

## Features

- For use with Analog Device's AD20msp910 / AD20msp918 ADSL chipsets
- Excellent Total Harmonic Distortion (THD) performance in a small size
- SMT and thru-hole package version
- Operating temperature -40 °C to +85 °C

- Designed to meet UL1950 and EN60950 supplementary insulation requirements for operating voltages up to 250 Vrms

## Applications

- ADSL - Analog AD20msp910/918

# SM538-1 & PT539-1 ADSL Line Transformers

### Electrical Specifications @ 25 °C

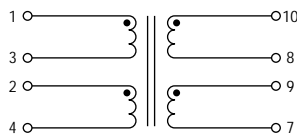
Turns Ratio .....	1:1 ±2 %
OCL @ 10 kHz, 0.1 V (1-4) with (2-3) shorted	.....5.0 mH ±10 %
(10-7) with (8-9) shorted	.....5.0 mH ±10 %
Leakage Inductance @ 100 kHz 0.1 V (1-4) with (2-3), (8-9), (10-7) shorted	.....18.0 µH max.
Longitudinal Balance 25 kHz to 1.1 MHz .....	40 dB min.
Insertion Loss @ 100 kHz .....	< 0.5 dB
Isolation Voltage .....	1500 Vrms max.
Load Resistance .....	100 Ω
DC Resistance (1-4), (10-7) .....	3 Ω max.
THD Linearity SM538-1 @ 300 kHz .....	-60 dB typ.
PT539-1 @ 30 kHz .....	-80 dB typ.
Package SM538-1 .....	SMT
PT539-1 .....	THT

### Packaging Specifications

SM538-1* .....	200 pcs./reel
PT539-1 .....	60 pcs./tray

\*"E" suffix at end of part number designates tape & reel packaging, e.g. SM538-1E.

### Electrical Schematic



*Reliable Electronic Solutions*

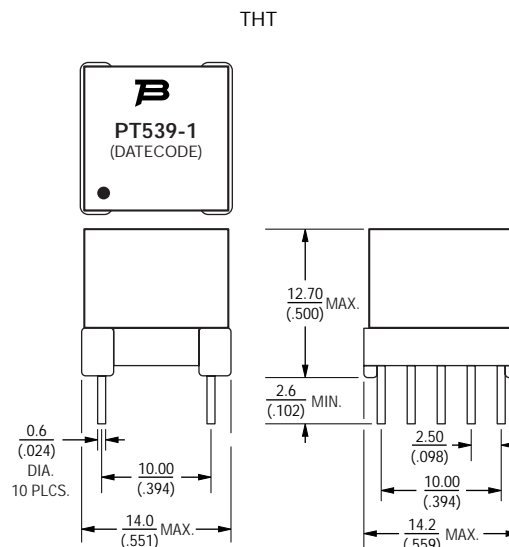
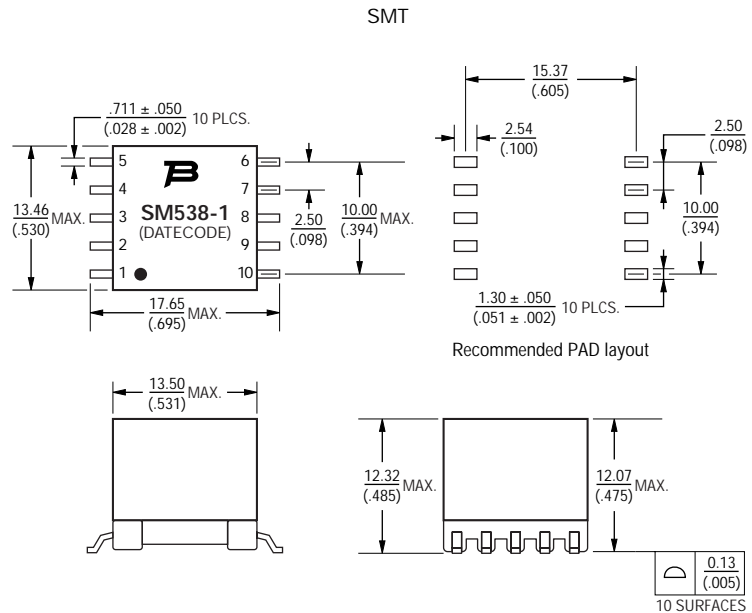
**Asia-Pacific:** TEL +886-2 25624117  
FAX +886-2 25624116

**Europe:** TEL +41-41 7685555  
FAX +41-41 7685510

**N. America:** TEL +1-909 781-5500  
FAX +1-909 781-5700

[www.bourns.com](http://www.bourns.com)

### Product Dimensions



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

TOLERANCE:  $\pm \frac{0.25}{(0.010)}$