

Features

- 7.36 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 typ. @ 600Hz - 10dBm
Dielectric Strength	2000 VRMS for 1 min.
Insulation Resistance	100 M Ω @ 500 V
DC Resistance**	
Primary	136 Ω \pm 12 %
Secondary	136 Ω \pm 12 %
Shunt Inductance.....	3.8 H min.
Shunt Loss.....	7500 Ω min.
Leakage Inductance	6-7 mH @ 1 kHz
Power Level	10 dBm
Operating Temperature	-20 $^{\circ}$ C to +85 $^{\circ}$ C
Storage Temperature	-40 $^{\circ}$ C to +85 $^{\circ}$ C

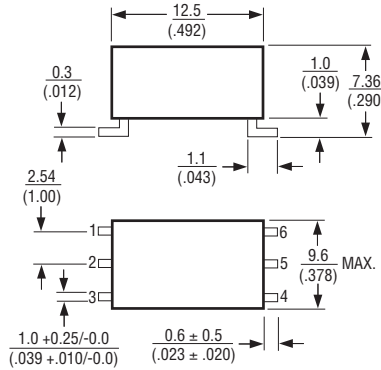
Materials

Terminal PlatingAgSn

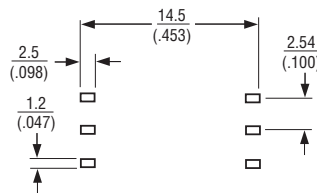
*For use with recommended circuit (BS6305 impedance Class A non-speech or Class B speech).

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

Product Dimensions



Suggested PCB Layout



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

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

