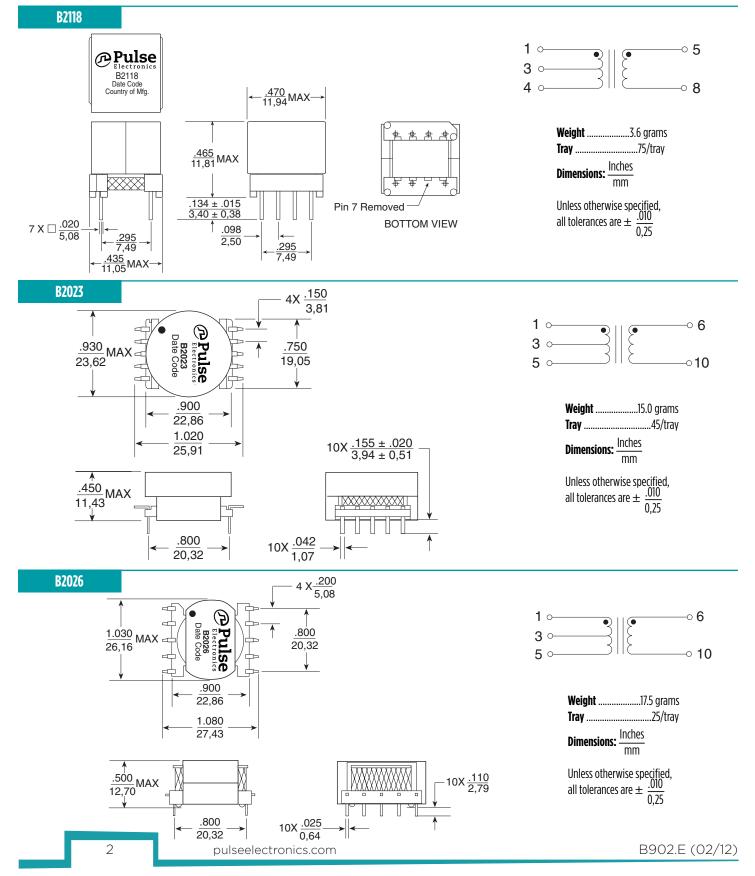
Inductors And Common Mode Chokes

Mechanicals

For Use in ADSL POTS Low Pass Filters



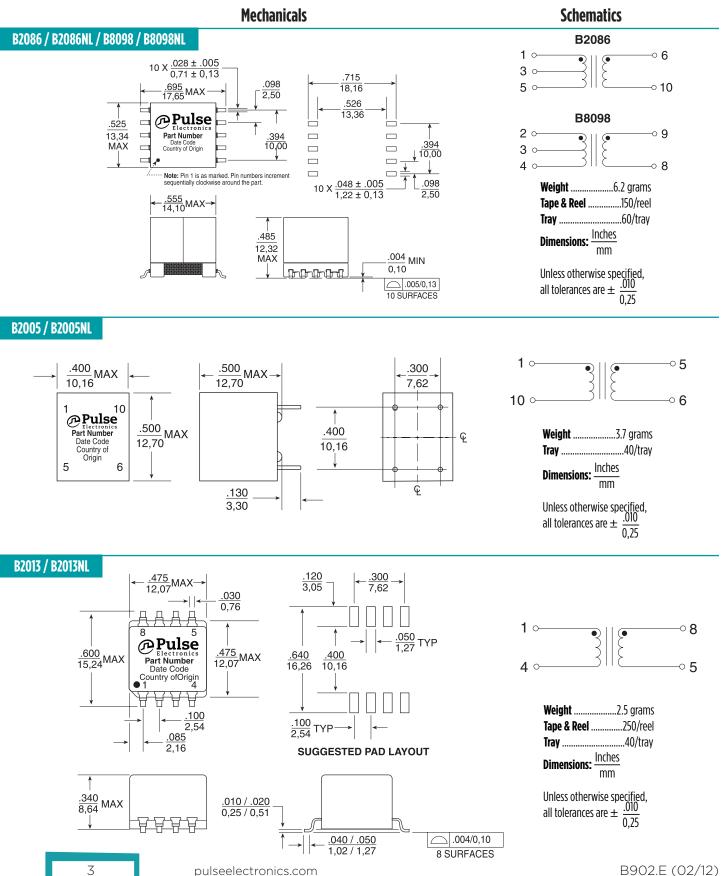
Schematics



Inductors And Common Mode Chokes

For Use in ADSL POTS Low Pass Filters





Inductors And Common Mode Chokes

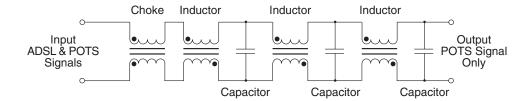
For Use in ADSL POTS Low Pass Filters

Performance Description

The series of coupled inductors shown on this data sheet are current and temperature, high self-resonant frequency, low ideal for use in Asymmetrical Digital Subscriber Line (ADSL) applications where a low pass filter is required to separate the voice frequencies from the data frequencies that are carried on an ADSL line. In spite of their small footprint and low profile, these coupled inductors provide excellent electrical performance. They have stable inductance with varying DC current and temperature, high self-resonant frequency, low coupling capacitance, and excellent balance. The common mode chokes were developed to reduce common mode voltages in the low frequency range that is used for voice transmission. The chokes are also designed to accommodate DC currents up to 100 mA.

Application Circuit

The following schematic depicts a typical LC filter that incorporates the use of a common mode choke in addition to the LC network. As shown in the frequency response graph below, at low frequencies, the amplitude of the output signal is roughly equal to the amplitude of the input signal. At higher frequencies, the amplitude of the output decreases. Thus, the network passes low frequency voice signals with only a small degree of attenuation, while it suppresses high frequency signals and acts as a low pass filter.



Frequency Response



For More Information

Headquarters	Pulse Europe Einsteinstrasse 1 D-71083 Herren- berg Germany	Pulse China Headquarters B402, Shenzhen Academy of Aerospace Technol- ogy Bldg. 10th Kejinan Road High-Tech Zone Nanshan District Shenzen. PR China	Pulse North China Room 2704/2705 Super Ocean Finance Ctr. 2067 Yan An Road West Shanghai 200336 China	Pulse South Asia 135 Joo Seng Road #03-02 PM Industrial Bldg. Singapore 368363 Tel: 65 6287 8998	Pulse North Asia 3F, No. 198 Zhongyuan Road Zhongli City Taoyuan County 320 Taiwan R. O. C. Tel: 886 3 4356768 Fax: 886 3 4356823 (Pulse)
	Tel: 49 7032 78060 Fax: 49 7032 7806 135	518057 Tel: 86 755 33966678 Fax: 86 755 33966700	Tel: 86 21 62787060 Fax: 86 2162786973	Fax: 65 6287 8998	Fax: 886 3 4356820 (FRE)

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2012. Pulse Electronics, Inc. All rights reserved.

4

pulseelectronics.com

B902.E (02/12)

