



Features

- Working voltage up to 1000 Vrms
- Hi-Pot: 4000 VAC, 5 mA, 10 s
- Reinforced insulation per IEC 61558-1, UL 62368-1
- Clearance distance >10 mm, up to 2 km altitude
- Creepage distance >10 mm
- Overvoltage category II, pollution degree 2
- AEC-Q200 compliant
- RoHS compliant*

SM91259AL Power Transformer

Additional Information

Click these links for more information:



Electrical Specifications @ 25 °C

Primary Inductance (100 kHz / 0.1 V)	27.5 μ H $\pm$ 10 %
Secondary Inductance (100 kHz / 0.1 V)	27.5 μ H $\pm$ 10 %
Leakage Inductance (100 kHz / 0.1 V)	
With Pin 5,8 Shorted.....	1.0 μ H max.
Capacitance (100 kHz / 0.1 V)	
Pri.-Sec.....	40 pF max.
DCR	
1-4.....	0.2 Ω max.
8-5.....	0.2 Ω max.
Turns Ratio.....	1:1 $\pm$ 3 %
Hi-Pot (5 mA, 10 s).....	4000 VAC
Working Voltage.....	1000 Vrms
Operating Temperature Range	
.....	-40 °C to +125 °C
(Including Temperature Rise)	
Storage Temperature Range	
.....	-25 °C to +85 °C

Packaging Specification

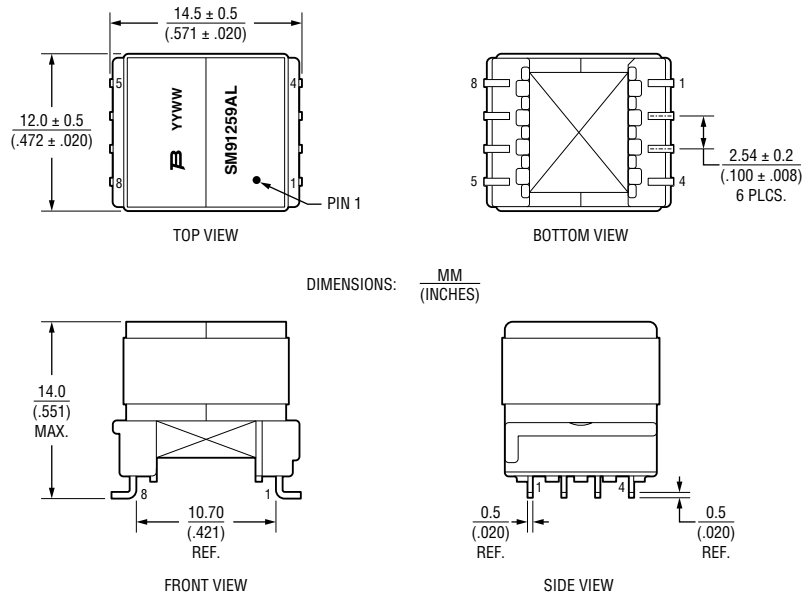
Tape & Reel..... 180 pcs. per 13-inch reel

How To Order

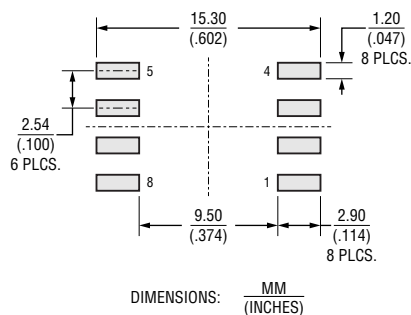
SM91259 A L - E

Model _____
AEC-Q200 Compliant _____
RoHS Compliant _____
Tape & Reel Packaging _____

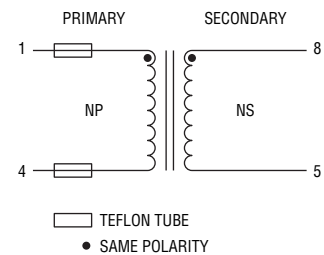
Product Dimensions



Recommended Layout



Electrical Schematic



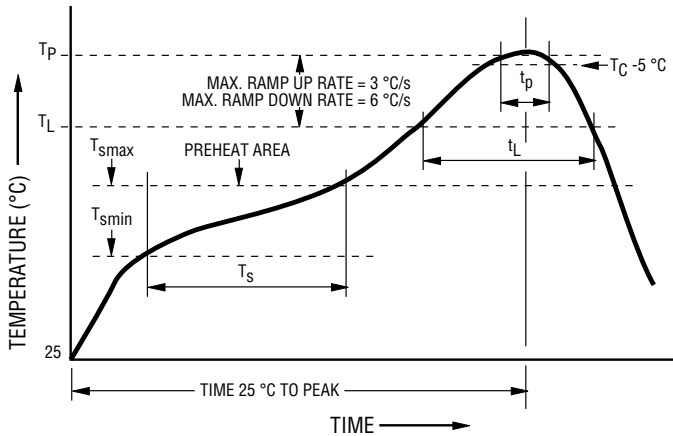
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*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 Reflow Recommendations



Profile Feature	Pb-Free Assembly
Preheat / Soak: Temperature Min. (T_{smin}) Temperature Max. (T_{smax}) Time (t_s) from (T_{smin} to T_{smax})	150 °C 200 °C 60~120 seconds
Ramp Up Rate (T_L to T_p)	3 °C / second max.
Liquidous Temperature (T_L) Time (t_L) maintained above T_L	217 °C 60~150 seconds
Peak Package Body Temperature (T_p)	$T_p \leq T_c$ (see table below)
Time (t_p)* within 5 °C of the specified classification temperature (T_c)	< 30 seconds*
Ramp Down Rate (T_p to T_L)	6 °C / second max.
Time 25 °C to Peak Temperature	8 minutes max.

*Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

Pb-Free Process Classification Temperatures (T_c)

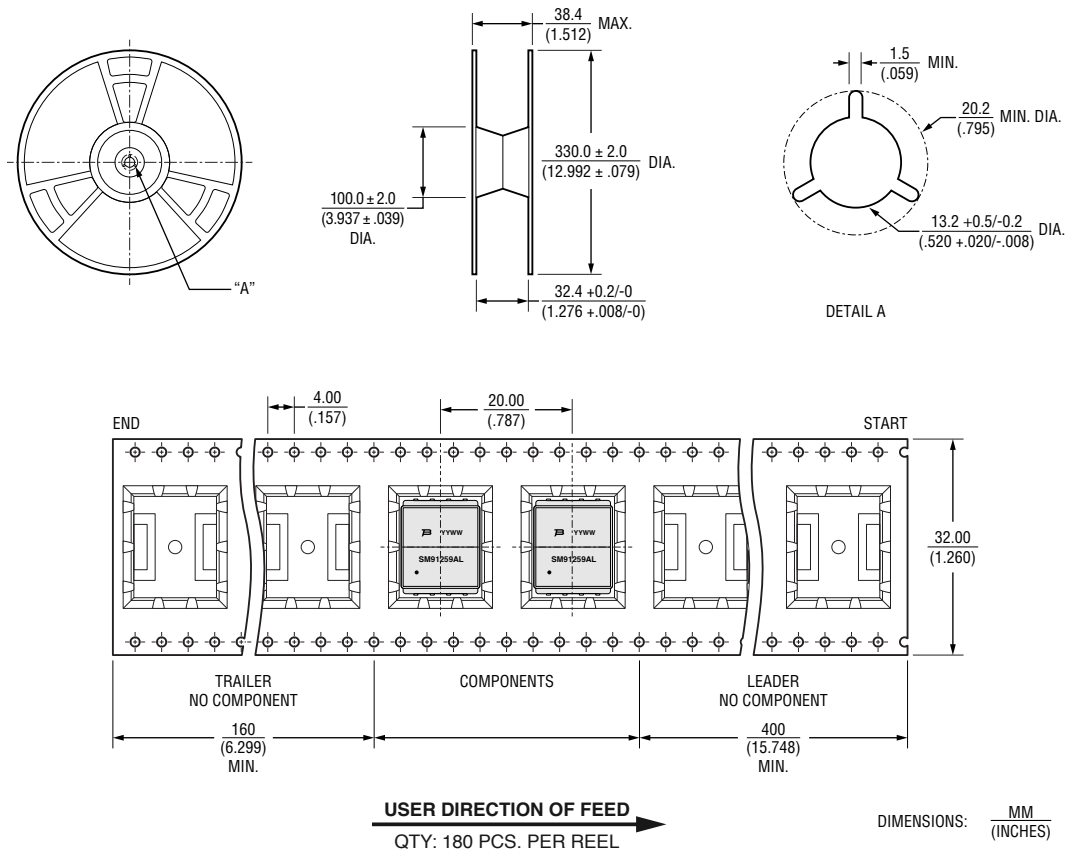
Package Thickness	Volume mm ³ < 350	Volume mm ³ 350 - 2000	Volume mm ³ > 2000
< 1.6 mm	260 °C	260 °C	260 °C
1.6 mm - 2.5 mm	260 °C	250 °C	245 °C
> 2.5 mm	250 °C	245 °C	245 °C

SM91259AL Power Transformer

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Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.



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