

Features

- For use with Alcatel's MTK-20140 ADSL chipset
- Excellent Total Harmonic Distortion (THD) Performance
- Both SMT and Thru-Hole package version
- Small size
- Operating temperature -40 °C to +85 °C

- Designed to meet UL1950 and EN60950 supplementary insulation requirements for operating voltages up to 250 Vrms
- Lead free version available (see How to Order)
- Lead free versions are RoHS compliant*

Applications

- ADSL - Alcatel MTK20140

SM540-1 & PT541-1 ADSL Line Transformers

Electrical Specifications @ 25 °C

Turns Ratio (1-4):(10-7) (line to chip)
 SM540-11:1 ±2 %
 PT541-12:1 ±2 %

OCL @ 10 kHz, 0.1 V
 (1-4) with (2-3) shorted
 SM540-1480 µH ±10 %
 PT541-1410 µH ±10 %

Leakage Inductance @ 300 kHz 0.1 V
 (1-4) with (2-3), (7-10), (8-9) shorted
 SM540-110.0 µH max.
 PT541-16.5 µH max.

Longitudinal Balance
 30 kHz to 1.1 MHz-40 dB min.

Insertion Loss
 @ 100 kHz and 1.1 MHz<1.0 dB

Isolation Voltage1500 Vrms max.

DC Resistance
 (1-4) with (2-3) shorted
 SM540-11.0 Ω max.
 PT541-10.6 Ω max.

THD Linearity
 SM540-1 @ 10 kHz (min.) ...-72 dB typ.
 PT541-1 @ 20 kHz (min.)-72 dB typ.

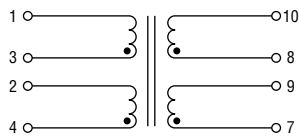
Application
 SM540-1CPE
 PT541-1CO

Packaging Specifications

SM540-1E*200 pcs./reel
 PT541-160 pcs./tray

**"E" suffix at end of part number designates tape & reel packaging, e.g. SM540-1E.

Electrical Schematic

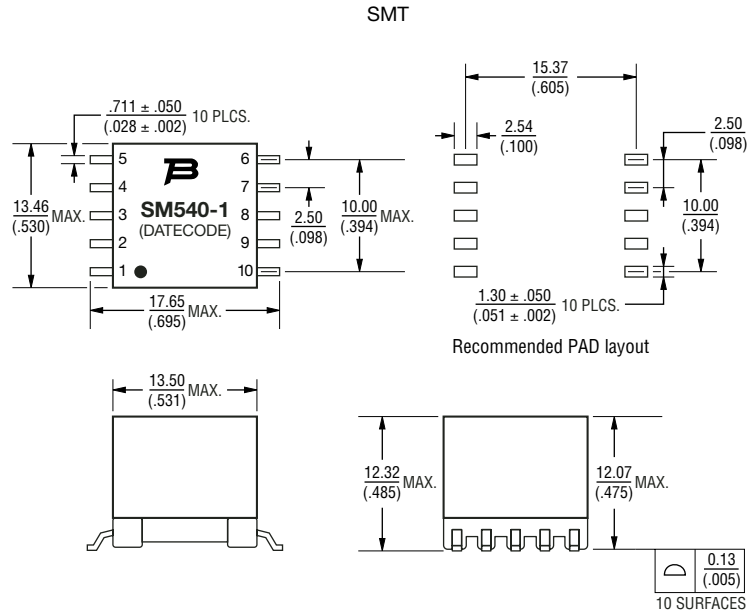


How to Order

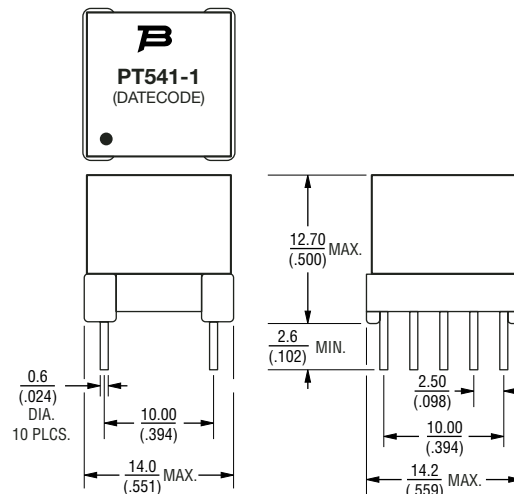
SM540-1E or PT541-1

Model _____
 Termination _____
 Blank = Tin-lead
 L = Tin only (lead free)

Product Dimensions



THT



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

TOLERANCE: $\pm \frac{0.25}{(.010)}$