

Features

- Superior quality from full automation of key processes
- 1000 VDC working voltage and Hi-Pot: 4300 VDC
- Supports serial daisy chain/IsoSPI communication
- Expanded operating temperature range: -40 to +125 °C
- AEC-Q200 and RoHS compliant*

SM91514AL BMS Transformer

Electrical Specifications @ 25 °C

OCL (-40 ~ +125 °C) 300 μ H min. @ 100 kHz, 0.1 V
Leakage Inductance 0.5 μ H max. @ 100 kHz, 0.1 V
DCR	Transformer Side 0.60 Ω max. CM Choke Side 1.20 Ω max.
Turns Ratio 1:1 \pm 2 %
Insertion Loss	4 MHz -0.30 dB max.
Return Loss (Z out = 100 Ω)	4 MHz -20 dB min.
Common Mode Rejection Ratio	1~100 MHz -35 dB min. 100-200 MHz -20 dB min.
Hi-Pot (1 mA, 60 s) 4300 VDC
Working Voltage 1000 VDC
Operating Temperature -40 °C to +125 °C
Storage Temperature -25 °C to +85 °C
Moisture Sensitivity Level 1
ESD Classification (HBM) N/A

Packaging Specifications

Tape & Reel 800 pcs./reel
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How To Order

SM91514 A L - E

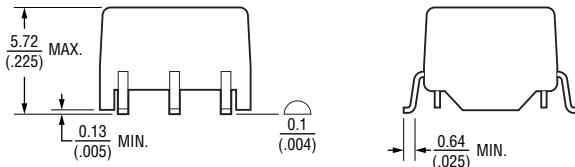
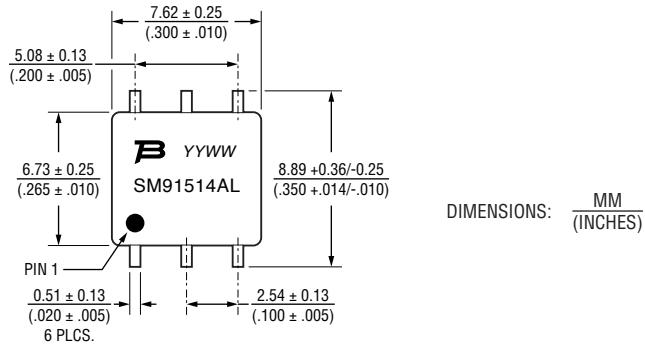
Model _____
 Compliancy _____
 A = AEC-Q200 Compliant
 Termination _____
 L = Tin (RoHS Compliant)
 Packaging _____
 E = Tape and Reel

Additional Information

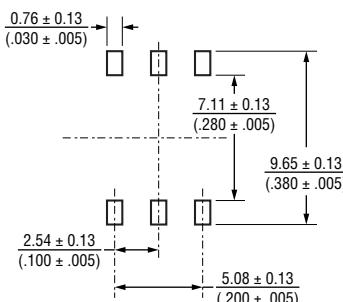
Click these links for more information:



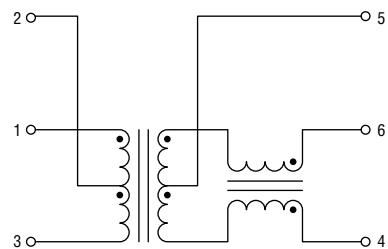
Product Dimensions



Recommended Layout



Electrical Schematic



CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant.

See www.P65Warnings.ca.gov

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

Specifications are subject to change without notice.

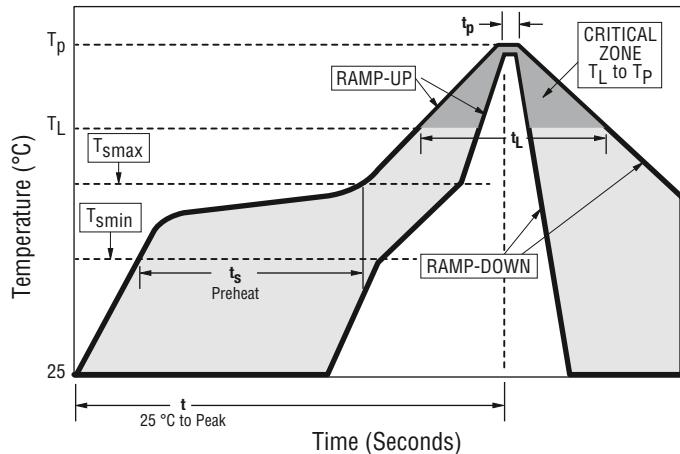
Users should verify actual device performance in their specific applications.

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SM91514AL BMS Transformer

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Solder Profile



Reflow Condition		Pb-free Assembly
Average Ramp-up Rate		3 °C / second max.
Preheat	Temperature Min. (T_{smin})	150 °C
	Temperature Max. (T_{smax})	200 °C
	Time (T_{smin} to T_{smax})	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 from 25 °C to Peak Temperature (T_p)		8 minutes max.
Do not Exceed		260 °C

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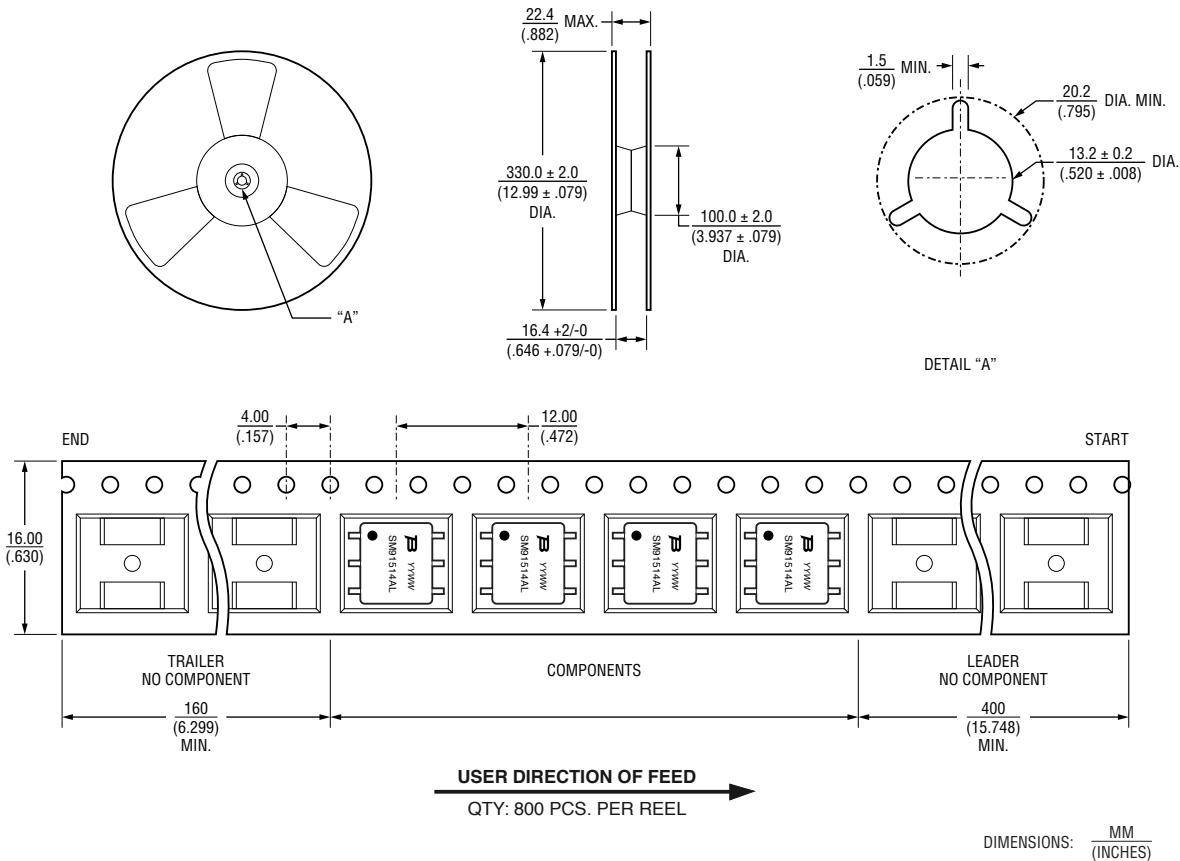
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SM91514AL BMS Transformer

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Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.



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REV. 01/26

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