



## 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

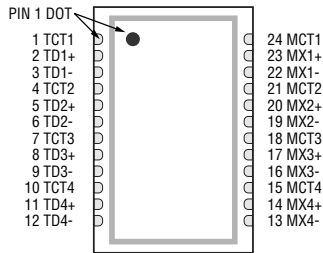
Operating Temperature..... -40 °C to +85 °C

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.  
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### Additional Information

Click these links for more information:



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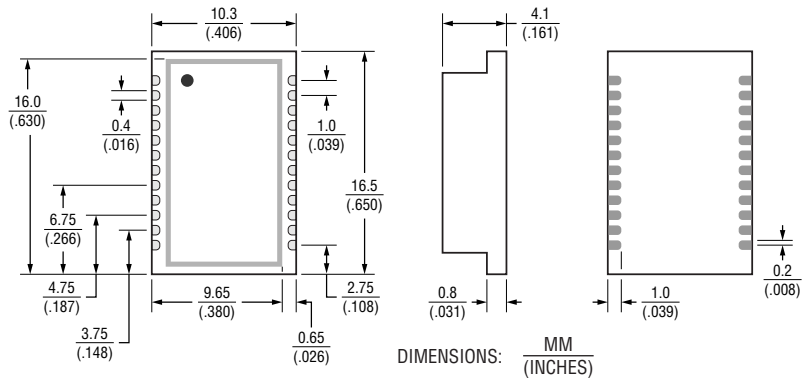


[INVENTORY](#)

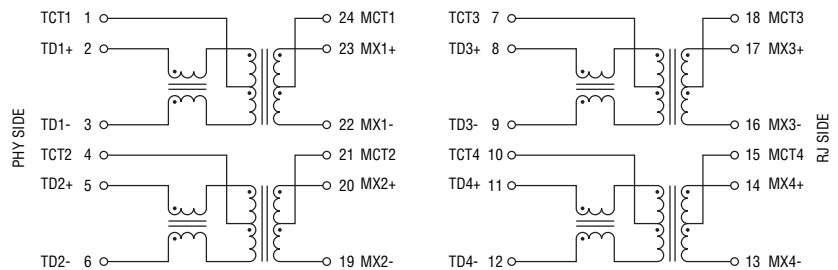


[SAMPLES](#)

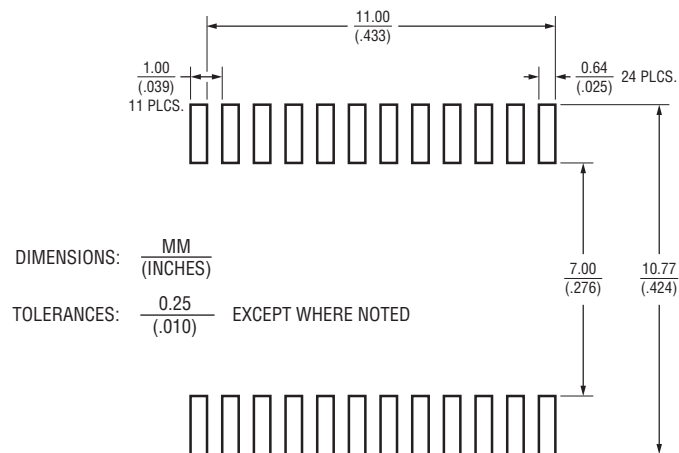
### Product Dimensions



### Electrical Schematic



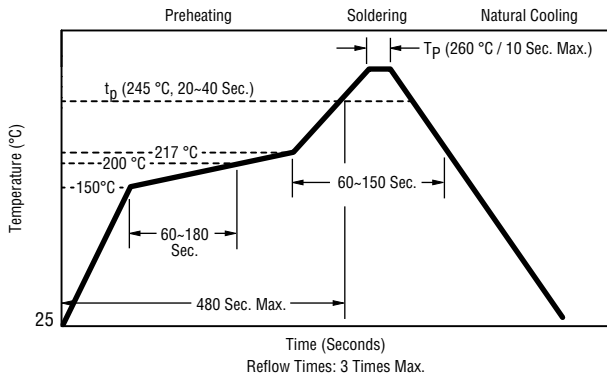
### Recommended Layout



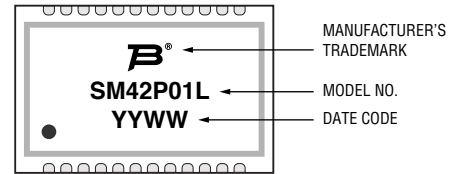
# SM42P01EL - 1 / 2.5 / 5 GbE Chip LAN Transformer Module



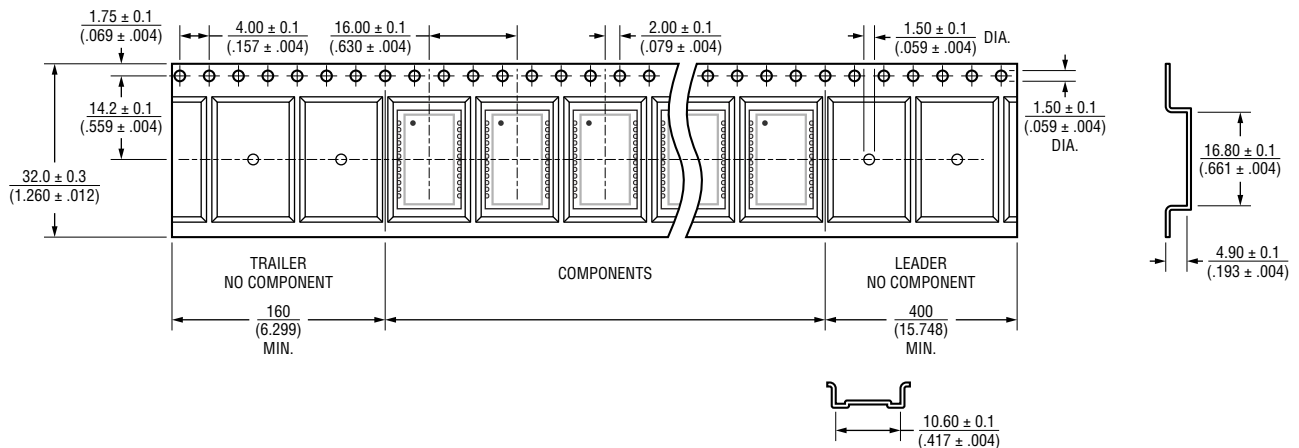
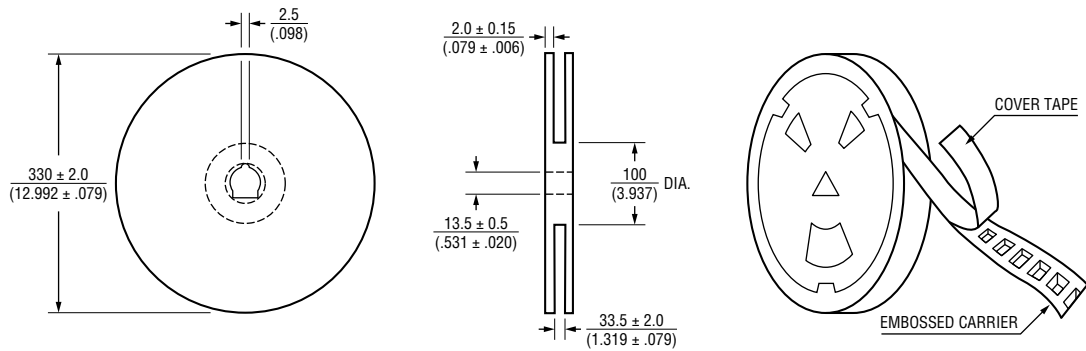
## Solder Profile



## 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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