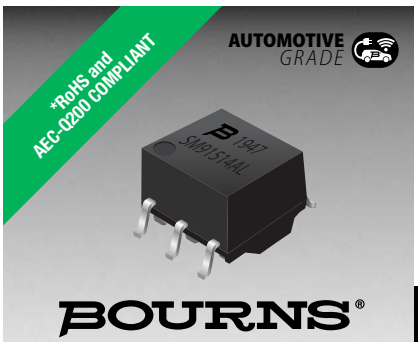
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## Features

- Superior quality from full automation of key processes
- 1000 Vdc working voltage and Hi-Pot: 4300 Vdc
- Supports serial daisy chain/IsoSPI communication
- Matches with NXP model MC33771C series and Maxim model Max17853
- 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 µH min. @ 100 kHz, 0.1 V
Leakage Inductance
..... 0.5 µH max. @ 100 kHz, 0.1 V
DCR
Transformer Side ..... 0.60 Ω max.
CM Choke Side ..... 1.20 Ω max.
Turns Ratio ..... 1:1 ± 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
..... -50 °C to +125 °C
Moisture Sensitivity Level ..... 1
ESD Classification (HBM) ..... N/A

### Packaging Specifications

Tape & Reel ..... 800 pcs./reel

### How To Order

**SM91514 A L - E**

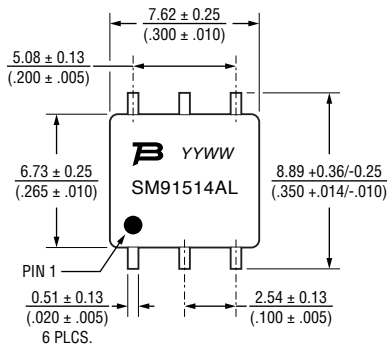
Model
Compliancy
A = AEC-Q200 Compliant
Termination
L = Tin (RoHS Compliant)
Packaging
E = Tape and Reel

### Additional Information

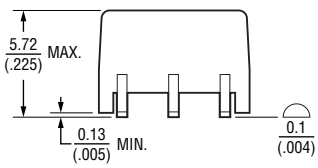
Click these links for more information:

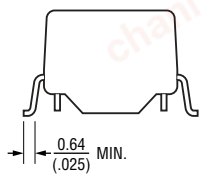
PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

### Product Dimensions

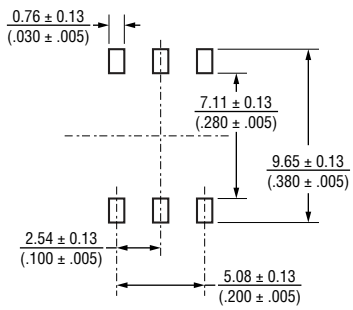



DIMENSIONS: MM / (INCHES)

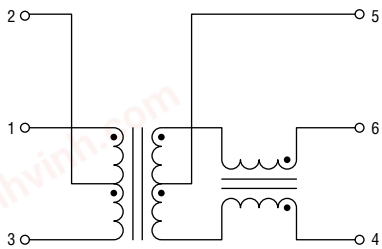



### Recommended Layout




### Electrical Schematic



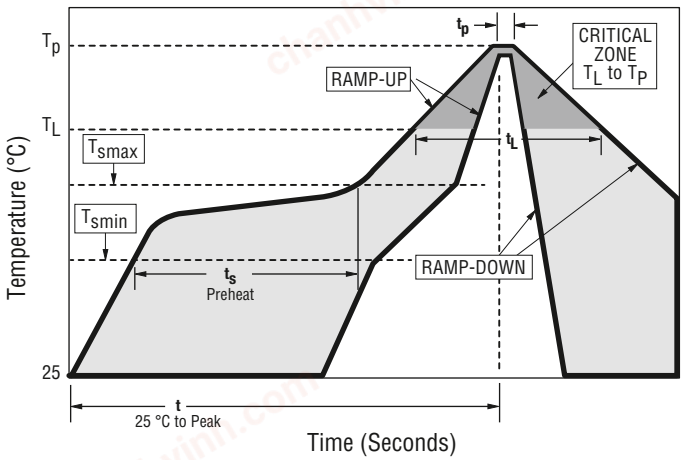

**WARNING Cancer and Reproductive Harm**
www.P65Warnings.ca.gov

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

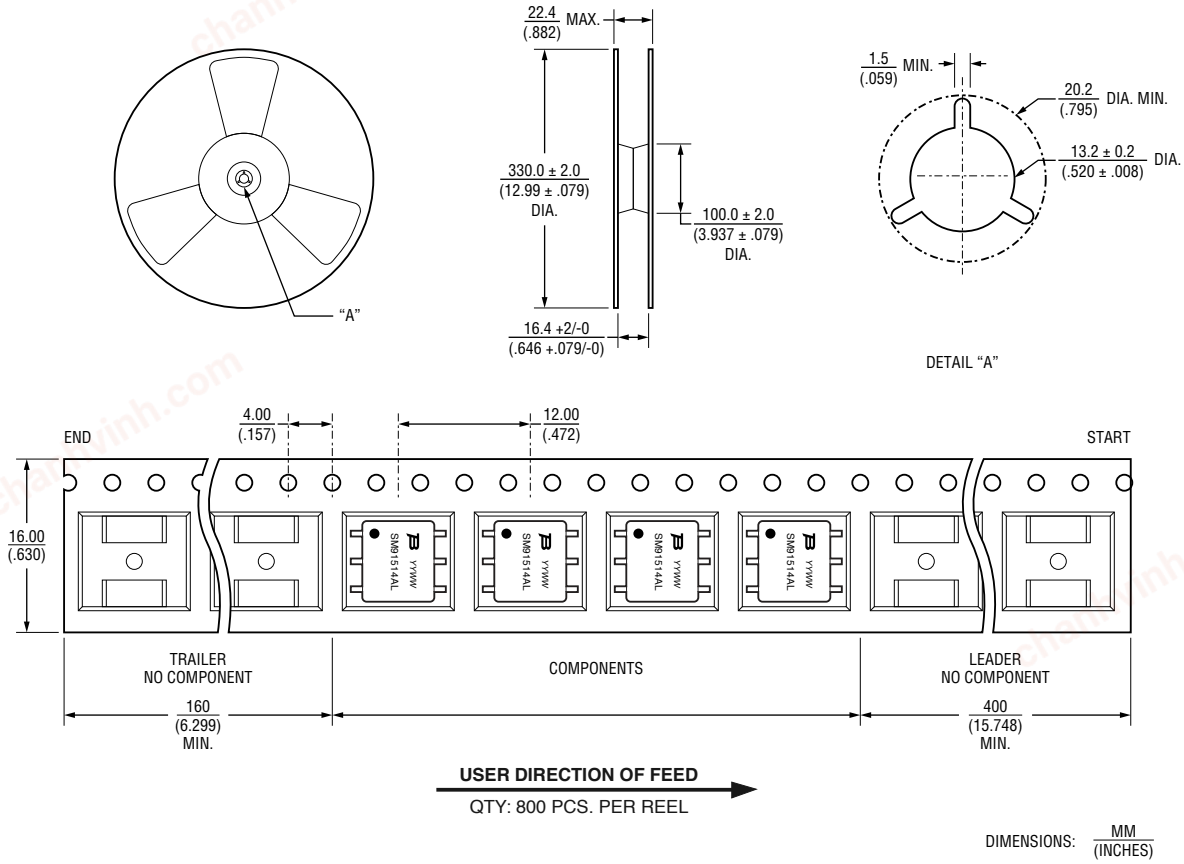
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## Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.




BOURNS®

**Asia-Pacific:** Tel: +886-2 2562-4117 • Email: asiacus@bourns.com
**EMEA:** Tel: +36 88 885 877 • Email: eurocus@bourns.com
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