

## Features

- Subminiature in SMT
- 7.36 mm seated height
- Tested at 4600 Vrms, 1 minute
- Distortion of only 0.015 %
- Vacuum encapsulated
- Weight - 2 g
- Lead free version available (see How to Order)

- Lead free versions are RoHS compliant\*

## Applications

- Modems (V34)
- 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 .....	4600 Vrms for 1 min.
Insulation Resistance .....	100 MΩ @ 500 V
DC Resistance**	
Primary .....	150 Ω
Secondary .....	150 Ω
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 °C to +85 °C
Storage Temperature .....	-40 °C to +85 °C

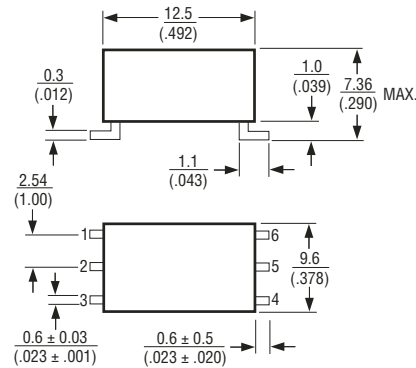
### Materials

Terminal Plating .....AgSn

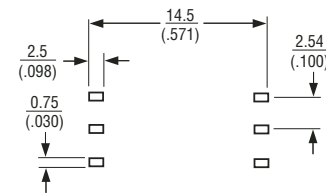
\*For use with recommended circuit (BS6305 impedance Class A non-speech or Class B speech).

\*\*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:  $\frac{0.15}{(.006)}$  MAX.

UNLESS OTHERWISE SPECIFIED, TOLERANCE:  $\frac{\pm 0.25}{(.010)}$  MAX.

### How to Order

**SM-LP-5002**

Model \_\_\_\_\_

Packaging \_\_\_\_\_

Blank = Packaged in tubes

E = Tape and reel (400 pcs. per reel)

Termination \_\_\_\_\_

Blank = Tin-lead: Date code 0513 or older

Blank = Tin only (lead free): Date code 0514 or newer

### Schematic

