

## Features

- EP10 structure, push-pull design
- Developed for use with TI SN6507
- 12 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

## SM91208L 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) ..... 130  $\mu$ H  $\pm$ 35 %
- Leakage Inductance (100 kHz/0.1 V)  
 L(1-4, tie Pin 2,3;  
 short Pin 5,6,7,8) ..... 0.6  $\mu$ H max.
- DC Resistance  
 NP1 (1-2) ..... 0.15  $\Omega$  max.  
 NP2 (3-4) ..... 0.2  $\Omega$  max.  
 NS1 (8-7) ..... 0.25  $\Omega$  max.  
 NS2 (6-5) ..... 0.25  $\Omega$  max.
- Turns Ratio (8-5):(1-4)  
 Pin 2,3 tied; Pin 6,7 tied ..... 1.25  $\pm$ 3 %
- Volt Second on Half of Primary  
 (unipolar operation) ..... 13.0 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

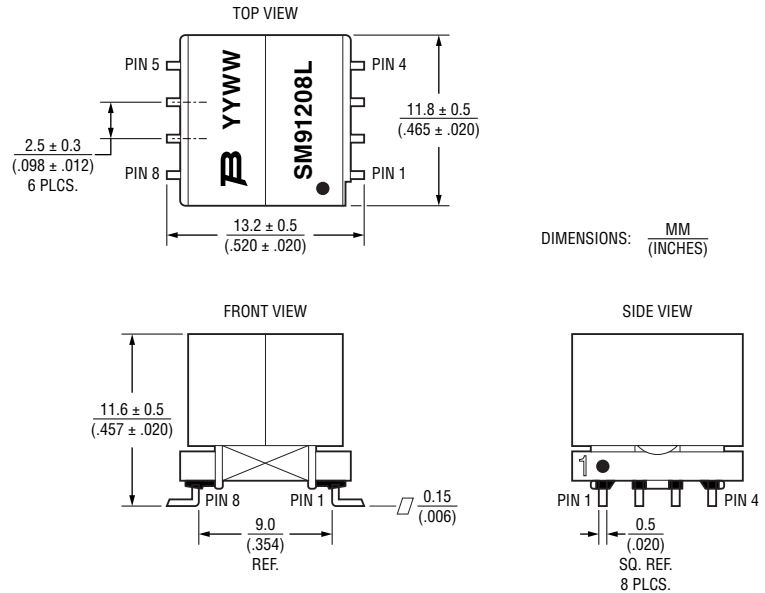
Tape & Reel ..... 200 pcs. per 13-inch reel

### How To Order

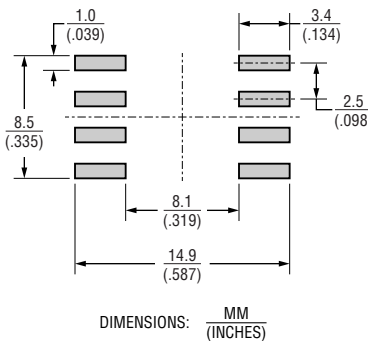
SM91208 L - E

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

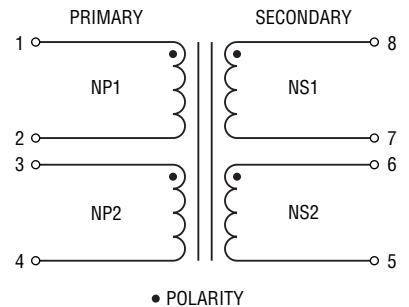
### Product Dimensions



### Recommended Layout



### Electrical Schematic



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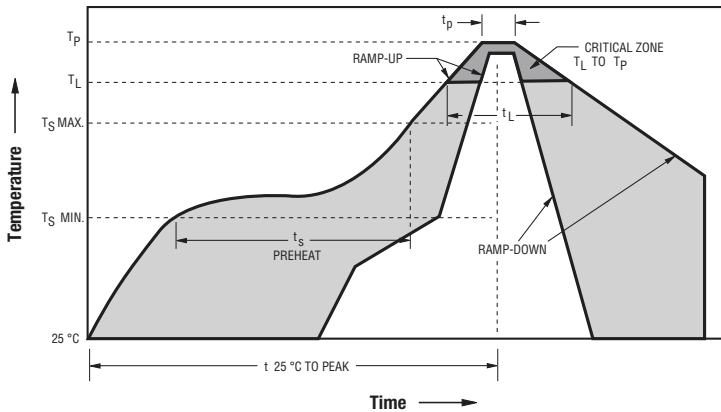
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\*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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# SM91208L Push-Pull Transformer

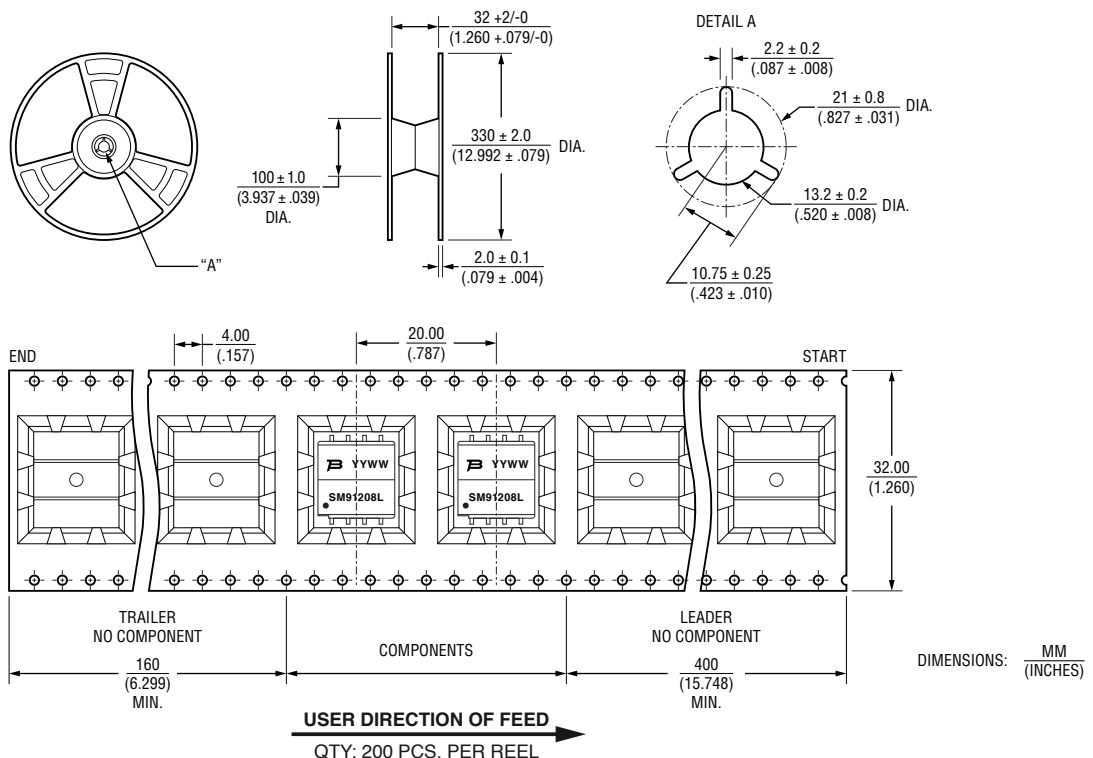
**BOURNS®**

## 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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Users should verify actual device performance in their specific applications.

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