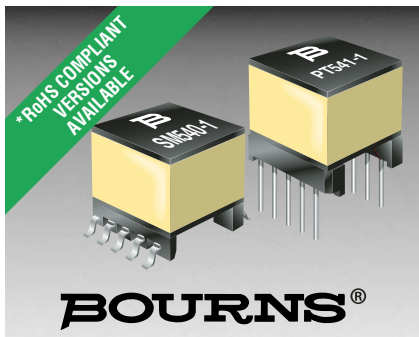




Features

- 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

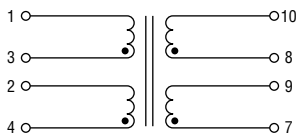
Turns Ratio (1-4):(10-7) (line to chip)	
SM540-1	1:1 ±2 %
PT541-1	2:1 ±2 %
OCL @ 10 kHz, 0.1 V	
(1-4) with (2-3) shorted	
SM540-1	480 µH ±10 %
PT541-1	410 µH ±10 %
Leakage Inductance @ 300 kHz 0.1 V	
(1-4) with (2-3), (7-10), (8-9) shorted	
SM540-1	10.0 µH max.
PT541-1	6.5 µH max.
Longitudinal Balance	
30 kHz to 1.1 MHz	-40 dB min.
Insertion Loss	
@ 100 kHz and 1.1 MHz	<1.0 dB
Isolation Voltage	1500 Vrms max.
DC Resistance	
(1-4) with (2-3) shorted	
SM540-1	1.0 Ω max.
PT541-1	0.6 Ω max.
THD Linearity	
SM540-1 @ 10 kHz (min.)	...-72 dB typ.
PT541-1 @ 20 kHz (min.)	...-72 dB typ.
Application	
SM540-1	CPE
PT541-1	CO

Packaging Specifications

SM540-1E*	200 pcs./reel
PT541-1	60 pcs./tray

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

Electrical Schematic



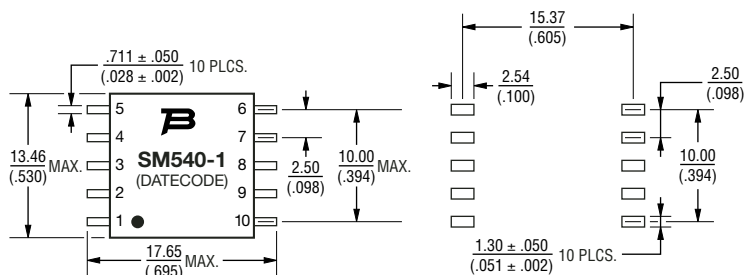
How to Order

SM540-1E or PT541-1

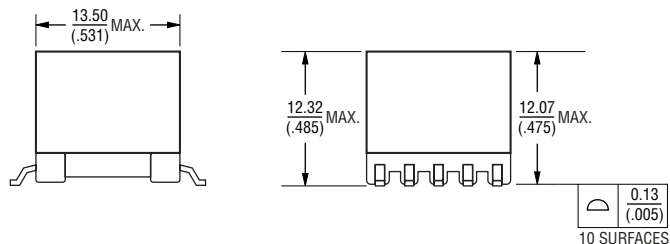
Model _____
 Termination _____
 Blank = Tin-lead
 L = Tin only (lead free)

Product Dimensions

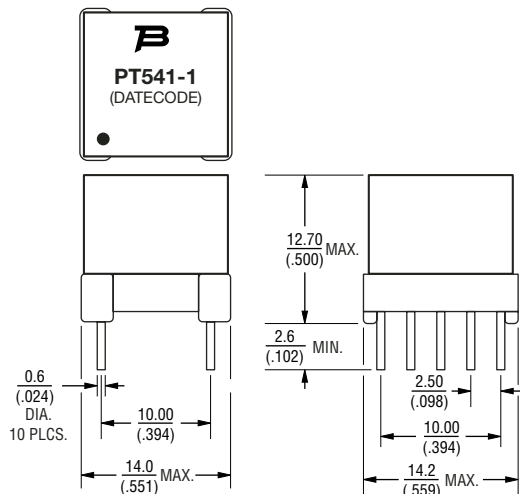
SMT



Recommended PAD layout



THT



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

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