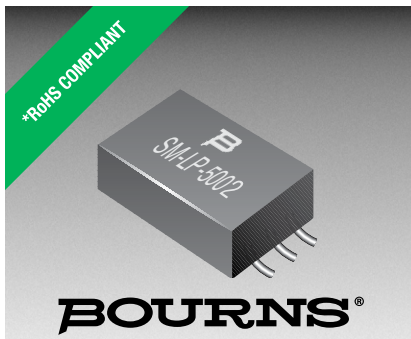




Features

- 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 M Ω @ 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..... -40 $^{\circ}$ C to +85 $^{\circ}$ C
 Storage Temperature..... -40 $^{\circ}$ C to +85 $^{\circ}$ C

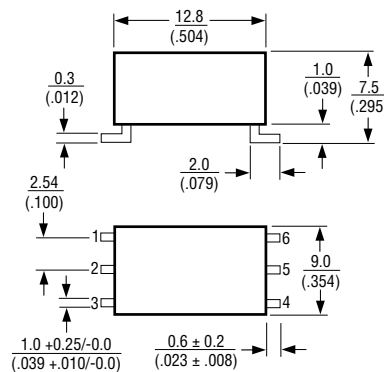
Materials

Terminal Plating Sn/Ag/Cu

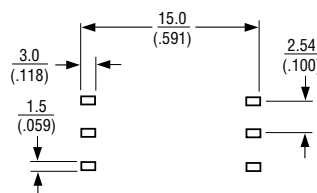
*For use with recommended circuit
 (BS6305 impedance Class A non-speech
 or Class B speech).

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

Product Dimensions



Suggested PCB Layout



DIMENSIONS: MM
 (INCHES)

LEAD COPLANARITY: 0.15 (0.006) MAX.

UNLESS OTHERWISE SPECIFIED, TOLERANCE 0.25 (0.010) MAX.

Additional Information

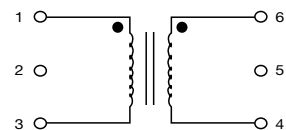
Click these links for more information:



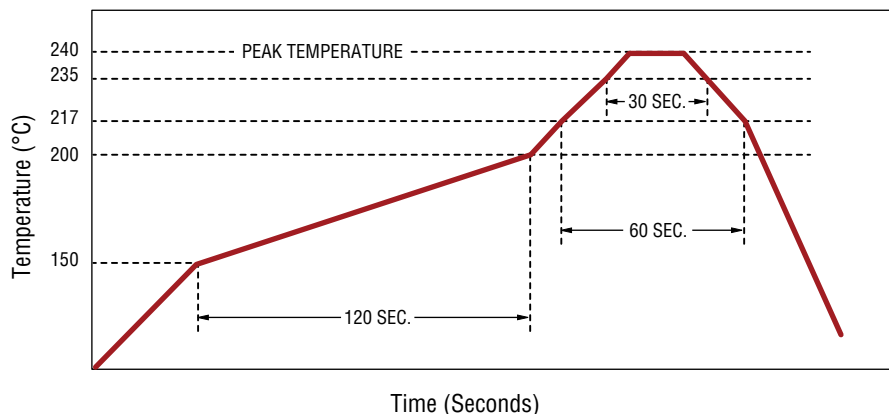
How To Order

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

Schematic



Solder Profile



WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
 Specifications are subject to change without notice.

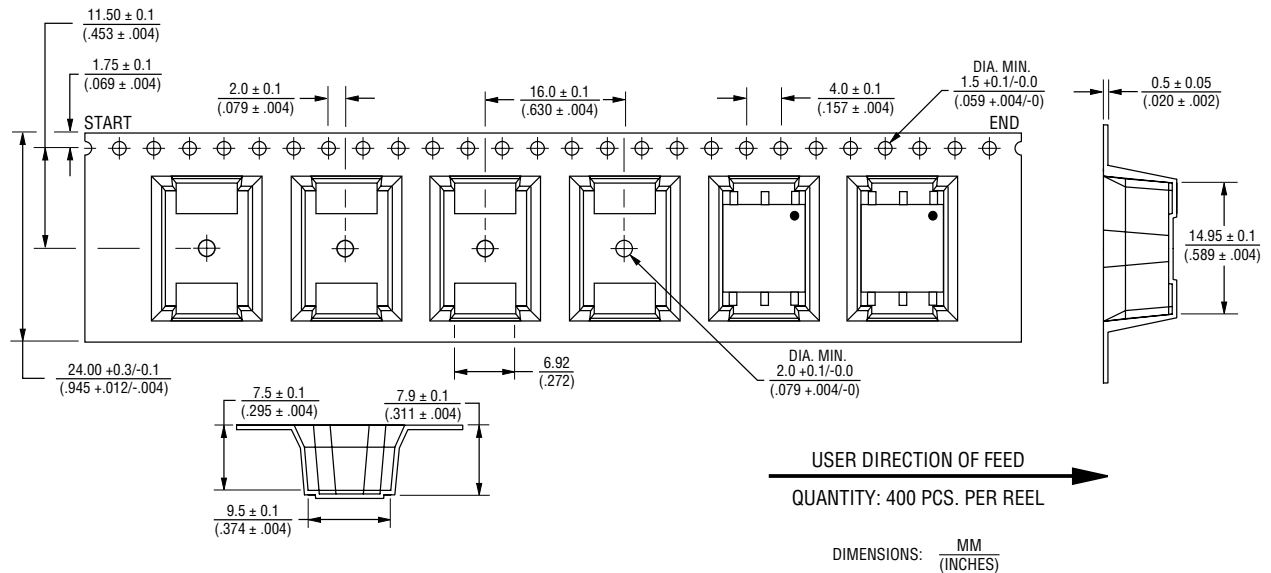
Users should verify actual device performance in their specific applications.

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SM-LP-5002 Series – Surface Mount Line Matching Transformers

BOURNS®

Packaging Specifications



BOURNS®

Americas: Tel: +1 951-781-5500 • Email: americus@bourns.com

Mexico: Tel: +52-614-478-0400 • Email: mexicus@bourns.com

Asia: Tel: +886-2-2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

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