



### Features

- IEEE 802.3 Ethernet compatible
- Discrete transformers and common mode chokes for flexible PCB layout
- PoE+
- Pair with common mode choke SRF2012A-801Y for EMI reduction
- Expanded temperature range: -40 to +85 °C
- RoHS compliant\*

## SM453229-231N7Y - 10/100/1000 Base-T PoE+ Chip LAN Transformer

### Electrical Specifications at 25 °C

Inductance  
 @ 100 kHz, 0.1 V, 0 mADC  
 (Pin 1-2 & 6-7 / short 3-4)  
 ..... 230  $\mu$ H min.

Inductance – DC Bias  
 @ 100 kHz, 0.1 V, 15 mA DC  
 (Pin 1-2 & 6-7 / short 3-4)  
 ..... 200  $\mu$ H min.

Turns Ratio ( $\pm 3\%$ )  
 (Pin 1-2 : 6-7 / short 3-4)..... 1 : 1

Insertion Loss (1-100 MHz)  
 .....-1.5 dB max.

Capacitance  
 (Pin 5-3 / short 3-4) .....35 pF typ.

Hi-Pot (Pin 1 to 6, short 3-4)  
 ..... 1500 VAC, 60 sec.

Operating Temperature.....-40 to +85 °C

Storage Temperature.....-40 to +85 °C

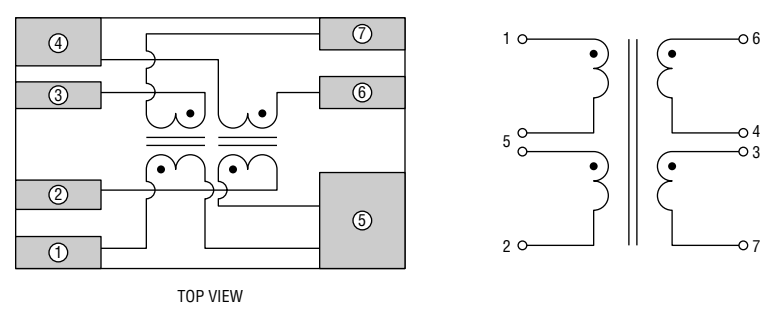
Packaging..... 2000 pcs. / reel

### Additional Information

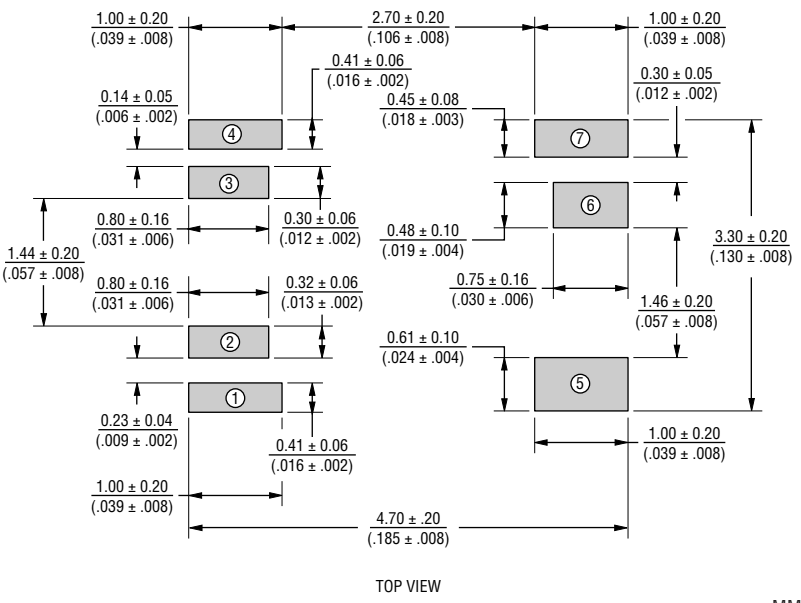
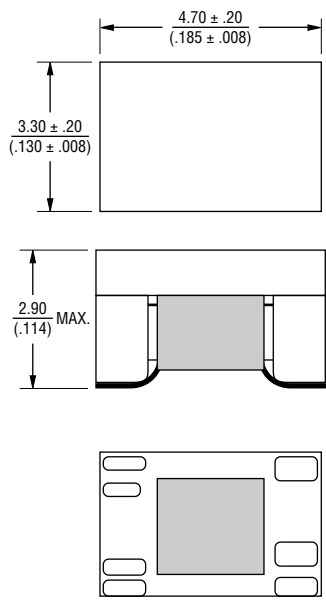
Click these links for more information:



### Electrical Schematic



### Product Dimensions



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

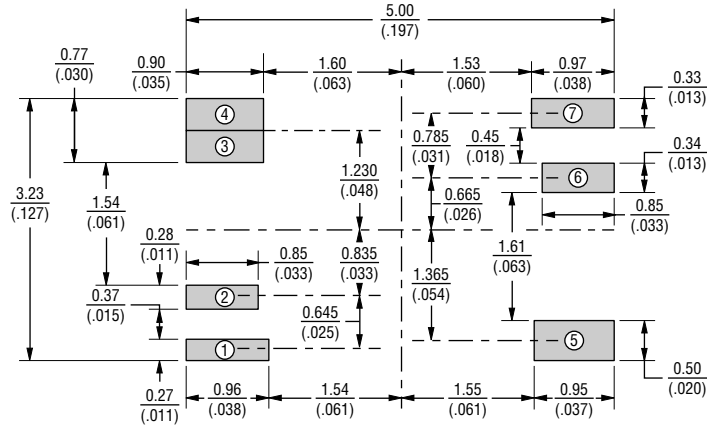
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\*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. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf).

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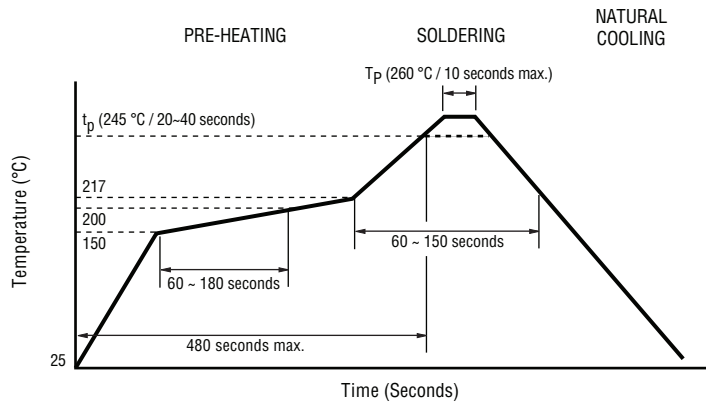


## Recommended Pad Layout



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

## Soldering Profile



REFLOW TIMES: 3 MAX.

Specifications are subject to change without notice.

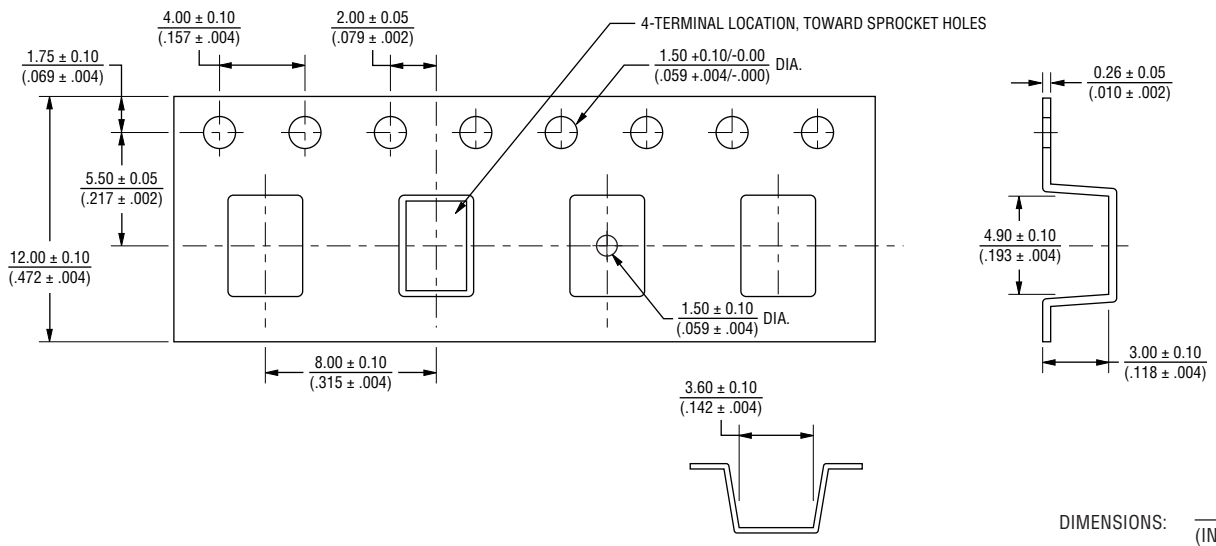
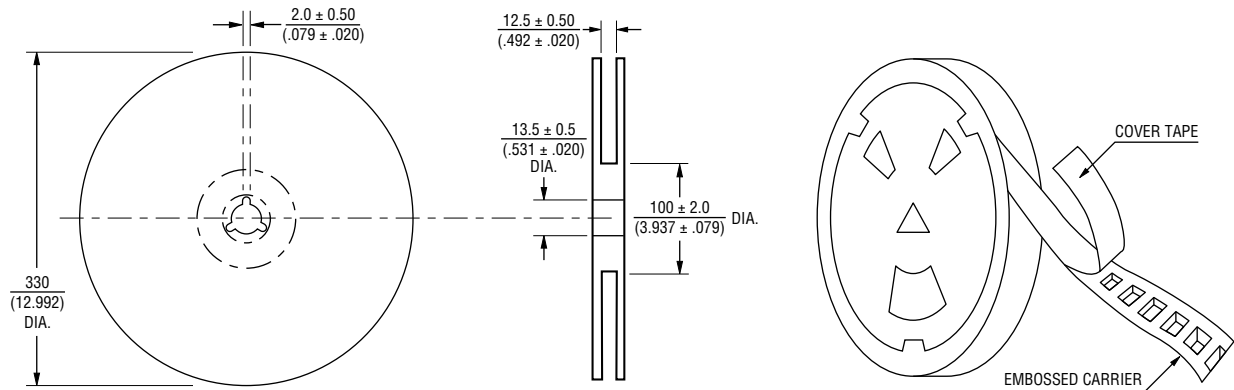
Users should verify actual device performance in their specific applications.

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**BOURNS®**

## Packaging Specifications



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

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