



Features

- IEEE 802.3 Ethernet compatible
- Compatible with 1G/2.5G/5G BASE-T
- Discrete transformers and common mode chokes for flexible PCB layout
- Pairing common mode choke SRF2012A-801Y for EMI reduction
- Expanded temperature range: -40 to +85 °C
- RoHS compliant* and halogen free**

SM453230-181N7Y - 1 / 2.5 / 5 GbE Chip LAN Transformer

Electrical Specifications @ 25 °C

Inductance (Pin 1-2 & 6-7 / short 3-4)
 .. 180 μ H min. @ 100 kHz, 0.1 V, 0 mA
 Turns Ratio
 Pin 1-2 : 6-7 / short 3-4 : 1:1 \pm 3 %
 Insertion Loss (Pin 1-2)
 1-100 MHz -1.0 dB max.
 Capacitance (Pin 3-5 / short 3-4)
 35 pF Typ.
 Hi-Pot (Pin 1 to 6, short 3-4)
 1500 Vac, 60 s
 Operating Temperature -40 °C to +85 °C
 Storage Temperature -40 °C to +85 °C

Packaging Specifications

Tape & Reel 2000 pcs./reel

How To Order

SM453230 - 181 - N7Y

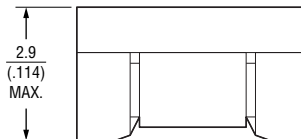
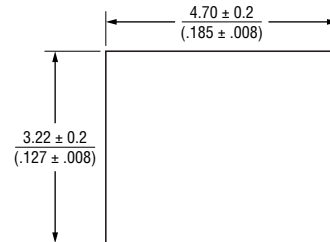
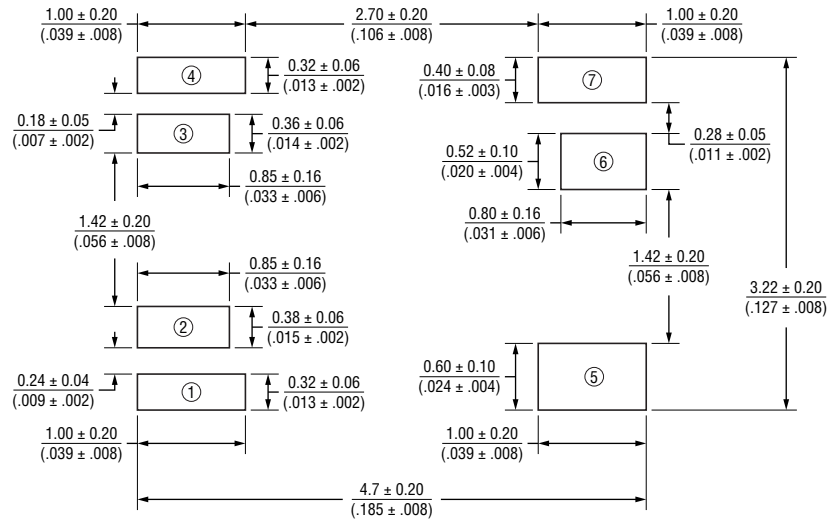
Model _____
 Packaging _____
 181 = Inductance code
 Termination _____
 N7 = Termination code
 Tolerance _____
 Y = Tolerance code

Typical Part Marking

No marking on part.

Product Dimensions

Terminal Dimensions – Top View



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



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WARNING Cancer and Reproductive Harm www.P65Warnings.ca.gov

* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

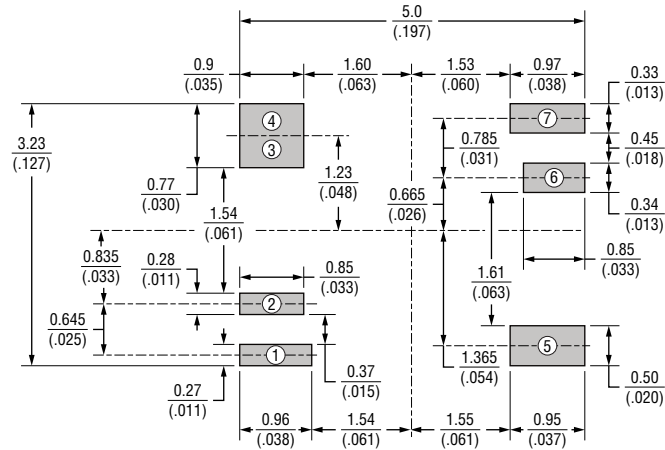
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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.

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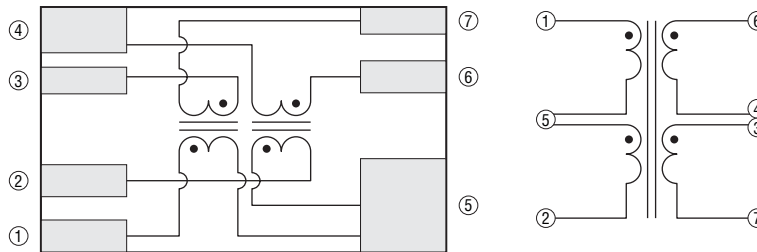
Recommended Layout



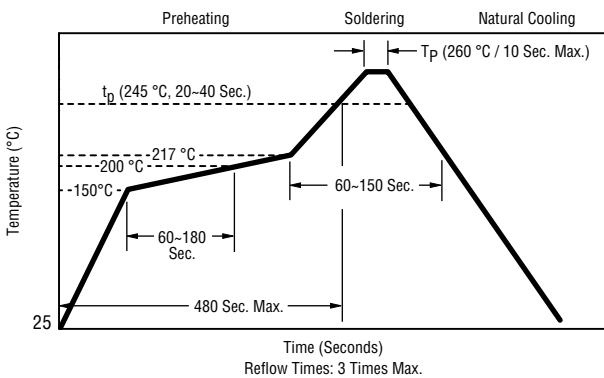
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Electrical Schematic

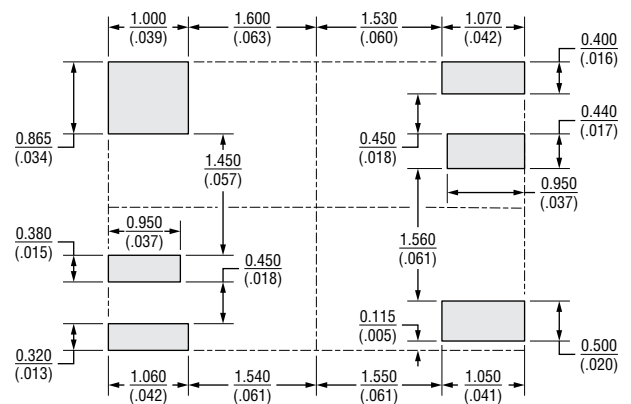
Top View



Solder Profile



Solder Paste Stencil Aperture Recommendation



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

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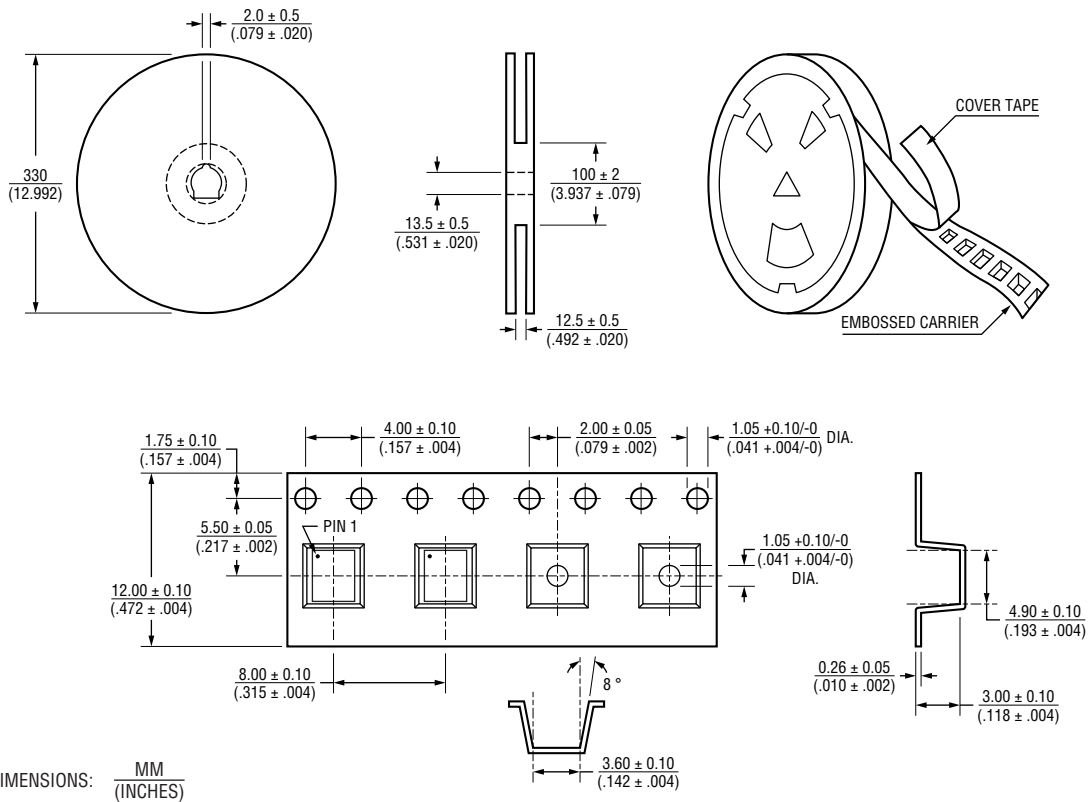
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BOURNS®

Packaging Specifications



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

USER DIRECTION OF FEED \rightarrow

QTY: 2000 PCS. PER REEL