

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 μ H min.
Leakage Inductance (100 kHz/0.1 V)
..... 1.0 μ H max.

DCR

Transformer Side 0.90 Ω max.
CM Choke Side 1.30 Ω max.

Turns Ratio 1 : 1 \pm 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

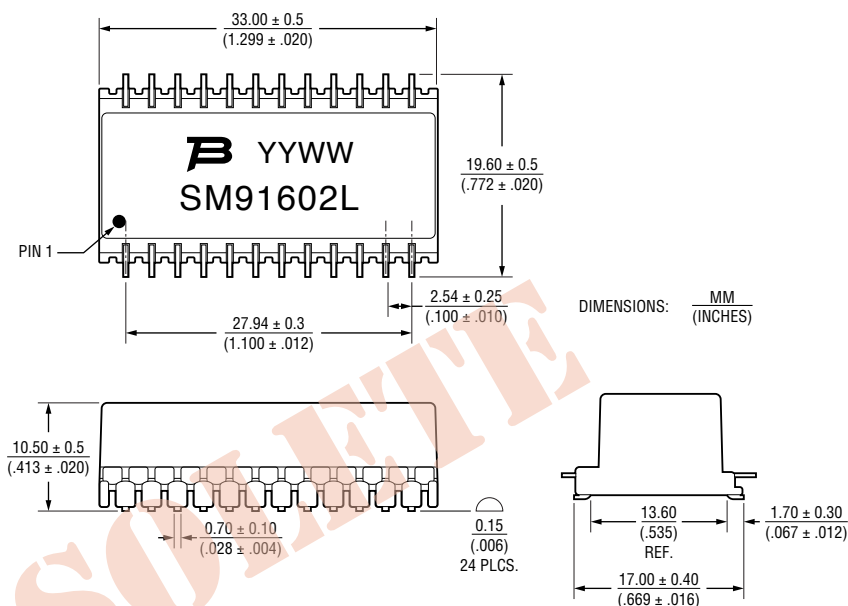
Model _____

RoHS Compliancy Designator _____

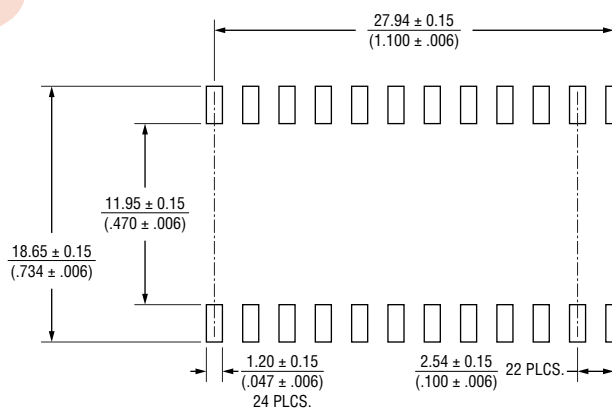
Packaging _____

E = 200 pcs. per 13-inch Reel,
2 Reels per Box

Product Dimensions



Recommended Layout



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$



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.

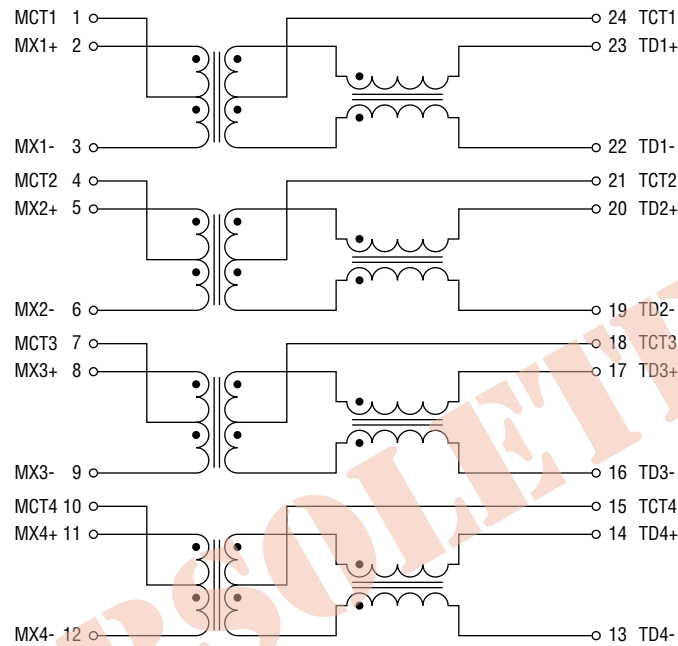
Users should verify actual device performance in their specific applications.

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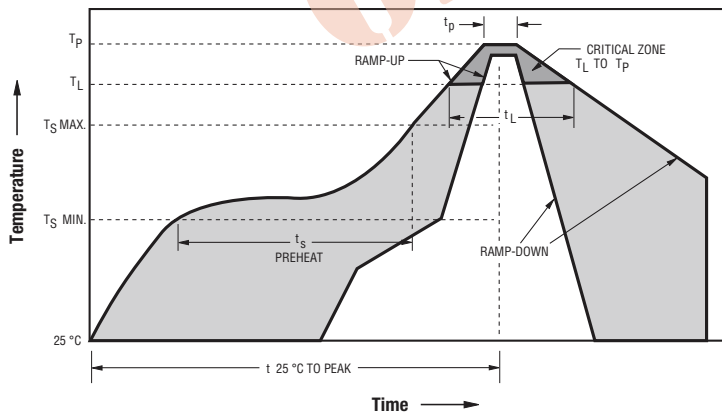
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Electrical Schematic



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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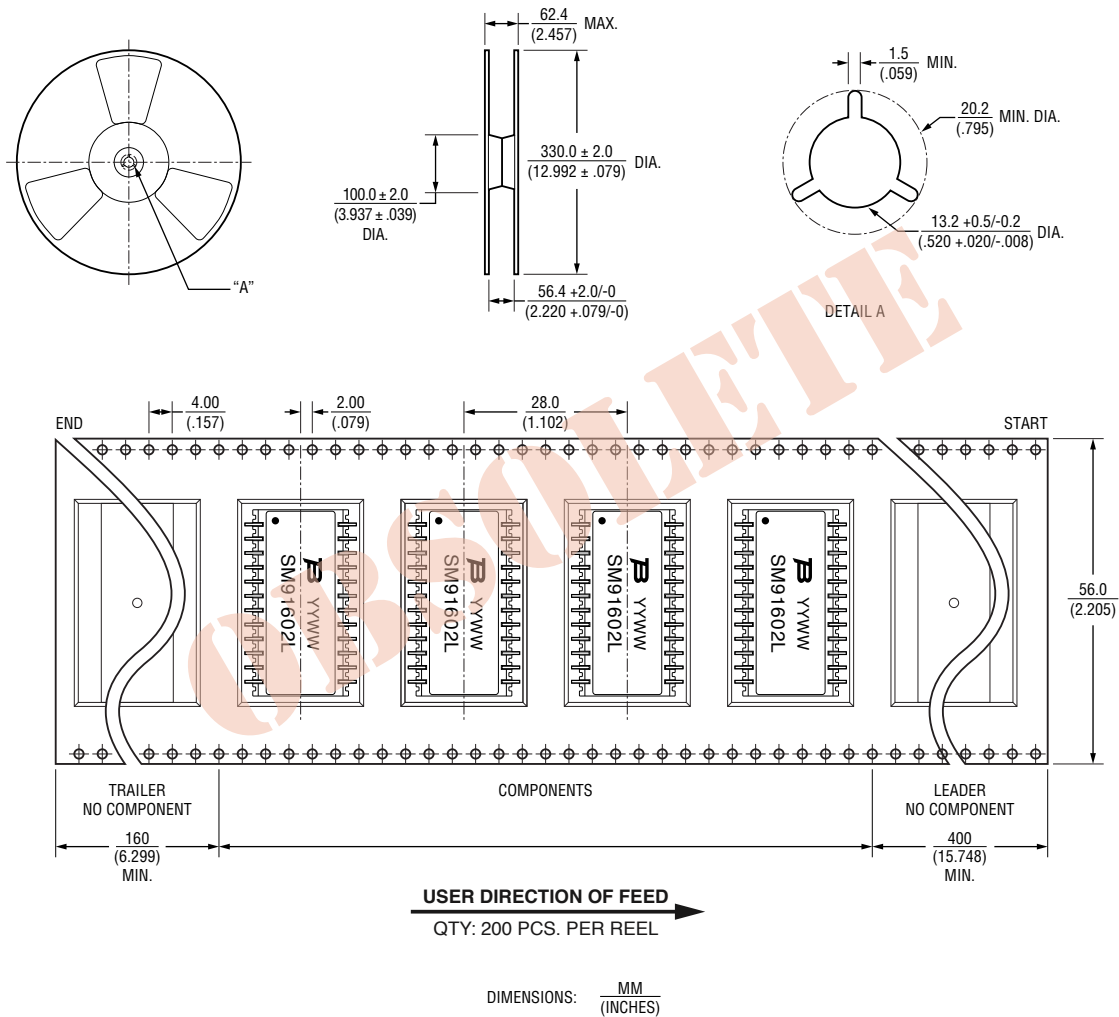
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SM91602L LAN Transformer

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Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.



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