuit (BS6305 impedance Class A non-speech or Class B speech).

**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: $\frac{\pm 0.25}{(0.010)}$ MAX.

How To Order

Model **SM-LP-5002**

Packaging _____

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

Schematic

