

Features

- IEEE 802.3 Ethernet compatible
- Compatible with 10/100/1000 BASE-T
- Discrete transformers and common mode chokes for flexible PCB layout
- Pairing common mode chip inductor Model SRF2012A-801Y for EMI reduction
- Expanded temperature range: -40 to +105 °C
- AEC-Q200 Compliant
- RoHS compliant* and halogen free**

SM453229A-381N7Y - 10/100/1000 Base-T Chip LAN Transformer

PRODUCT

Click these links for more information:

LIBRARY

TECHNICAL INVENTORY SAMPLES

CONTACT

Electrical Specifications @ 25 °C

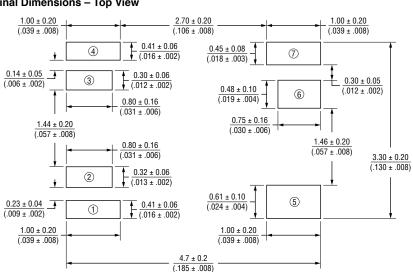
Inductance (Pin 1-2 & 6-7 / short 3-4) 380 µH min. @ 100 kHz, 0.1 V, 0 mA 350 µH min. @ 100 kHz, 0.1 V, 8 mA Turns Ratio Pin 1-2 : 6-7 / short 3-4 : 1:1± 3 % Insertion Loss
1-100 MHz1.5 dB max.
Capacitance (Pin 3-5 / short 3-4)
Hi-Pot (Pin 1 to 6, short 3-4)
Withstanding Pulse Voltage
2400 V, 1.2/50 μS
Operating Temperature
40 °C to +105 °C
Storage Temperature
40 °C to +105 °C
Packaging Specifications
Tape & Reel 2000 pcs./reel

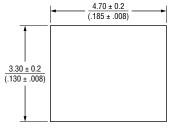
How To Order **Additional Information**

SM453229A - 381 - N7 Y Model Packaging 381 = Inductance code Termination N7 = Termination code Tolerance Y = Tolerance code

Product Dimensions

Terminal Dimensions – Top View





MM DIMENSIONS: (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 (CI) content is 1500 ppm or less.

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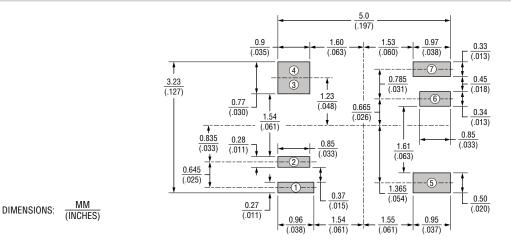
(.114) MAX

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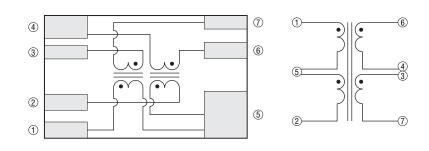
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Recommended Layout

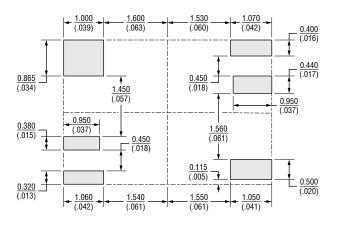




Top View



Solder Paste Stencil Aperture Recommendation



MM DIMENSIONS: (INCHES)

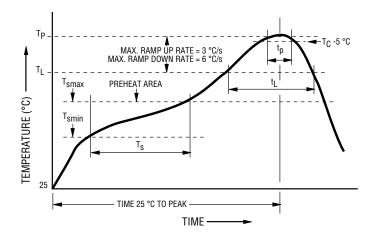
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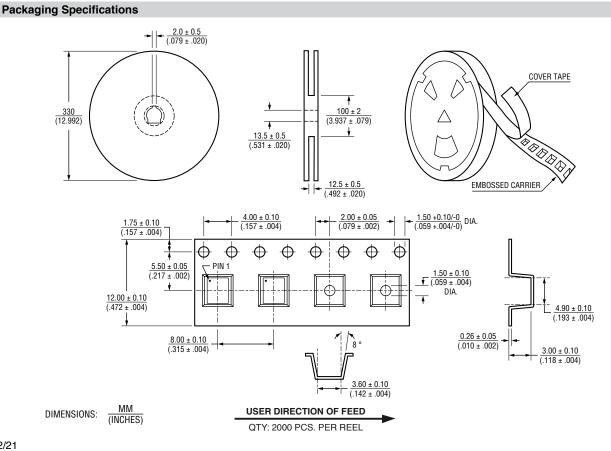
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Profile Feature	Pb-Free Assembly
Preheat / Soak:	
Temperature Min. (T _{smin})	150 °C
Temperature Max. (T _{smax})	200 °C
Time (t _s) from (T _{smin} to T _{smax})	60~120 seconds
Ramp Up Rate (T _L to T _p)	3 °C / second max.
Liquidous Temperature (T _L)	217 °C
Time (t_L) maintained above T_L	60~150 seconds
Peak Package Body Temperature (T _p)	250 °C
Time $(t_p)^*$ within 5 °C of the specified classification temperature (T_c)	< 30 seconds*
Ramp Down Rate $(T_p \text{ to } T_L)$	6 °C / second max.
Time 25 °C to Peak Temperature	8 minutes max.

*Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.



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