

## Features

- IEEE 802.3bt Type 3 4PPoE Ethernet compatible
- Dual-port
- PoE++ capable
- RoHS compliant\*

## SM13143EL - 10/100/1000 Base-T Transformer

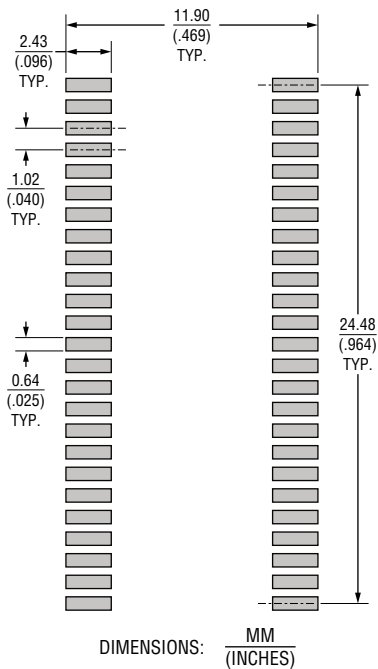
### Electrical Specifications @ 25 °C

Inductance (@ 100 kHz, 0.1 V, 8 mA)	350 $\mu$ H min.
Leakage Inductance (100 kHz, 0.1 V)	0.5 $\mu$ H max.
DCR	1400 m $\Omega$ max.
Turns Ratio (1CT:1CT) $\pm$ 5 %	
Insertion Loss	
1-100 MHz	-1.1 dB max.
Return Loss	
1-30 MHz	-18 dB min.
40 MHz	-14.4 dB min.
50 MHz	-13.1 dB min.
60-80 MHz	-12 dB min.
100 MHz	-10 dB min.
Cross Talk	
1-100 MHz	-30 dB min.
Common Mode Rejection	
1-100 MHz	-30 dB min.
PoE++	60W
Each channel supports	
700 mA DC balance current	
Full channels support	
1400 mA DC balance current	
Hi-Pot	1500 Vac, 1 mA, 60 s
Operating Temperature	0 °C to +70 °C
Storage Temperature	-40 °C to +85 °C

### Packaging Specifications

Tape & Reel ..... 350 pcs./reel

### Recommended Layout



### How To Order

Model **SM13143 E L**

Packaging \_\_\_\_\_  
E = Tape and Reel

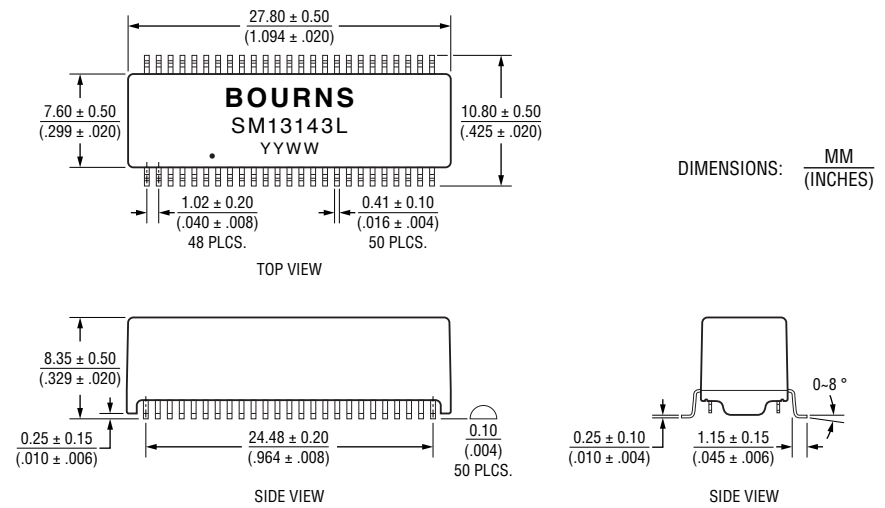
Termination \_\_\_\_\_  
L = Tin finish (RoHS Compliant)

### Additional Information

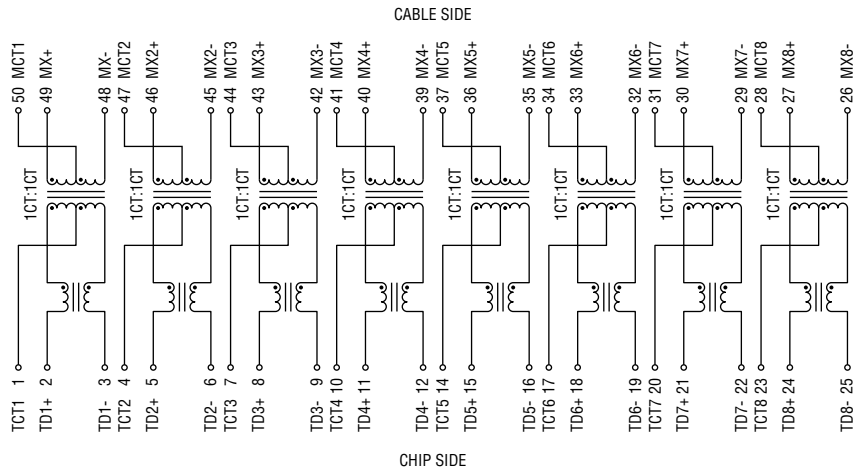
Click these links for more information:



### Product Dimensions



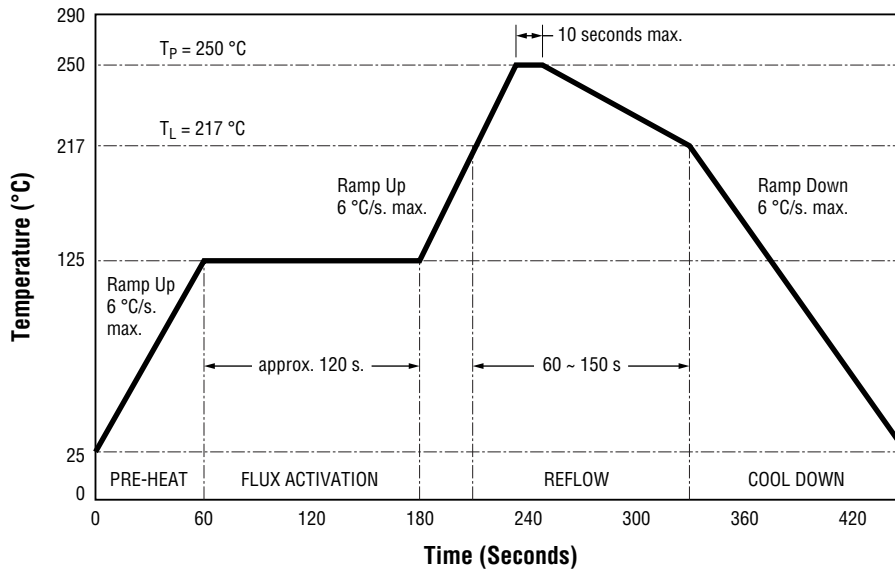
### Electrical Schematic



**WARNING**  
Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://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. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf).

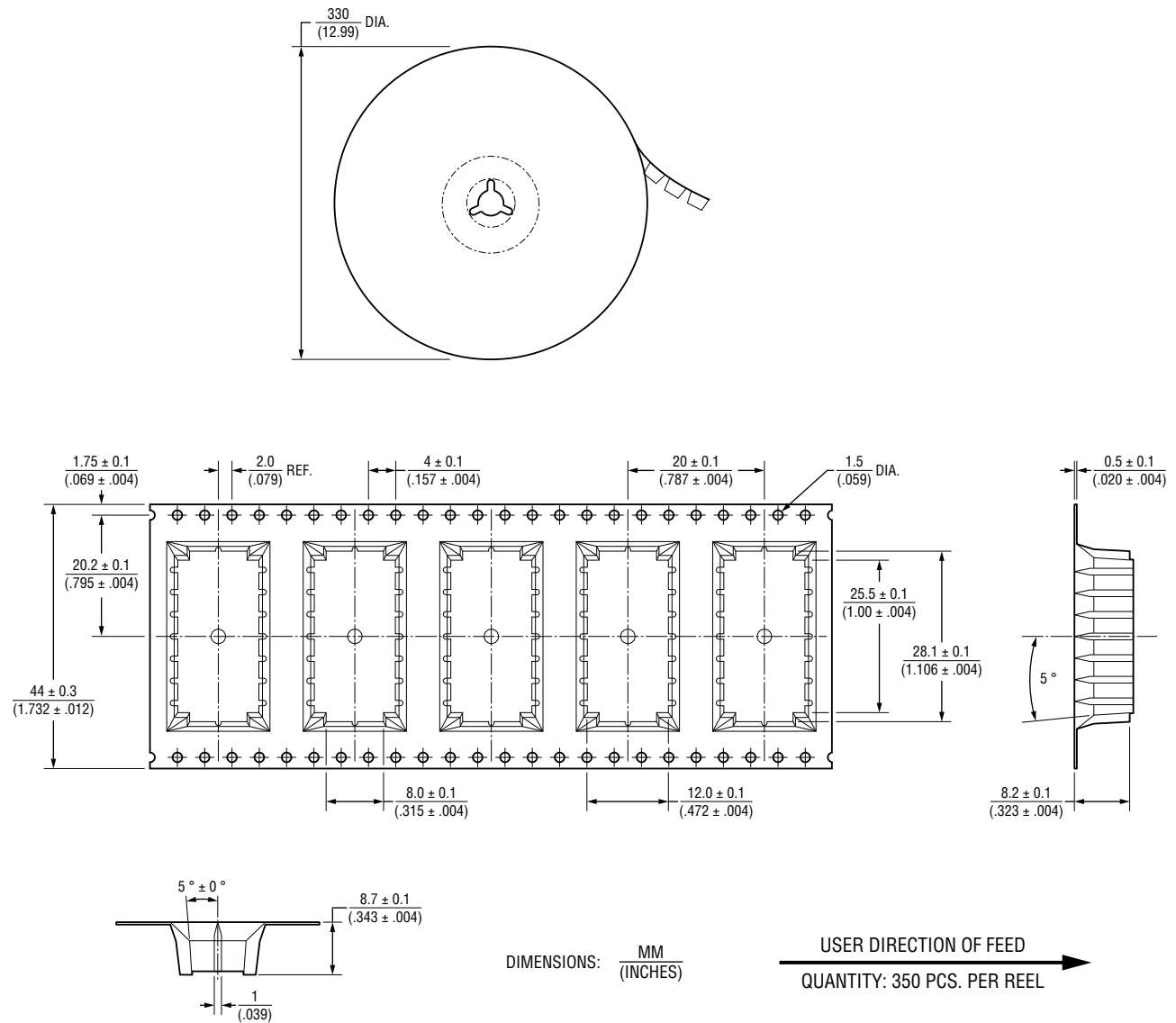
Soldering Profile



# SM13143EL - 10/100/1000 Base-T Transformer

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## Packaging Specifications



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Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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