

## Features

- EP10 structure, push-pull design
- Developed for use with TI SN6507
- 24 V to 15 V application
- Working voltage: 400 V per functional insulation
- Hi-Pot: 2.5k VAC, 1 mA, 60 sec.
- Compliant with IEC/UL 62368-1
- RoHS\* and REACH compliant

## SM91207L Push-Pull Transformer

### Additional Information

Click these links for more information:



### Electrical Specifications @ 25 °C

- Primary Inductance (1 V at 100 kHz)  
L(1-4), tie Pin 2,3 .....430  $\mu$ H  $\pm$ 35 %
- Leakage Inductance (100 kHz/0.1 V)  
L(1-4, tie Pin 2,3;  
short Pin 5,6,7,8)..... 1.6  $\mu$ H max.
- DC Resistance  
NP1 (1-2).....0.35  $\Omega$  max.  
NP2 (3-4).....0.4  $\Omega$  max.  
NS1 (8-7).....0.3  $\Omega$  max.  
NS2 (6-5).....0.3  $\Omega$  max.
- Turns Ratio (8-5):(1-4)  
Pin 2,3 tied; Pin 6-7 tied.....0.733  $\pm$ 3 %
- Volt Second on Half of Primary  
(unipolar operation) .....25.0 V $\mu$ s min.
- Clearance and Creepage Distance  
between Primary and Secondary  
.....2 mm min.
- Hi-Pot (P-S) .....2.5k VAC, 1 mA, 60 sec.
- Operating Temperature Range  
.....-40 °C to +125 °C
- Storage Temperature Range  
.....-25 °C to +85 °C
- Moisture Sensitivity Level ..... 1

### Packaging Specification

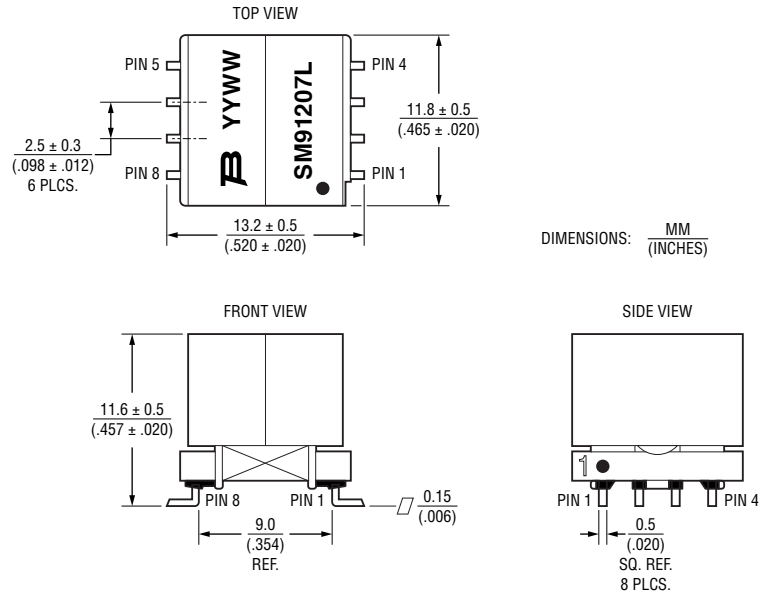
Tape & Reel ..... 200 pcs. per 13-inch reel

### How To Order

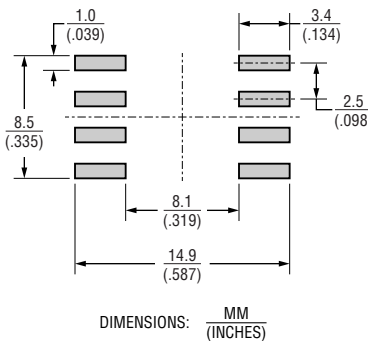
SM91207 L - E

Model \_\_\_\_\_  
RoHS Compliancy Designator \_\_\_\_\_  
Packaging \_\_\_\_\_  
E = 200 pcs. per 13-inch Reel

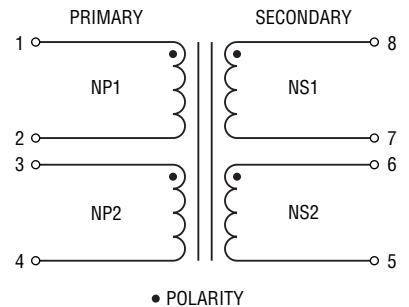
### Product Dimensions



### Recommended Layout



### Electrical Schematic



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**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.

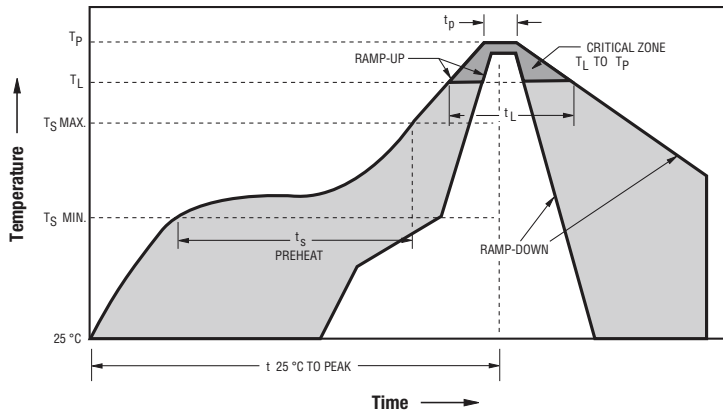
Users should verify actual device performance in their specific applications.

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# SM91207L Push-Pull Transformer

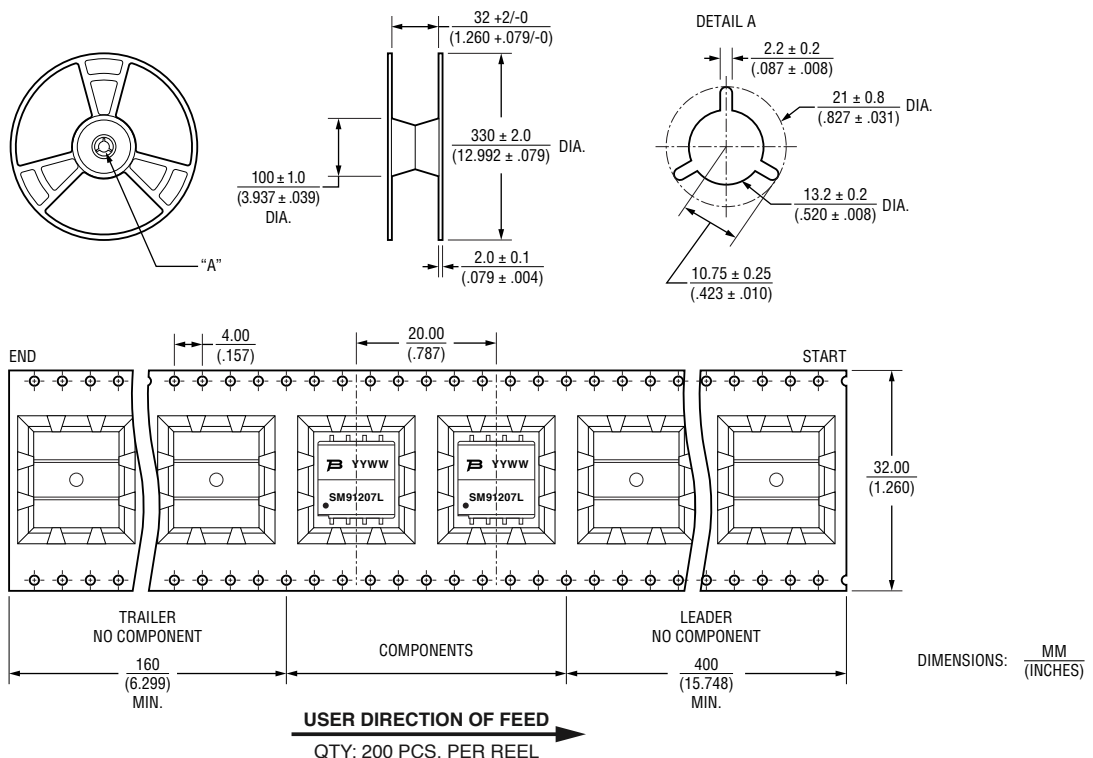
**BOURNS®**

## Reflow Solder Profile



Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate	3 °C / second max.
PREHEAT: Temperature Min. ( $T_{Smin}$ ) Temperature Max. ( $T_{Smax}$ ) Time ( $T_{Smin}$ to $T_{Smax}$ )	150 °C 200 °C 60~180 seconds
Liquidus Temperature ( $T_L$ )	217 °C
Time Above Liquidus Temperature ( $t_L$ )	60~150 seconds
Peak Temperature ( $T_P$ )	245-250 °C
Time within 5 °C of Actual Peak Temperature ( $t_p$ )	20~40 seconds
Ramp-Down Rate from Peak Temperature	6 °C / second max
Time 25 °C to Peak Temperature ( $T_p$ )	8 minutes max.
Do Not Exceed	250 °C

## Packaging Specifications



REV. 05/25

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