

#### **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:











CONTACT

#### **General Specifications** (400 kH= (0.4 M

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 Ratio1:1 ± 2 %
Insertion Loss:
4 MHz1.0 dB max.
Return Loss (Z out = $100 \Omega$ )
4 MHz:20 dB min.
Common Mode Rejection Ratio
1~100 MHz30 dB min.
Hi-pot (1 mA, 60 S)6400 VDC
Working Voltageup to 1500 VDC
Operation temperature
40 °C to +125 °C
Storage Temperature (Component)
50 °C to +125 °C
Moisture Sensitivity Level1

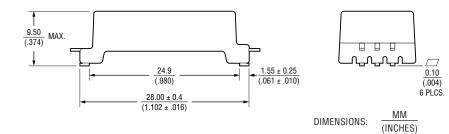
#### Packaging Specification

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

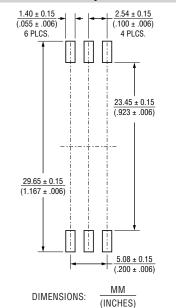
ESD Classification (HBM).....N/A

### **Product Dimensions**

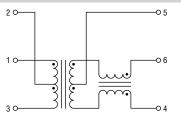




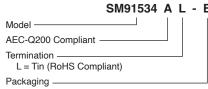
#### **Recommended Layout**



#### **Electric Schematic**



#### **How To Order**



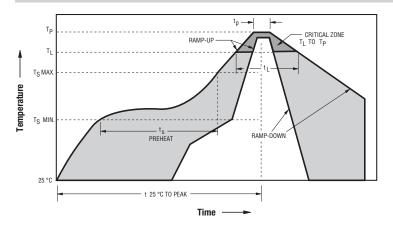
E = Tape and Reel



WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

# **SM91534AL BMS Transformer**

### **Solder Profile**



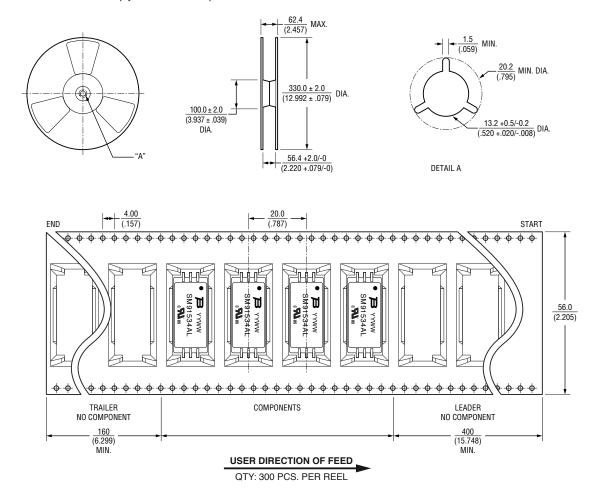
Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate	3 °C / second max.
PREHEAT: Temperature Min. (T <sub>smin</sub> ) Temperature Max. (T <sub>smax</sub> ) Time (T <sub>smin</sub> to T <sub>smax</sub> )	150 °C 200 °C 60~180 seconds
Liquidus Temperature (T <sub>L</sub> )	217 °C
Time Above Liquidus Temperature (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

## **SM91534AL BMS Transformer**

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#### **Packaging Specifications**

Specifications and tolerances comply with EIA-481 requirements.



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

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REV. 04/23

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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