

#### **Features**

- Operating temperature: -40 to +150 °C
- High frequency integrated choke
- Hi-Pot: 3000 Vrms
- RoHS compliant\*
- AEC-Q200 compliant

# SM91508AL BMS Signal Transformer

### Electrical Specifications @ 25 °C

OCL

(100 kHz, 0.1 V, (-40  $^{\circ}$ C  $\sim$  +150  $^{\circ}$ C) ...... 300 µH min. Leakage Inductance (100 kHz, 0.1 V) ..... 0.5 μH max. **DCR** 

Transformer Side ...... 0.8 Ω max. CM Choke Side...... 1.0  $\Omega$  max. Turns Ratio ......1:1 ±2 % Insertion Loss

1-80 MHz.....-1.0 dB max. 125 MHz.....-3.0 dB max. Return Loss (Z out =  $100 \Omega$ )

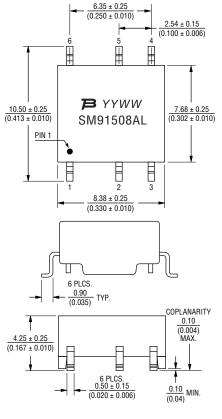
1-30 MHz.....-16 dB min. 30-60 MHz....-12 dB min. 60-80 MHz.....-10 dB min. Hi-Pot (1 mA, 60 sec.) ......3000 Vrms Working Voltage ......1000 Vdc Operating Temperature....-40 to +150 °C Storage Temperature ......-50 to +150 °C Moisture Sensitivity Level......1

#### **Packaging Specifications**

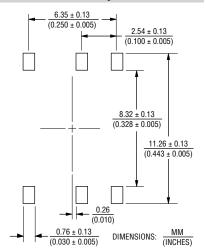
Tape & Reel...... 800 pcs./reel

ESD Classification (HBM).....N/A

# **Product Dimensions**



#### **Recommended Layout**

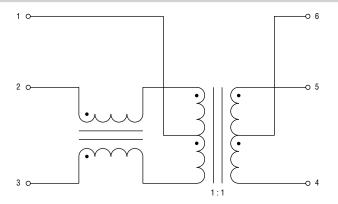


#### **How To Order**

	SM91508	Α	L-E
Model -			
AEC-Q200 Compliant -			
Termination ———— L = RoHS Compliant			_
Packaging ————			

E = Tape and Reel (800 pcs. per reel)

#### **Electrical Schematic**





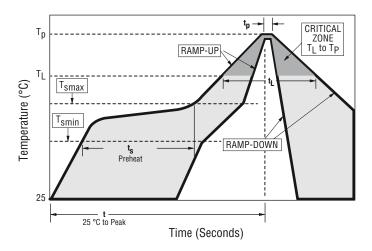
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

\*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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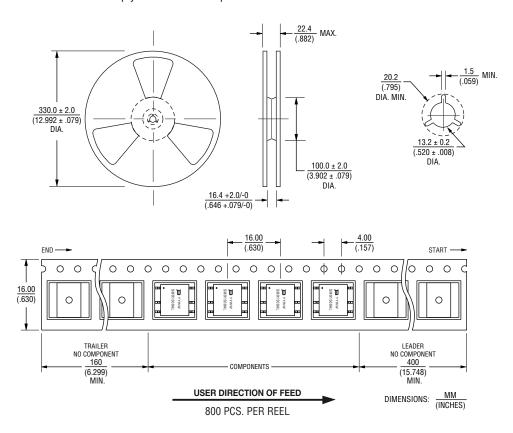
#### **Solder Profile**



Profile Features	Pb Free Assembly	
Average Ramp-up Rate	3 °C/second max.	
Preheat		
Temperature min. (T <sub>S</sub> min)	150 °C	
Temperature max. (T <sub>S</sub> max)	200 °C	
Time (t <sub>S</sub> min. to t <sub>S</sub> max.)	60 ~ 180 s	
Liquidus Temperature: TL	217 °C	
Time above Liquidus Temperature: tL	60 ~ 150 s	
Peak Temperature: Tp	245-250 °C	
Time within 5 °C of Actual Peak Temperature: tp	20 ~ 40 s	
Ramp-down Rate from Peak Temperature	6 °C/s max.	
Time 25 °C to Peak: t <sub>TO PEAK</sub>	8 minutes max.	

#### **Packaging Specifications**

Specifications and tolerances comply with EIA-481 requirements.



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