

## Features

- Pin auto-termination
- Working voltage: 1000 VDC
- Hi-Pot: 4300 VDC
- Single channel with integrated choke
- Developed for use with TI BQ79616
- Functional insulation
- AEC-Q200 compliant
- RoHS compliant\*

## SM91525AL BMS Transformer

### Additional Information

Click these links for more information:



### General Specifications

OCL (100 kHz / 0.1 V, -40 °C ~ +125 °C)	300 $\mu$ H ~ 1000 $\mu$ H
Leakage Inductance (100 kHz/0.1 V)	0.5 $\mu$ H max.
DCR	
Transformer Side	0.9 $\Omega$ max.
CM Choke Side	1.1 $\Omega$ max.
Turns Ratio	1 : 1 $\pm$ 2 %
Insertion Loss:	
1-80 MHz	-1.0 dB max.
125 MHz	-3.0 dB max.
Return Loss (Z out = 100 $\Omega$ )	
1-30 MHz	-16 dB min.
30-60 MHz	-12 dB min.
60-80 MHz	-10 dB min.
Hi-pot (1 mA, 60 S)	4300 VDC
Working Voltage	1000 VDC
Operation Temperature	-40 °C to +125 °C
Storage Temperature Range	-50 °C to +125 °C
Moisture Sensitivity Level	1
ESD Classification (HBM)	N/A

### Packaging Specification

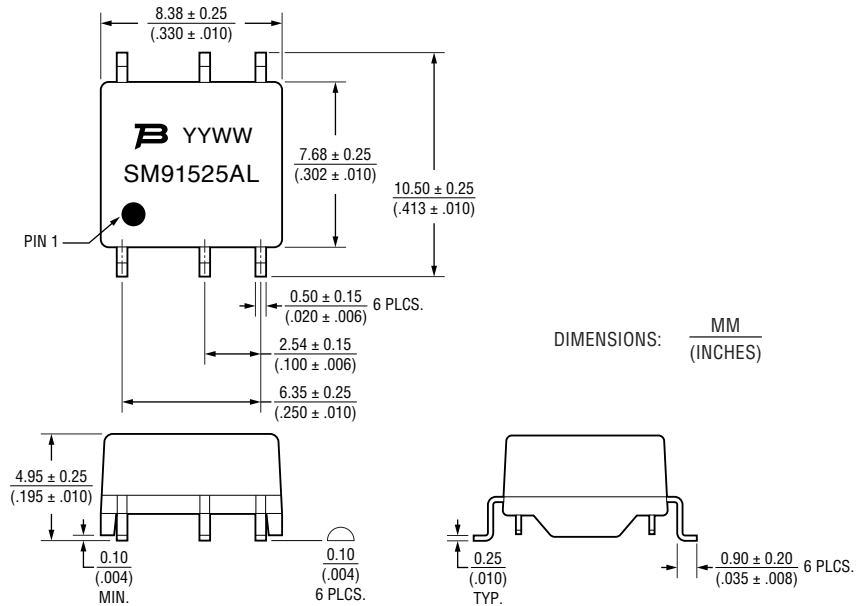
Tape & Reel..... 700 pcs. per 13-inch reel

### How To Order

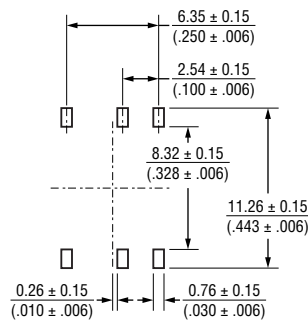
**SM91525 A L - E**

Model \_\_\_\_\_  
 AEC-Q200 Compliant \_\_\_\_\_  
 RoHS Compliancy Designator \_\_\_\_\_  
 Packaging \_\_\_\_\_  
   E = 700 pcs. per 13-inch Reel  
   5 Reels per Box

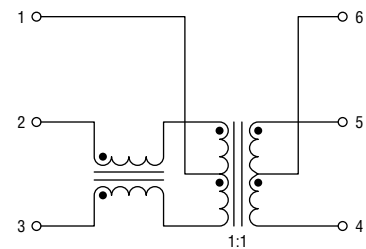
### Product Dimensions



### Recommended Layout



### Electrical Schematic



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

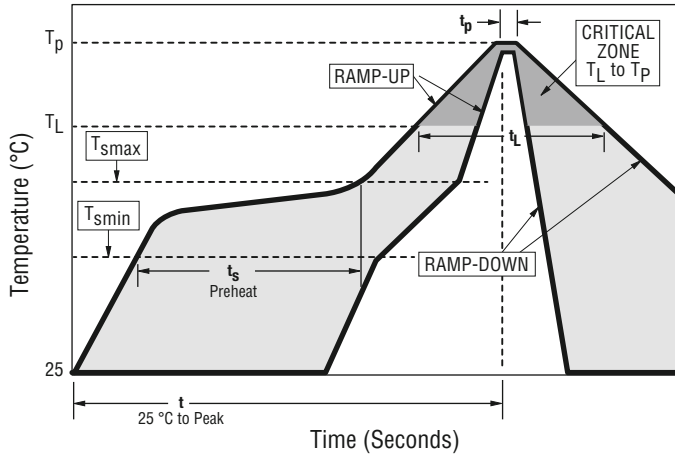
\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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**Solder Profile**



Reflow Condition		Pb-free Assembly
Average Ramp-up Rate		3 °C / second max.
Preheat	Temperature Min. (T <sub>smin</sub> )	150 °C
	Temperature Max. (T <sub>smax</sub> )	200 °C
	Time (T <sub>smin</sub> to T <sub>smax</sub> )	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 from 25 °C to Peak Temperature (T <sub>p</sub> )		8 minutes max.
Do not Exceed		250 °C

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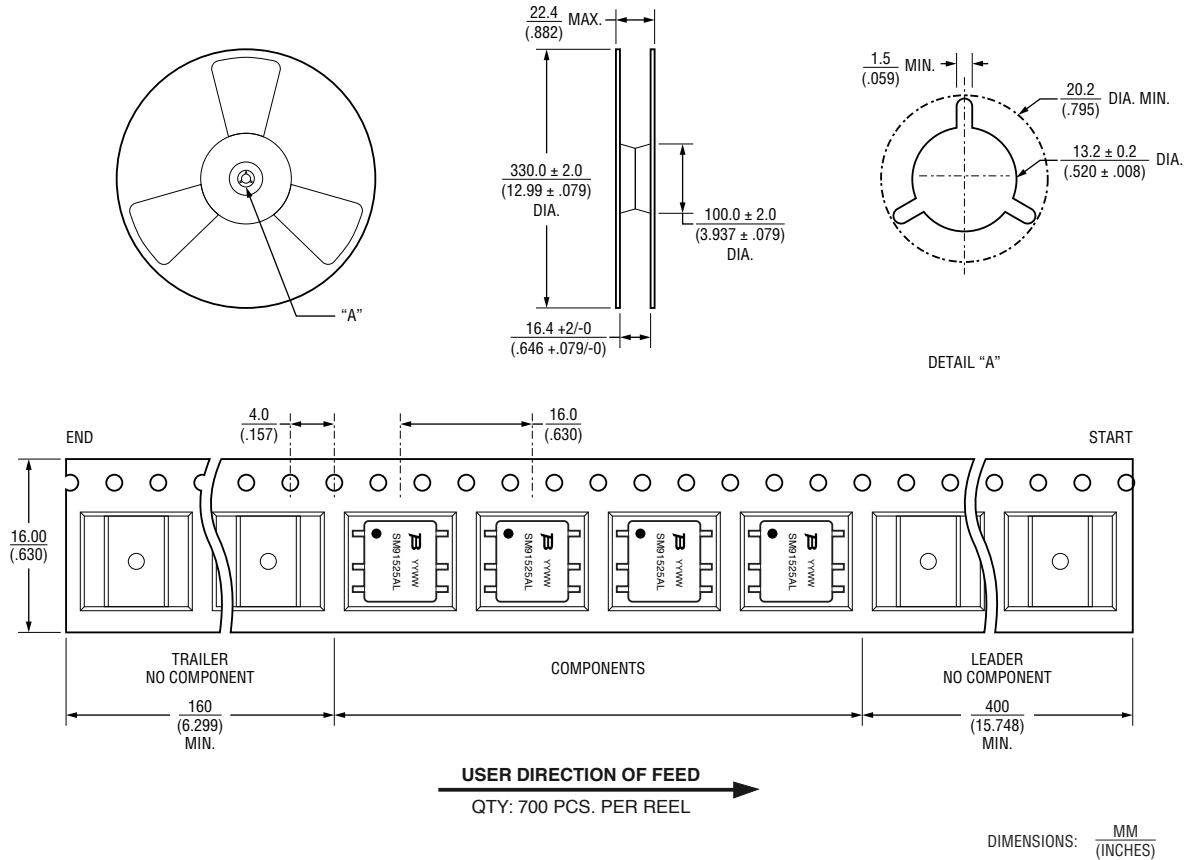
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# SM91525AL BMS Transformer

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## Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.



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