

Features

- Single port Gigabit Ethernet
- Working voltage: 500 V
- Hi-Pot: 4680 VDC
- Design construction: Reinforced insulation per IEC 60664-1 and IEC 62368-1 requirements
- RoHS compliant*

This model is currently available but not recommended for new designs. Please contact the product line for a possible replacement.

- Creepage distance 5 mm min., Clearance distance 5 mm min., pollution degree 2, material group CTI I

SM91602L LAN Transformer

Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

General Specifications

OCL (100 kHz / 0.1 V, 8 mA DC Bias) ..... 350 µH min.
Leakage Inductance (100 kHz/0.1 V) ..... 1.0 µH max.
DCR
Transformer Side ..... 0.90 Ω max.
CM Choke Side ..... 1.30 Ω max.
Turns Ratio ..... 1 : 1 ± 2 %
Insertion Loss:
1 MHz ..... -1.0 dB max.
5~80 MHz ..... -3.0 dB max.
125 MHz ..... -5.0 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.
Cross Talk (Between each Channel):
1 MHz: ..... -58 dB min.
5~100 MHz: ..... -30+20*LOG10 (f/20 MHz) dB min.
Hi-pot (1 mA, 60 S) ..... 4680 VDC
Working Voltage ..... up to 500 V
Operation Temperature ..... 0 °C to +85 °C
Storage Temperature (Component) ..... -25 °C to +85 °C
Moisture Sensitivity Level 1
ESD Classification (HBM) ..... N/A

Packaging Specification

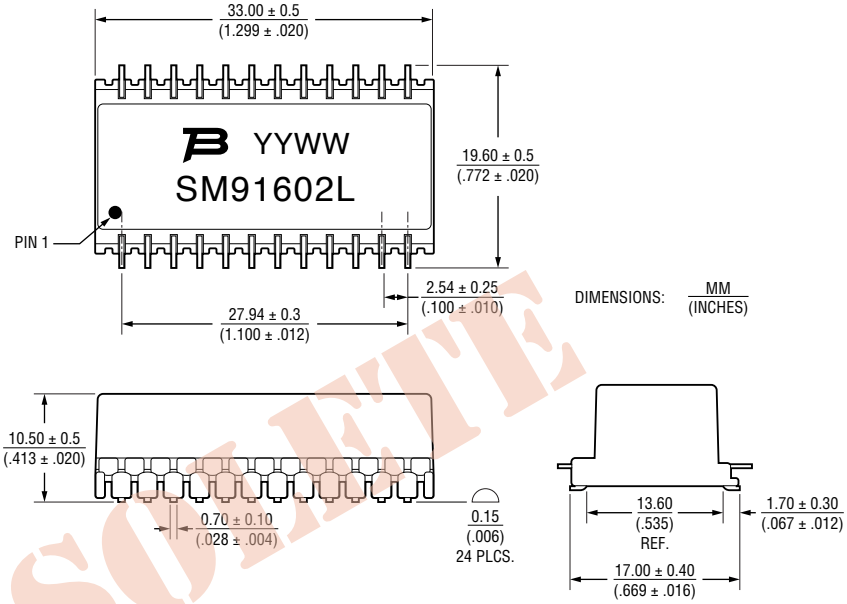
Tape & Reel ..... 200 pcs. per 13-inch reel

How To Order

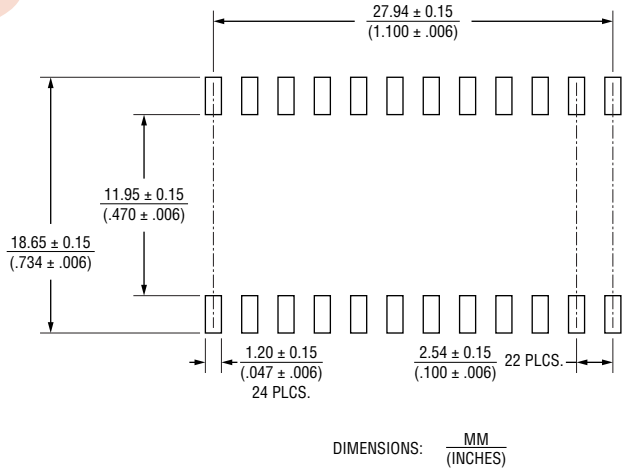
SM91602 L - E

Model
RoHS Compliancy Designator
Packaging
E = 200 pcs. per 13-inch Reel, 2 Reels per Box

Product Dimensions



Recommended Layout



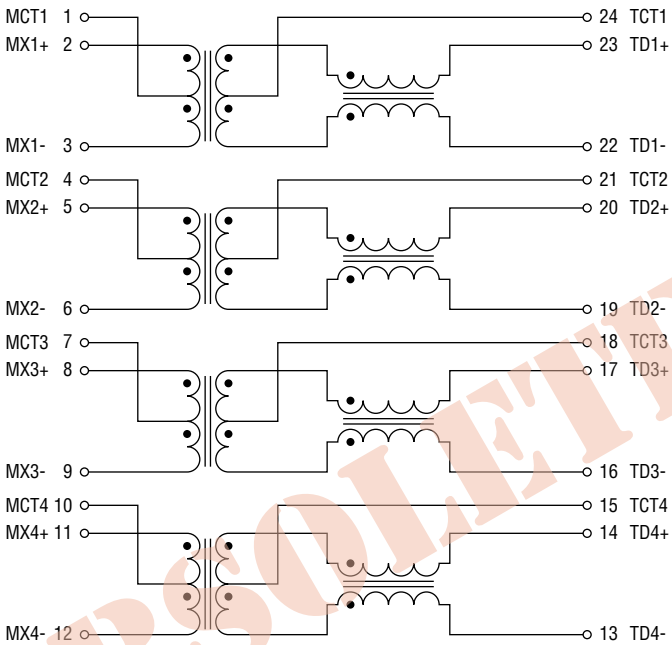
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WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*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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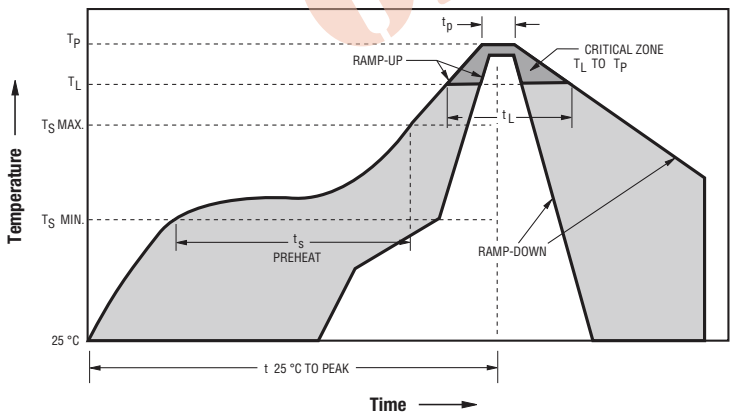
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Electrical Schematic



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Reflow Solder Profile



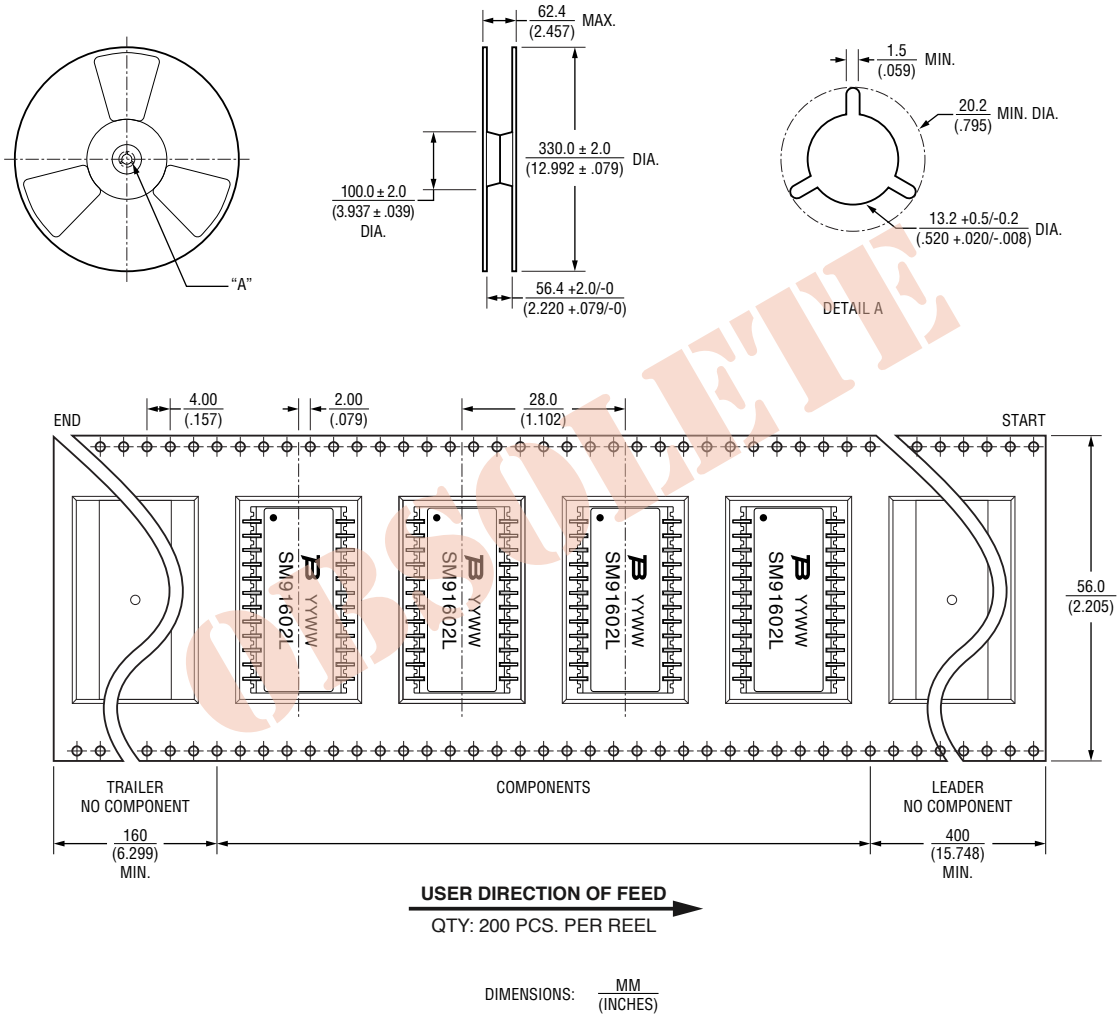
Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate	3 °C / second max.
PREHEAT: Temperature Min. (T_{smin}) Temperature Max. (T_{smax}) Time (T_{smin} to T_{smax})	 150 °C 200 °C 60~180 seconds
Liquidus Temperature (T_L)	217 °C
Time Above Liquidus Temperature (t_L)	60~150 seconds
Peak Temperature (T_p)	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.



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