



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 μ 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

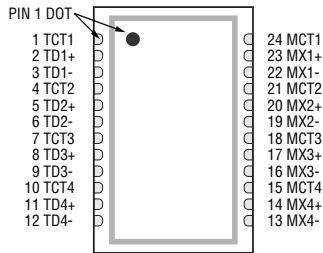
Operating Temperature..... -40 °C to +85 °C

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

* 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

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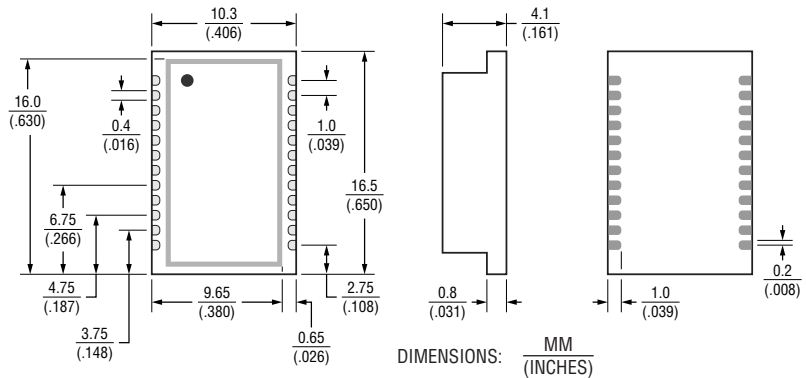


[INVENTORY](#)

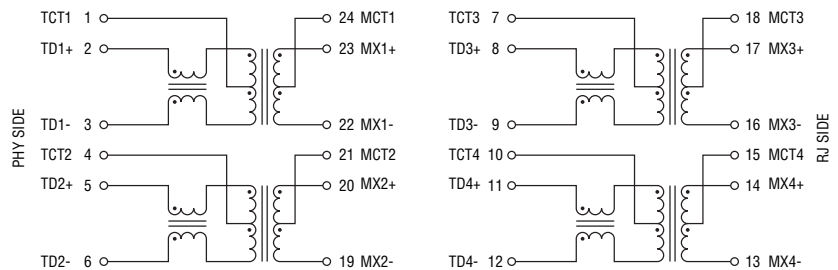


[SAMPLES](#)

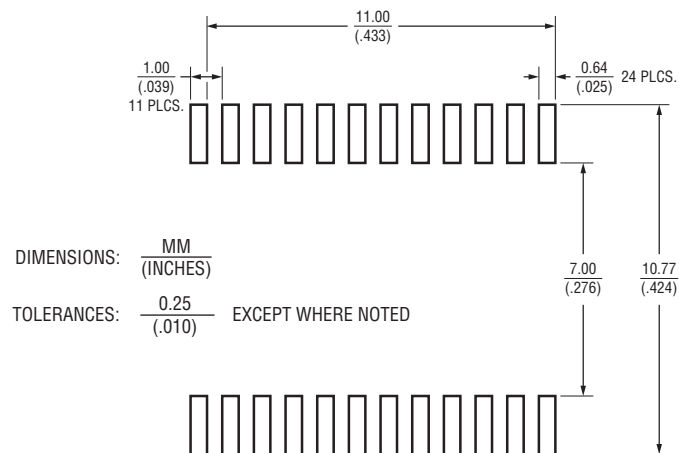
Product Dimensions



Electrical Schematic



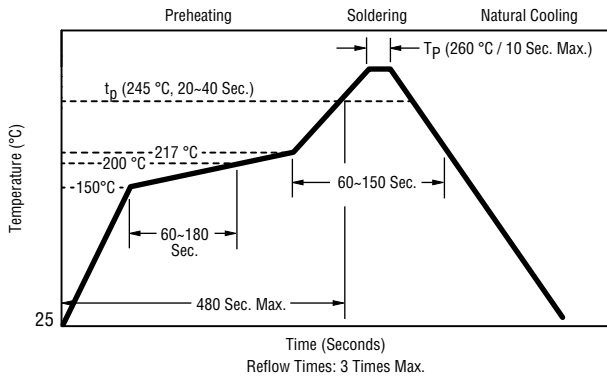
Recommended Layout



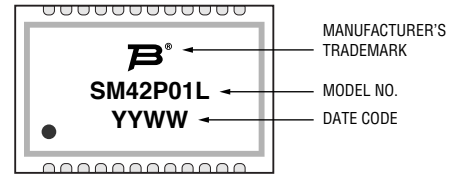
SM42P01EL - 1 / 2.5 / 5 GbE Chip LAN Transformer Module



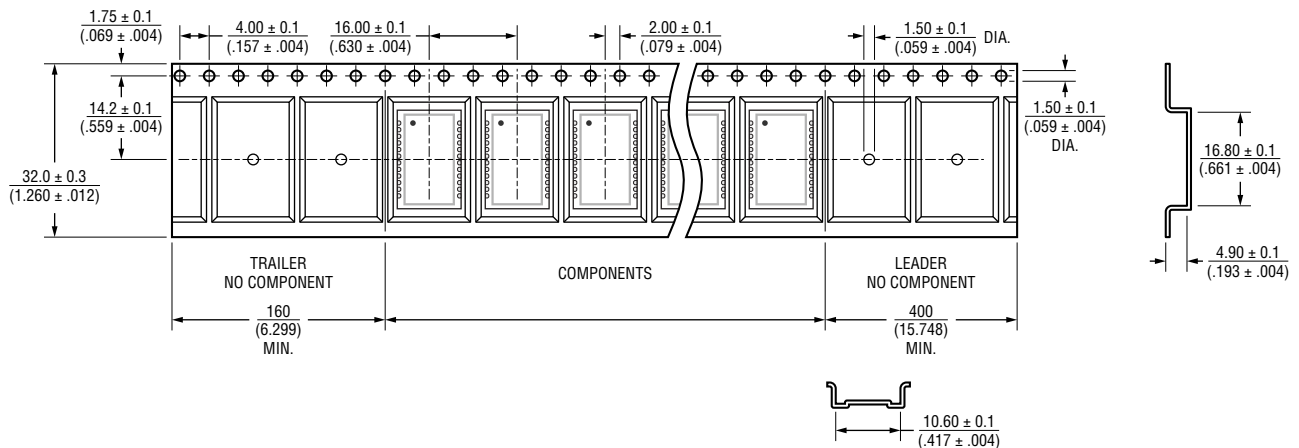
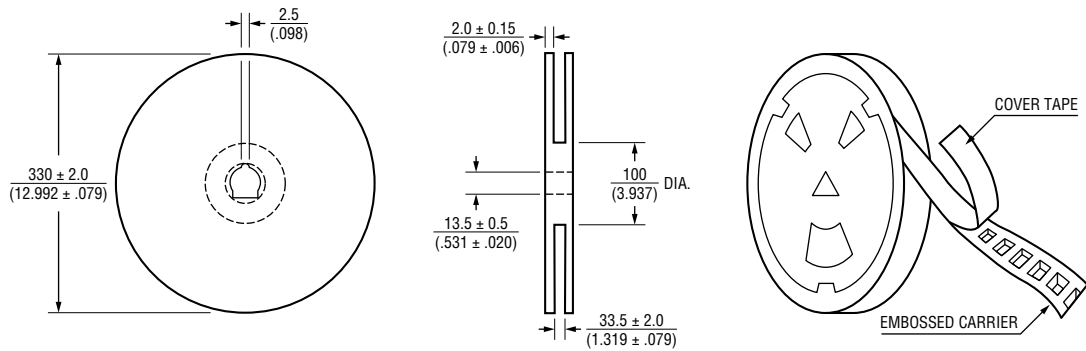
Solder Profile



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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Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

www.bourns.com

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