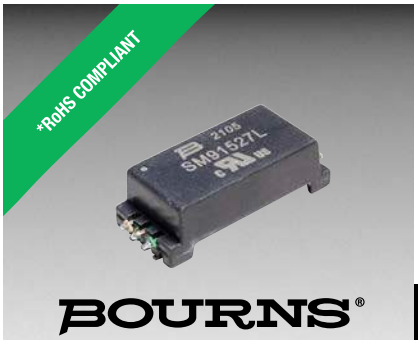

Features

- Working voltage up to 1500 VDC
- Hi-Pot: 7640 VDC
- Developed for use with NXP model MC33771C series and ADI model LTC6804/681x series
- Design construction: Reinforced insulation between primary and secondary per IEC 62477-1, IEC 60664-1 and IEC 62368-1
- c UL us UL recognized per UL 62368-1, File No. E515965
- Creepage distance > 15 mm, pollution degree 2, material group CTI I

SM91527L BMS Transformer

Electrical Specifications @ 25 °C

OCL (-40 ~ +125 °C) .....150 ~ 450 µH @ 100 kHz, 0.1 V
Leakage Inductance ..... 4.5 µH max. @ 100 kHz, 0.1 V
DCR
Transformer Side ..... 0.45 Ω max.
CM Choke Side ..... 0.8 Ω max.
Turns Ratio .....1:1 ± 2 %
Insertion Loss
4 MHz..... -1.2 dB max.
Return Loss (Z out = 100 Ω)
4 MHz..... -6 dB min.
Common Mode Rejection Ratio
1~100 MHz..... -50 dB typ.
Hi-Pot (1 mA, 2 s)..... 7640 VDC
Working Voltage ..... up to 1500 VDC
Operating Temperature
..... -40 °C to +125 °C
Storage Temperature
..... -50 °C to +125 °C
Partial discharge level ..... 2250 V
Impulse Voltage..... 12 KV, 1.2/50 µs
Moisture Sensitivity Level.....1
ESD Classification (HBM)..... N/A

Packaging Specifications

Tape & Reel..... 300 pcs./reel

How To Order

SM91527 L - E

Model
Termination
L = Tin (RoHS Compliant)
Packaging
E = Tape and Reel

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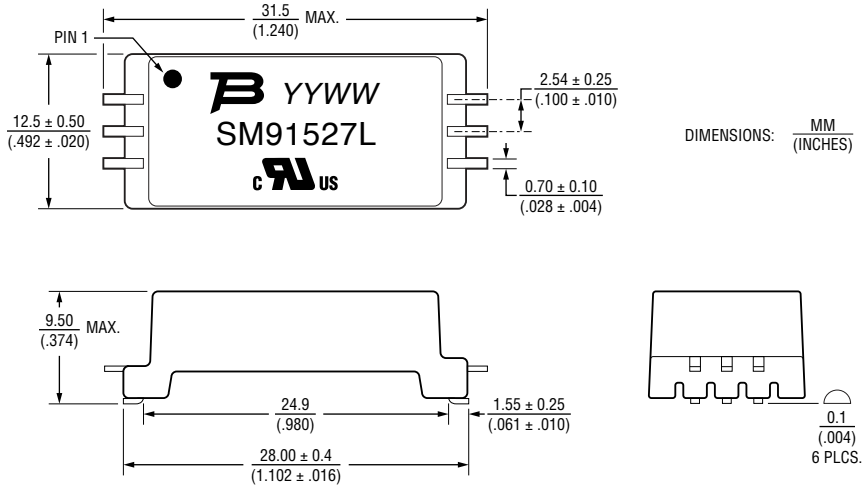
Additional Information

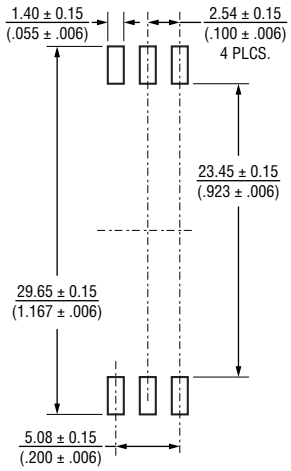
Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

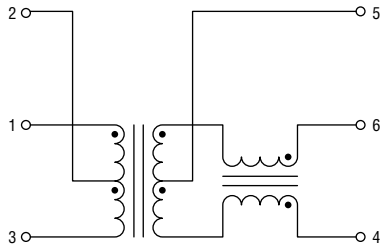
Product Dimensions



Recommended Layout



Electrical Schematic



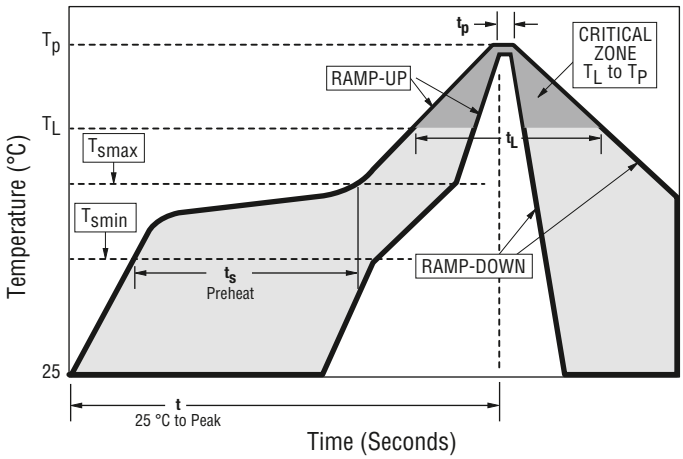
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*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.

Features (Continued)

- Clearance distance > 14 mm, overvoltage category III
- Partial discharge level up to 2250 V
- Withstand impulse voltage up to 12 KV, 1.2/50 µs
- RoHS compliant*

Solder Profile

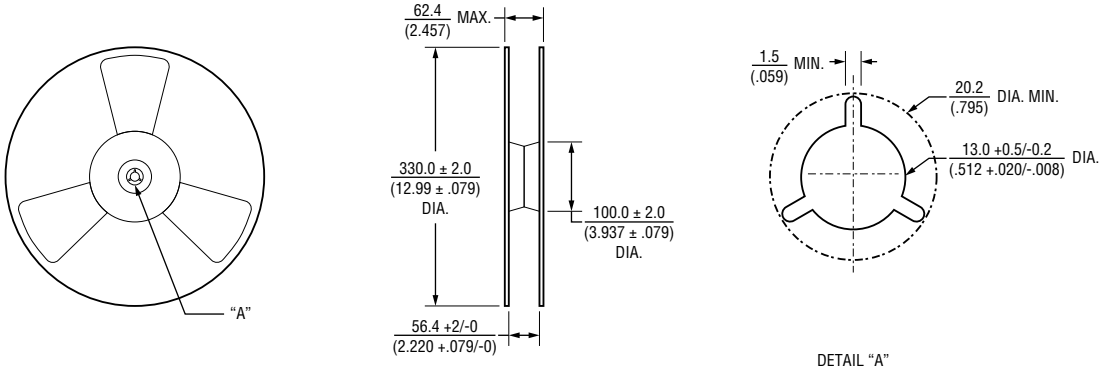


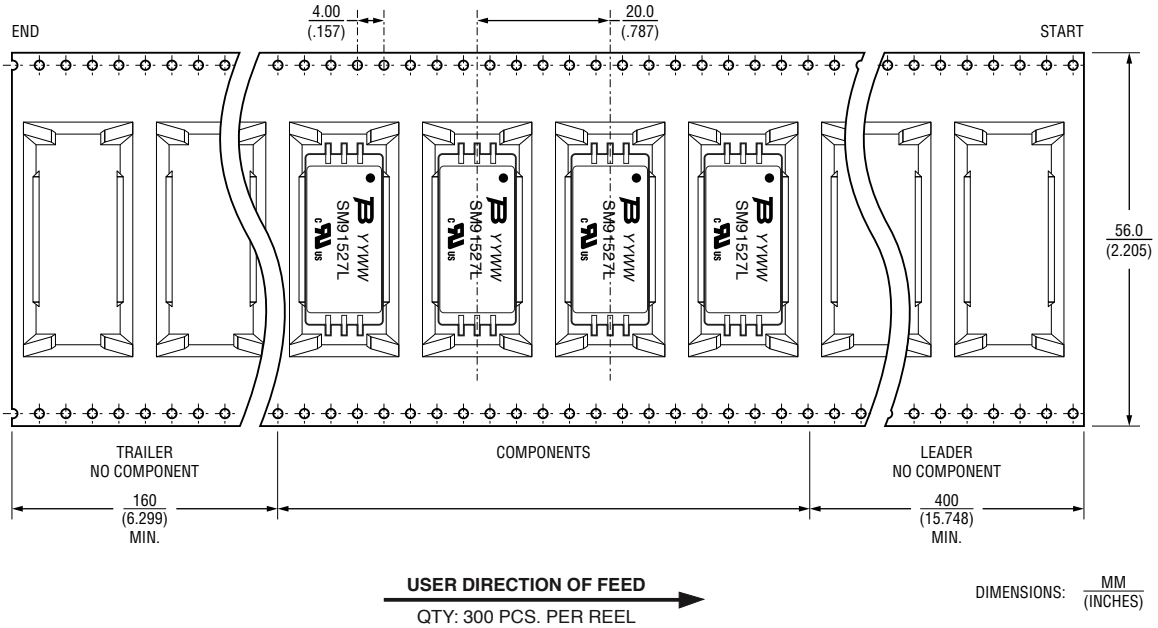
Reflow Condition		Pb-free Assembly
Average Ramp-up Rate		3 °C / second max.
Preheat	Temperature Min. (T_{smin})	150 °C
	Temperature Max. (T_{smax})	200 °C
	Time (T_{smin} to T_{smax})	60 ~ 180 seconds
Liquidus Temperature (T_L)		217 °C
Time above Liquidus Temperature (t_L)		60 ~ 150 seconds
Peak Temperature (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

*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.

Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.





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