Features

- Working voltage: up to 1500 VDC
- Hi-Pot: 5600 VAC, 1 mA, 60 sec. or 8000 VDC, 1 mA, 60 sec. Impulse voltage: 12 kV, 1.2/50 µs
- Partial discharge level up to 2250 V
- Reinforced insulation between primary and secondary per IEC 62477-1, IEC 60664-1 & IEC 62368-1
- Creepage distance >19 mm, pollution degree 2, material group CTI I
- Clearance distance >16 mm, overvoltage category III
- AEC-Q200 compliant
- RoHS compliant*

SM91543AL BMS Transformer

Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

Electrical Specifications @ 25 °C

OCL (100 kHz / 0.1 V)
(-40 °C to +125 °C)..... 150~450 µH
Leakage Inductance (100 kHz / 0.1 V)
..... 0.6 µH max.
DCR
1-3..... 0.5 Ω max.
4-6..... 0.6 Ω max.
Turns Ratio .....1 : 1
Insertion Loss (1-3)-(6-4)
4 MHz..... -1.0 dB max.
Return Loss (1-3)-(6-4)
4 MHz..... -20 dB min.
Common Rejection Ratio (1-3)-(6-4)
1-100 MHz..... -30 dB max.
Hi-Pot.....5600 VAC, 1 mA, 60 sec.
or 8000 VDC, 1 mA, 60 sec.
Working Voltage ..... 1500 VDC
Operating Temperature Range
..... -40 °C to +125 °C
Storage Temperature Range
..... -25 °C to +85 °C
Moisture Sensitivity Level.....1

Packaging Specification

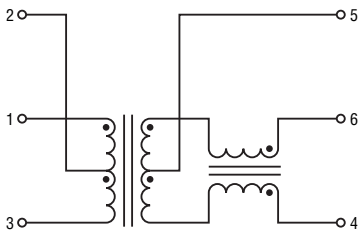
Tape & Reel..... 300 pcs. per 13-inch reel

How To Order

SM91543 A L - E

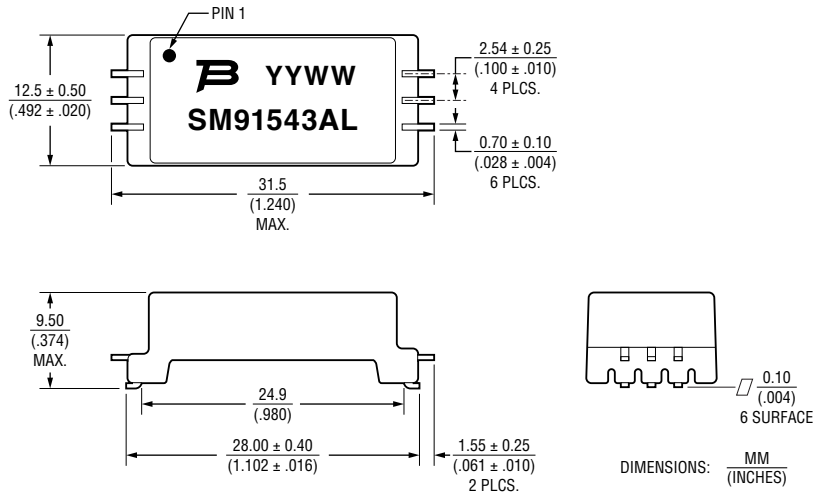
Model
AEC-Q200 Compliancy Designator
Termination
L = Tin (RoHS Compliant)
Packaging
E = Tape & Reel

Electric Schematic

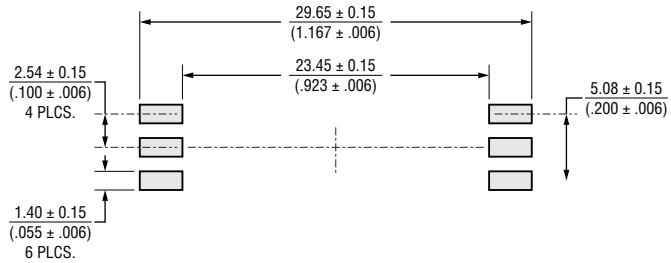


• SAME POLARITY

Product Dimensions



Recommended Layout



WARNING
Cancer and Reproductive Harm
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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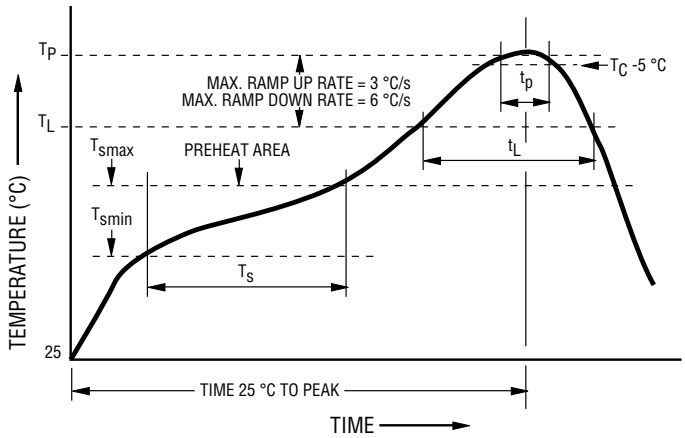
Solder Reflow Recommendations



Profile Feature	Pb-Free Assembly
Preheat / Soak: Temperature Min. (T_{smin}) Temperature Max. (T_{smax}) Time (t_s) from (T_{smin} to T_{smax})	 150 °C 200 °C 60~120 seconds
Ramp Up Rate (T_L to T_p)	3 °C / second max.
Liquidous Temperature (T_L) Time (t_L) maintained above T_L	217 °C 60~150 seconds
Peak Package Body Temperature (T_p)	$T_p \leq T_c$ (see table below)
Time (t_p)* within 5 °C of the specified classification temperature (T_c)	< 30 seconds*
Ramp Down Rate (T_p to T_L)	6 °C / second max.
Time 25 °C to Peak Temperature	8 minutes max.

**Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.*

Pb-Free Process Classification Temperatures (T_c)

Package Thickness	Volume mm³ < 350	Volume mm³ 350 - 2000	Volume mm³ > 2000
< 1.6 mm	260 °C	260 °C	260 °C
1.6 mm - 2.5 mm	260 °C	250 °C	245 °C
> 2.5 mm	250 °C	245 °C	245 °C

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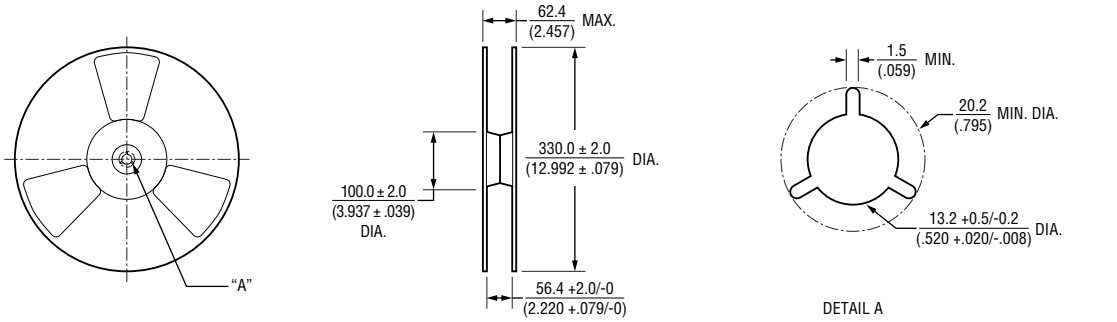
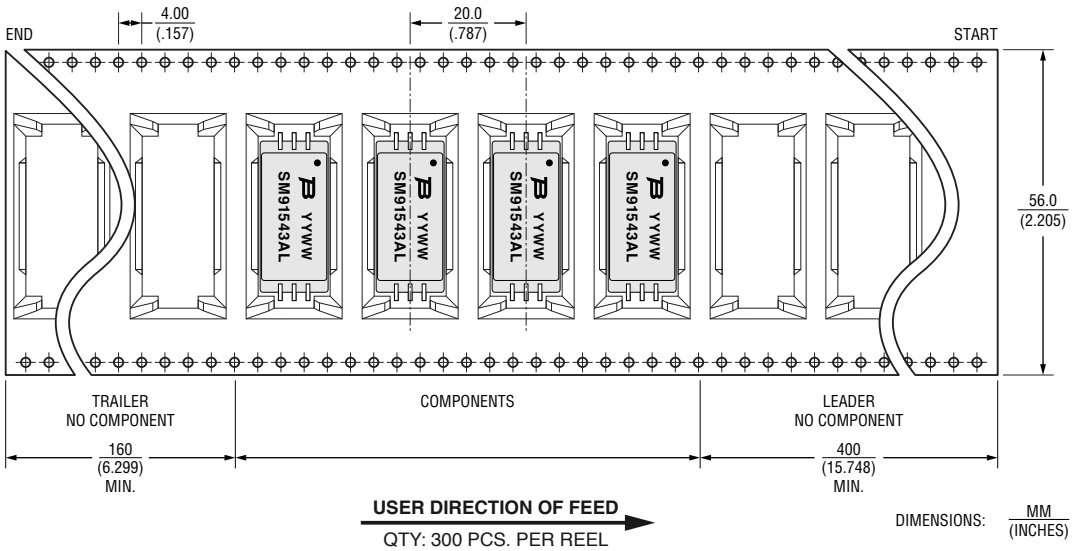
Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.





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