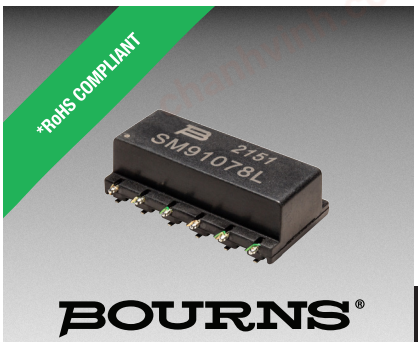
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Features

- 100Base-Tx Ethernet
- Working voltage up to 1500 VDC
- Hi-Pot: 4000 VAC
- Design construction: Basic insulation per IEC 62368-1
- Creepage distance 8 mm minimum, pollution degree 2, material group CTI I
- Clearance distance 8 mm minimum, Overvoltage Category III, up to 4 km sea level
- RoHS compliant*

SM91078L LAN Transformer

Additional Information

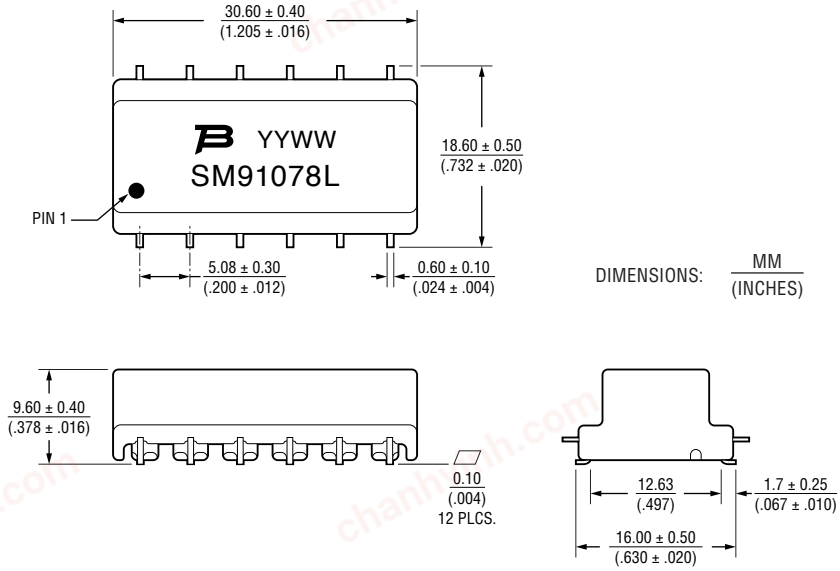
Click these links for more information:

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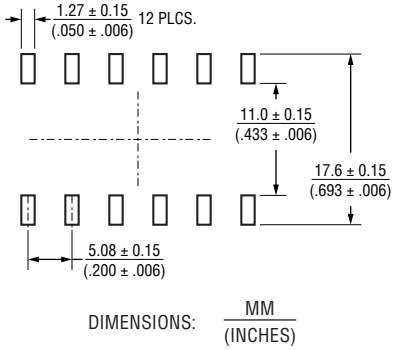
General Specifications

OCL (100 kHz / 0.1 V, 8 mA DC Bias)
(-40 °C ~ +105 °C)..... 350 µH min.
Leakage Inductance (100 kHz/0.1 V)
..... 1.0 µH max.
DCR
Transformer Side ..... 0.6 Ω max.
CM Choke Side..... 1.0 Ω max.
Turns Ratio.....1 : 1 ± 2 %
Insertion Loss:
1-10 MHz..... -0.35 dB max.
10~60 MHz..... -2.5 dB max.
60~100 MHz..... -4.0 dB max.
Return Loss (Z out = 100 Ω)
1~30 MHz:..... -8.5 dB min.
30~45 MHz..... -6.0 dB min.
45~60 MHz..... -4.5 dB min.
Common Mode Rejection Ratio
1~30 MHz..... -45 dB min.
30~100 MHz..... -30 dB min.
Cross Talk (Between each Channel):
1 MHz:..... -62 dB min.
5~100 MHz:.....-40+20*LOG10 (f/30 MHz) dB min.
Hi-pot (1 mA, 60 S).....4000 VAC
Working Voltage ..... up to 1500 VDC
System Voltage.....up to 600 VAC
Impulse Voltage..... 8 kV, 1.2/5.0 µS
Operation temperature
..... - 40 °C to +105 °C
Storage Temperature (Component)
..... -50 °C to +125 °C
Moisture Sensitivity Level.....1
ESD Classification (HBM)..... N/A

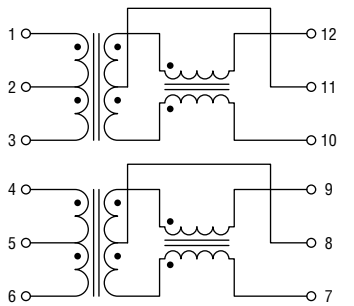
Product Dimensions



Recommended Layout



Electric Schematic



Packaging Specification

Tape & Reel..... 200 pcs. per 13-inch reel

How To Order

SM91078 L - E

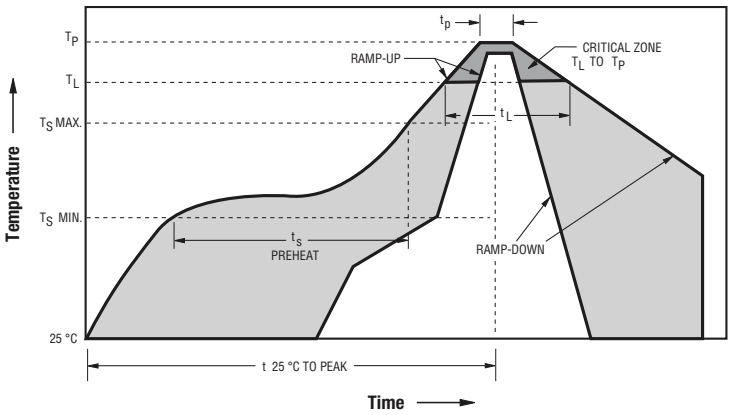
Model
Termination
L = Tin (RoHS Compliant)
Packaging
E = Tape and Reel

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



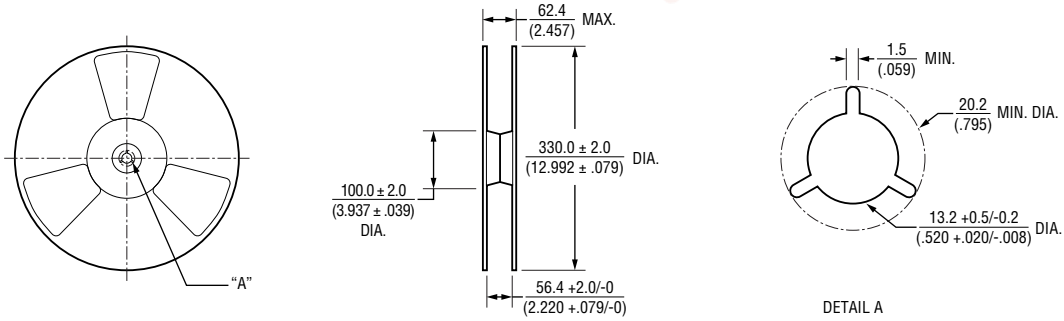
Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate	3 °C / second max.
PREHEAT: Temperature Min. (T_{smin}) Temperature Max. (T_{smax}) Time (T_{smin} to T_{smax})	 150 °C 200 °C 60~180 seconds
Liquidus Temperature (T_L)	217 °C
Time Above Liquidus Temperature (t_L)	60~150 seconds
Peak Temperature (T_p)	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 25 °C to Peak Temperature (T_p)	8 minutes max.
Do Not Exceed	250 °C

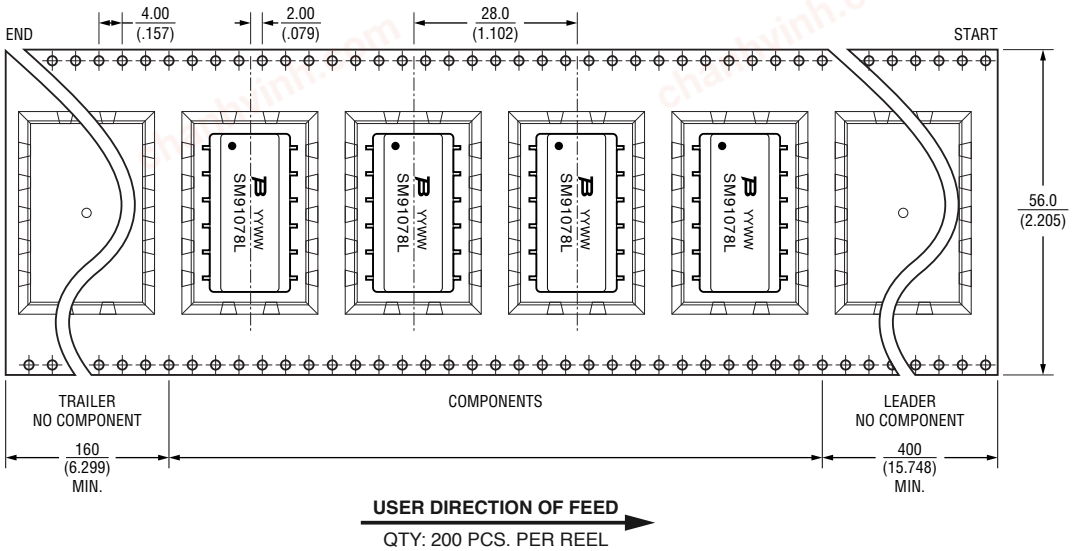
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Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.





DIMENSIONS: MM / (INCHES)

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