

Features

- First pin auto-termination
- Working voltage: 1000 VDC
- Hi-Pot: 4300 VDC
- Single channel with integrated choke
- Functional insulation
- Developed for use with Analog Device's Model LTC6804-1/681X, NXP's Model MC33771/33772 and Texas Instruments' Model BQ79616
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SM91502ALA BMS Transformer

Electrical Specifications @ 25 °C

OCL (-40 ~ +125 °C)
 150 ~ 450 μ H @ 100 kHz, 0.1 V

Leakage Inductance
 0.5 μ H max. @ 100 kHz, 0.1 V

DCR
 Transformer Side 0.45 Ω max.
 CM Choke Side 0.85 Ω max.

Turns Ratio 1:1 \pm 2 %

Insertion Loss
 4 MHz -0.25 dB max.
 Return Loss (Z out = 100 Ω)
 4 MHz -22 dB min.

Common Mode Rejection Ratio
 1~100 MHz -35 dB min.
 100~200 MHz -28 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

How To Order

SM91502 A L A - E

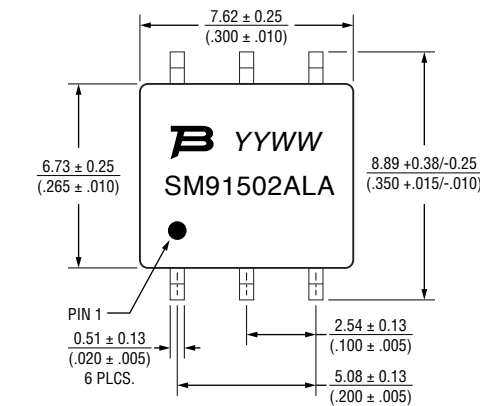
Model	_____	_____	_____	_____
Compliance	_____	_____	_____	_____
A = AEC-Q200 Compliant				
Termination	_____	_____	_____	_____
L = Tin (RoHS Compliant)				
Auto Pin Termination	_____	_____	_____	_____
Packaging	_____	_____	_____	_____
E = Tape and Reel				

Additional Information

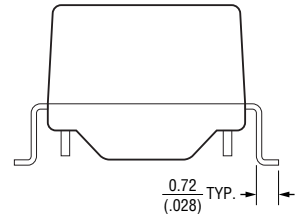
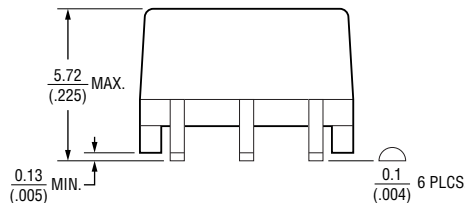
Click these links for more information:



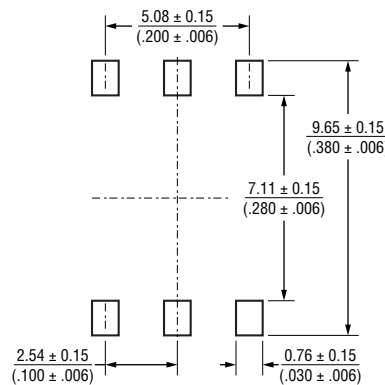
Product Dimensions



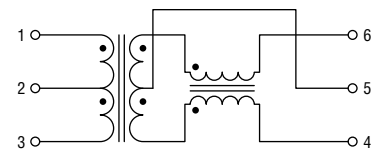
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$



Recommended Layout



Electric Schematic



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

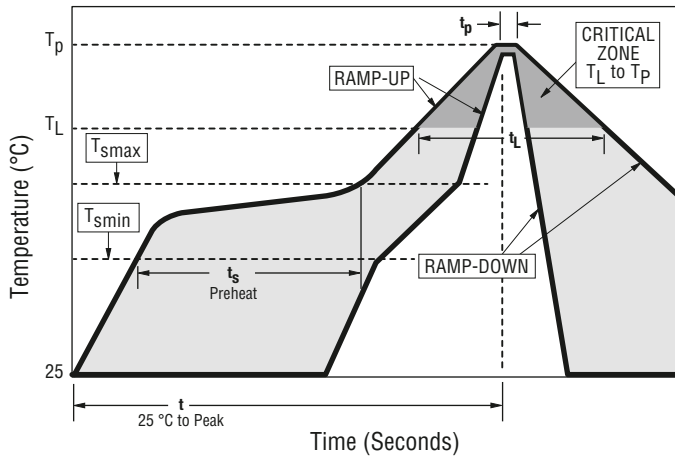
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

**Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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_{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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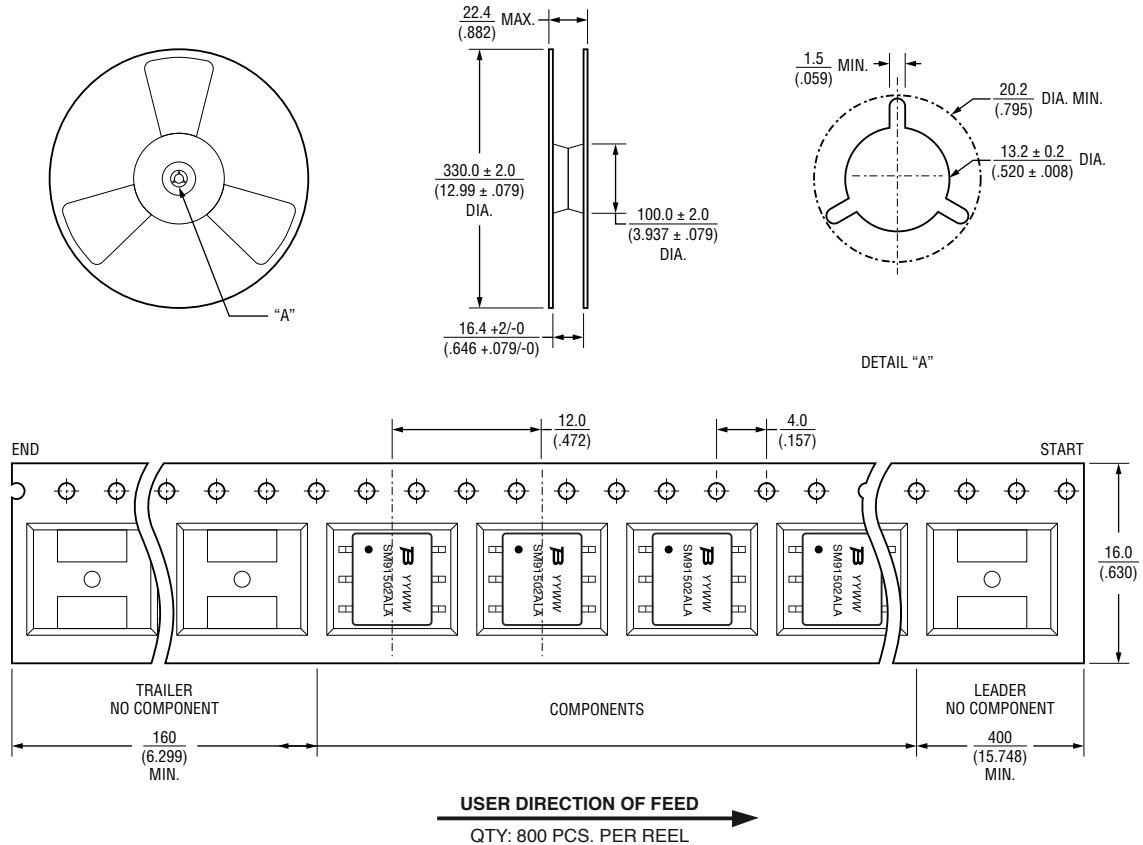
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SM91502ALA BMS Transformer

BOURNS®

Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.



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

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