



## Features

- IEEE 802.3 Ethernet compatible
- Compatible with 1G/2.5G/5G BASE-T
- PoE+
- Expanded temperature range: -40 to +85 °C
- RoHS compliant\* and halogen free\*\*

## SM42P01EL - 1 / 2.5 / 5 GbE Chip LAN Transformer Module

### Electrical Specifications @ 25 °C

#### Inductance

..... 230  $\mu$ H min. @ 100 kHz, 0.1 V

#### Insertion Loss (TD-MX)

1-100 MHz..... -1.0 dB max.

100-250 MHz..... -2.0 dB max.

#### Return Loss (TD-MX)

1-40 MHz..... -16 dB min.

40  $\leq$  f  $\leq$  250 MHz

..... -(16-10 log (f/40)) min.

#### Cross Talk

1  $\leq$  f  $\leq$  250 MHz..... -35 dB min.

#### DCMR (TD-MX)

1-50 MHz..... -30 dB min.

50-150 MHz..... -20 dB min.

150-250 MHz..... -15 dB min.

Hi-Pot..... 1500 Vac, 60 s

PoE+ Current..... 600 mA

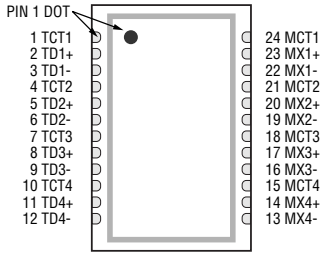
Operating Temperature..... -40 °C to +85 °C

Storage Temperature..... -40 °C to +85 °C

### Packaging Specifications

Tape & Reel..... 800 pcs./reel

### Pin Layout



### How To Order

**SM42P01 E L**

Model \_\_\_\_\_

Packaging \_\_\_\_\_

E = Tape and Reel (800 pcs. per reel)

Termination \_\_\_\_\_

L = Tin (RoHS Compliant)



**WARNING Cancer and Reproductive Harm**

[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

\*\* Bourns considers a product to be "halogen free" if

(a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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).

### Additional Information

Click these links for more information:



[PRODUCT](#)



[TECHNICAL LIBRARY](#)

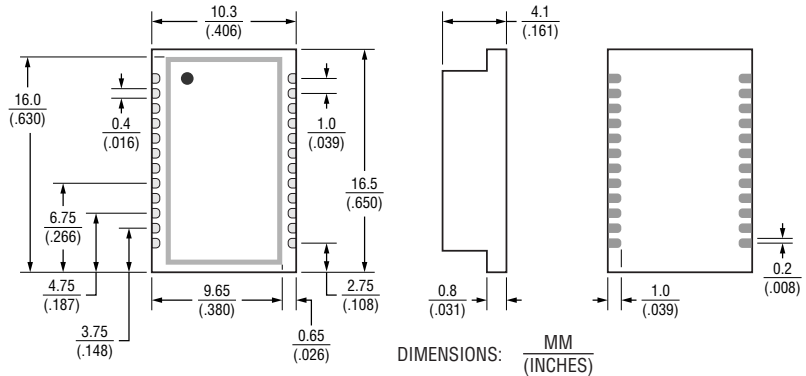


[INVENTORY](#)

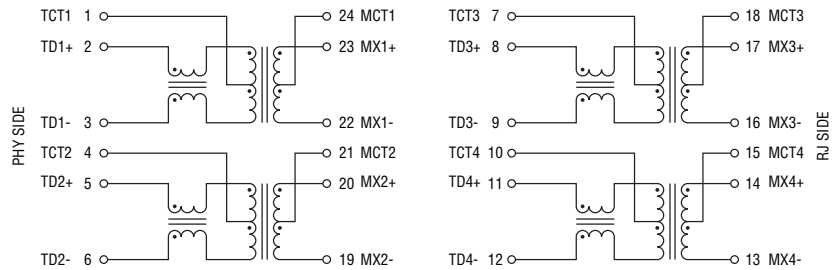


[SAMPLES](#)

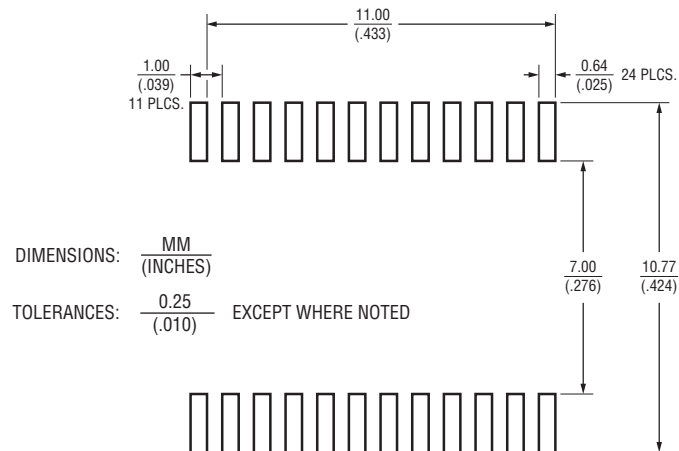
### Product Dimensions



### Electrical Schematic



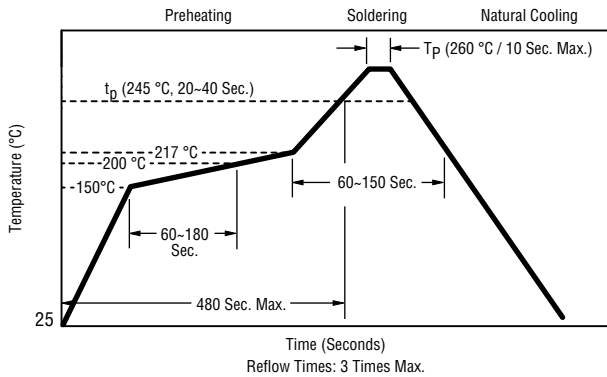
### Recommended Layout



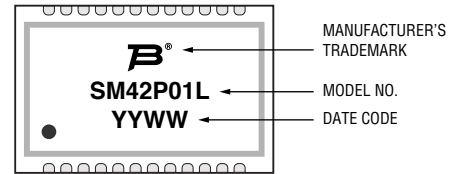
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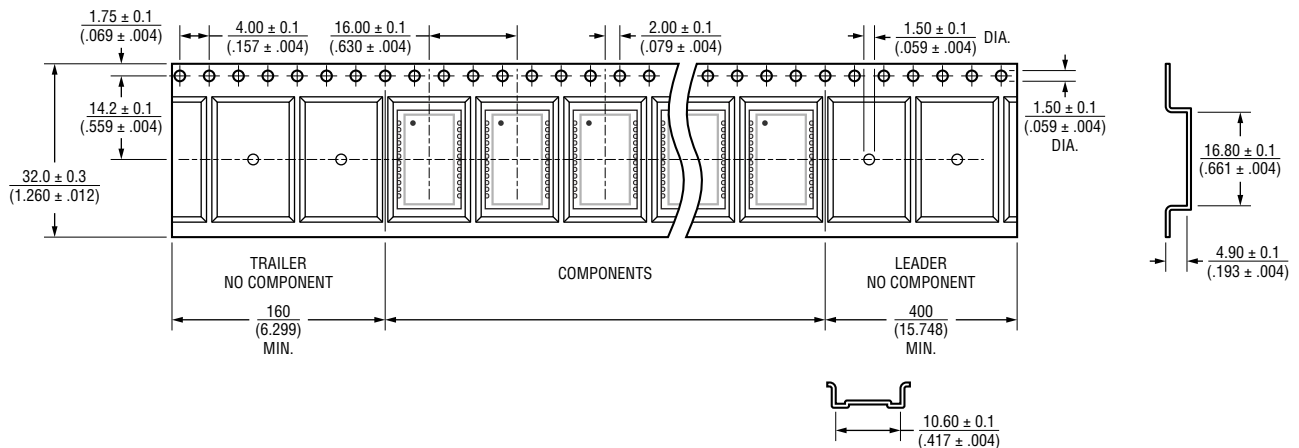
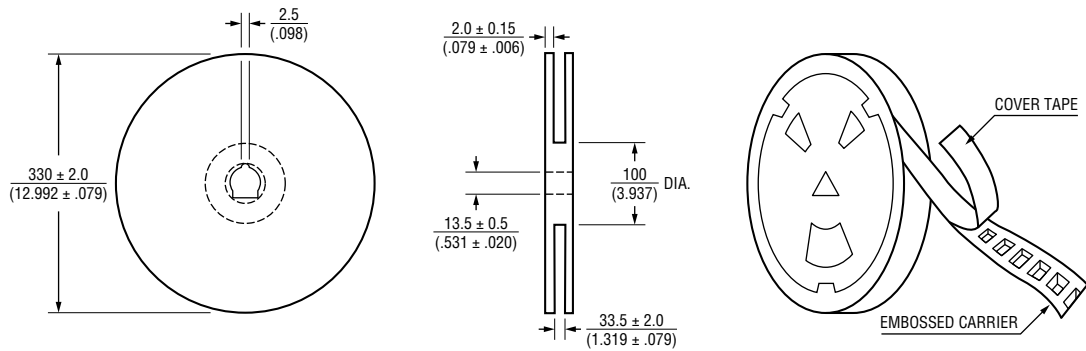
## Solder Profile



## Typical Part Marking



## Packaging Specifications



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

USER DIRECTION OF FEED

QTY: 800 PCS. PER REEL

01/21

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