



## Features

- Working voltage up to 1500 VDC
- Hi-Pot: 6400 VDC
- Developed for use with NXP model 33771C series and Analog Device's model AD1818 and LTC6804/681X series
- Design construction: Reinforced insulation between primary and secondary per IEC 62477-1, IEC 60664-1 & IEC 62368-1
- UL recognized per UL 62368-1, File No. [E515965](#)
- Creepage distance >15 mm, pollution degree 2, material group CTI I
- Clearance distance >14 mm, Overvoltage Category III
- RoHS compliant\* and AEC-Q200 compliant

## SM91534AL BMS Transformer

### Additional Information

Click these links for more information:



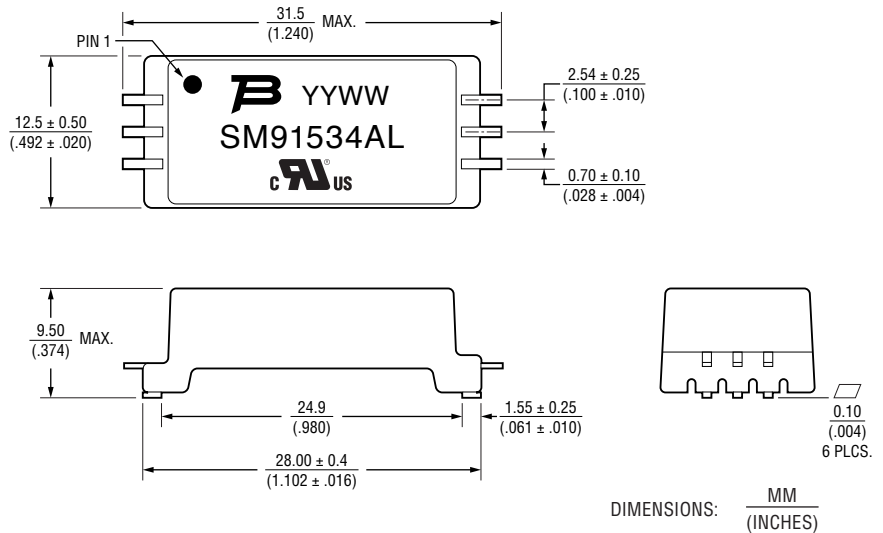
### General Specifications

OCL (100 kHz / 0.1 V)  
 (-40 °C ~ +125 °C)..... 150 μH min.  
 Leakage Inductance (100 kHz/0.1 V)  
 ..... 0.6 μH max.  
 DCR  
 Transformer Side ..... 0.5 Ω max.  
 CM Choke Side ..... 0.6 Ω max.  
 Turns Ratio ..... 1 : 1 ± 2 %  
 Insertion Loss:  
 4 MHz..... -1.0 dB max.  
 Return Loss (Z out = 100 Ω)  
 4 MHz:..... -20 dB min.  
 Common Mode Rejection Ratio  
 1~100 MHz..... -30 dB min.  
 Hi-pot (1 mA, 60 S)..... 6400 VDC  
 Working Voltage ..... up to 1500 VDC  
 Operation temperature  
 ..... - 40 °C to +125 °C  
 Storage Temperature (Component)  
 ..... -50 °C to +125 °C  
 Moisture Sensitivity Level..... 1  
 ESD Classification (HBM)..... N/A

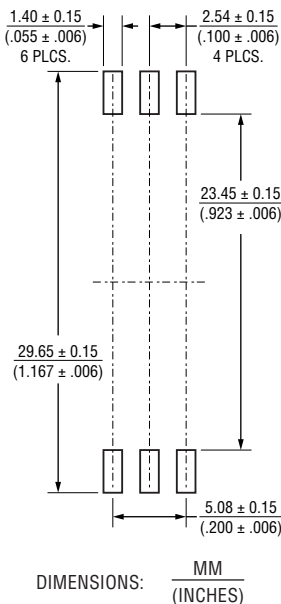
### Packaging Specification

Tape & Reel..... 300 pcs. per 13-inch reel

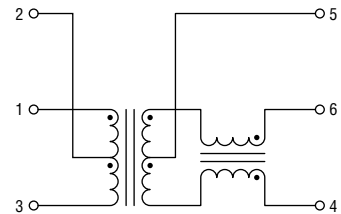
### Product Dimensions



### Recommended Layout



### Electric Schematic



### How To Order

Model **SM91534 A L - E**

AEC-Q200 Compliant \_\_\_\_\_

Termination \_\_\_\_\_  
 L = Tin (RoHS Compliant)

Packaging \_\_\_\_\_  
 E = Tape and Reel



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

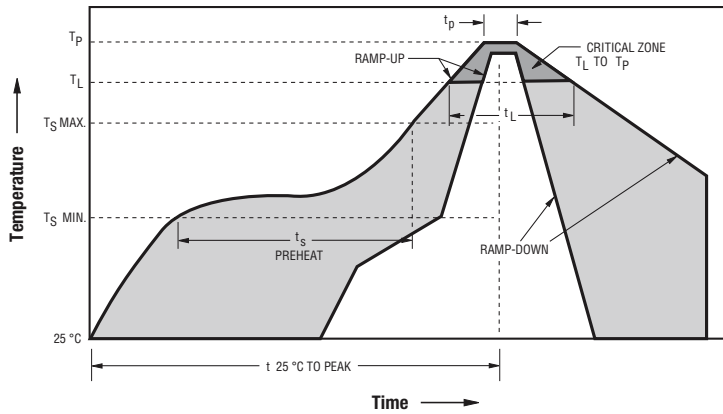
\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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**Solder Profile**



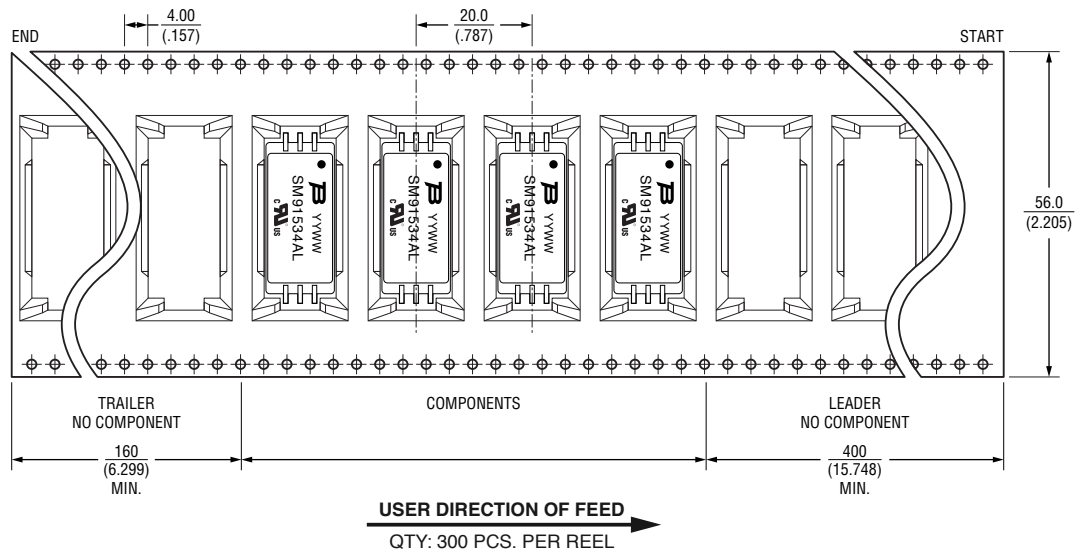
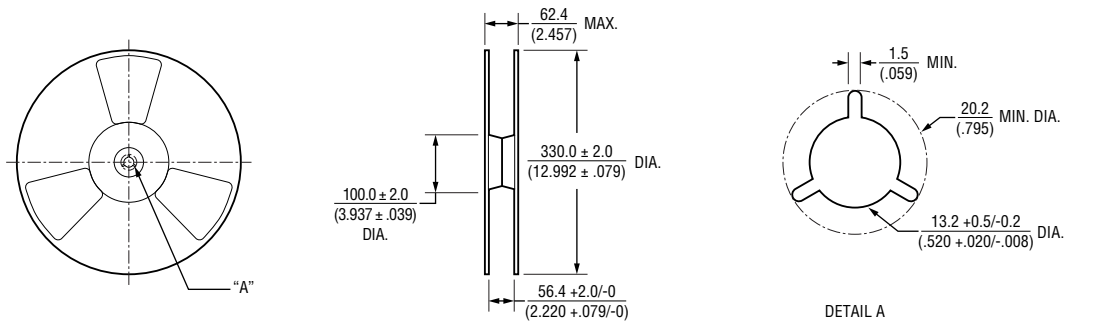
Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate	3 °C / second max.
PREHEAT: Temperature Min. ( $T_{Smin}$ ) Temperature Max. ( $T_{Smax}$ ) Time ( $T_{Smin}$ to $T_{Smax}$ )	150 °C 200 °C 60~180 seconds
Liquidus Temperature ( $T_L$ )	217 °C
Time Above Liquidus Temperature ( $t_L$ )	60~150 seconds
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

# SM91534AL BMS Transformer

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## Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.



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

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