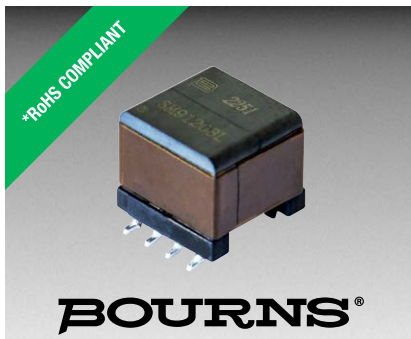




## Features

- 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  
 ..... -40 °C to +125 °C  
 Moisture Sensitivity Level ..... 1

### Packaging Specification

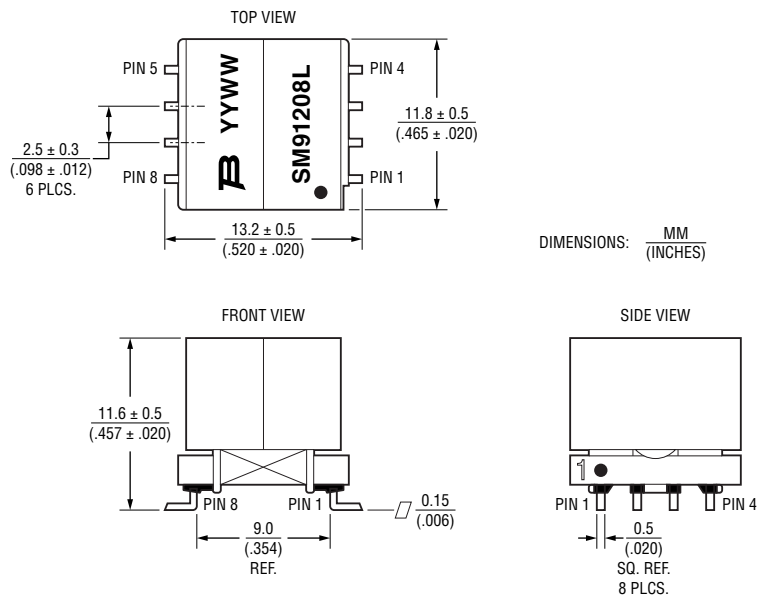
Tape & Reel ..... 200 pcs. per 13-inch reel

### How To Order

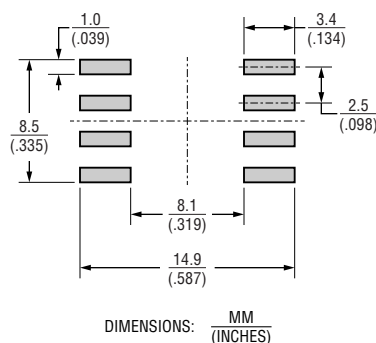
**SM91208 L - E**

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

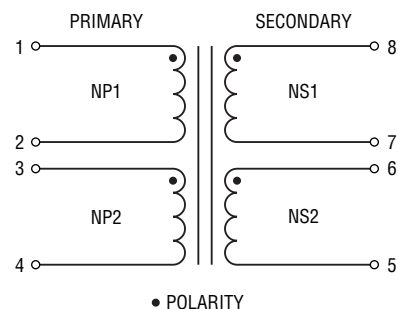
### Product Dimensions



### 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.

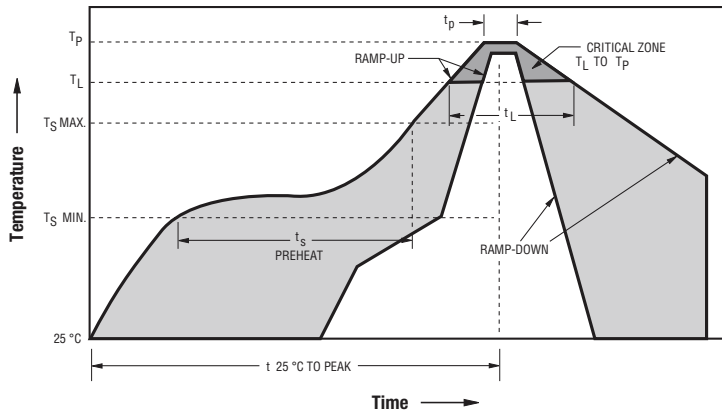
Users should verify actual device performance in their specific applications.

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# SM91208L Push-Pull Transformer

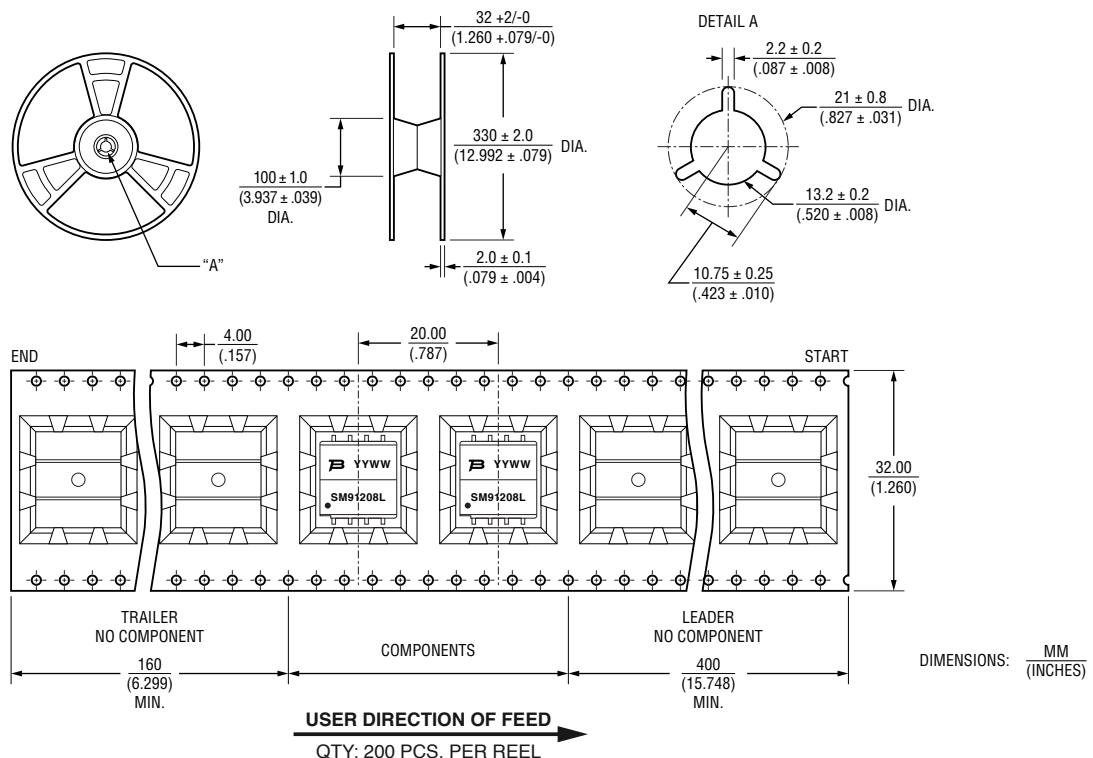
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## Reflow Solder Profile



| Profile Feature                                                                                                                              | Pb-Free Assembly                   |
|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| Average Ramp-Up Rate                                                                                                                         | 3 °C / second max.                 |
| PREHEAT:<br>Temperature Min. (T <sub>smin</sub> )<br>Temperature Max. (T <sub>smax</sub> )<br>Time (T <sub>smin</sub> to T <sub>smax</sub> ) | 150 °C<br>200 °C<br>60~180 seconds |
| Liquidus Temperature (T <sub>L</sub> )                                                                                                       | 217 °C                             |
| Time Above Liquidus Temperature (t <sub>L</sub> )                                                                                            | 60~150 seconds                     |
| Peak Temperature (T <sub>p</sub> )                                                                                                           | 245-250 °C                         |
| Time within 5 °C of Actual Peak Temperature (t <sub>p</sub> )                                                                                | 20~40 seconds                      |
| Ramp-Down Rate from Peak Temperature                                                                                                         | 6 °C / second max                  |
| Time 25 °C to Peak Temperature (T <sub>p</sub> )                                                                                             | 8 minutes max.                     |
| Do Not Exceed                                                                                                                                | 250 °C                             |

## Packaging Specifications



REV. 03/24

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