



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

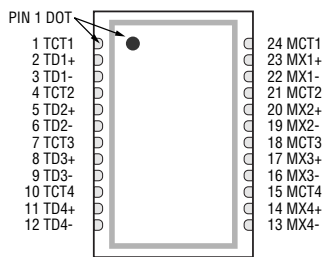
Operating Temperature..... -40 °C to +85 °C

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

Packaging Specifications

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

Pin Layout



How To Order

SM42P01 E L

Model _____

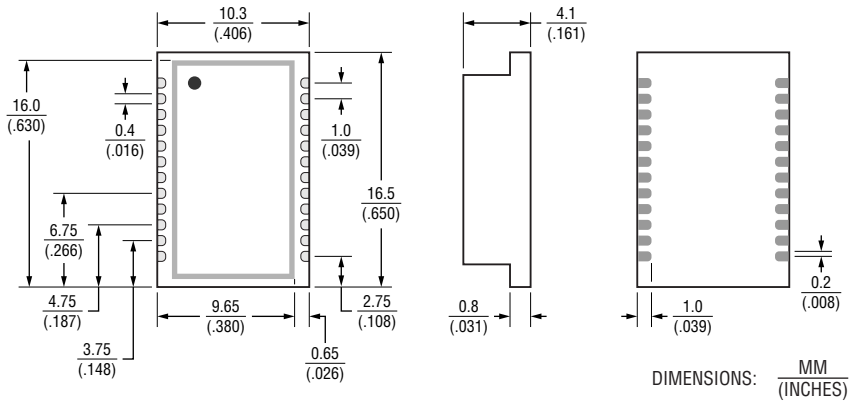
Packaging _____

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

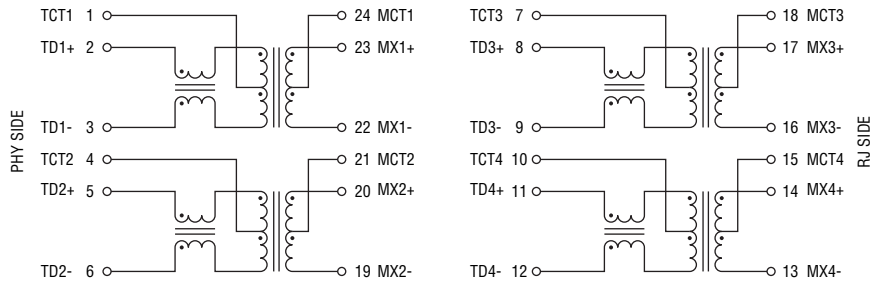
Termination _____

L = Tin (RoHS Compliant)

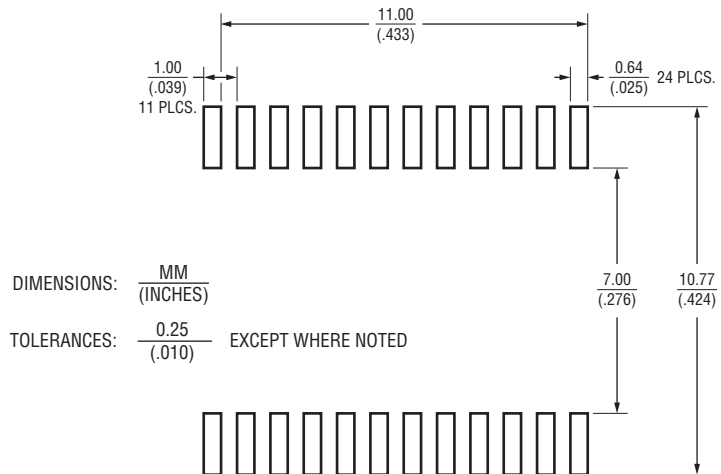
Product Dimensions



Electrical Schematic



Recommended Layout



WARNING Cancer and Reproductive Harm www.P65Warnings.ca.gov

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

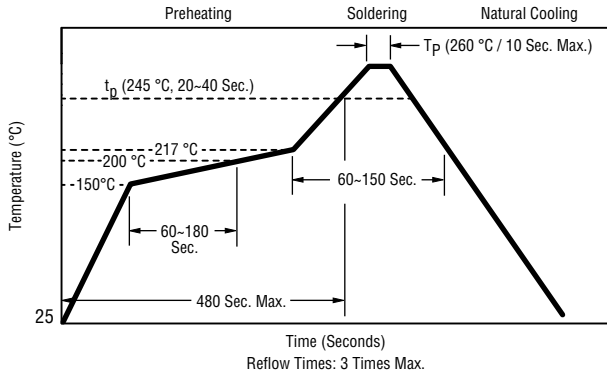
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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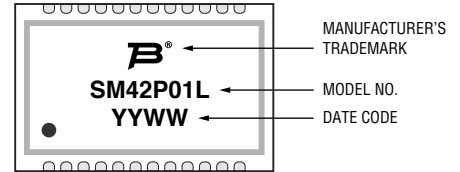
SM42P01EL - 1 / 2.5 / 5 GbE Chip LAN Transformer Module



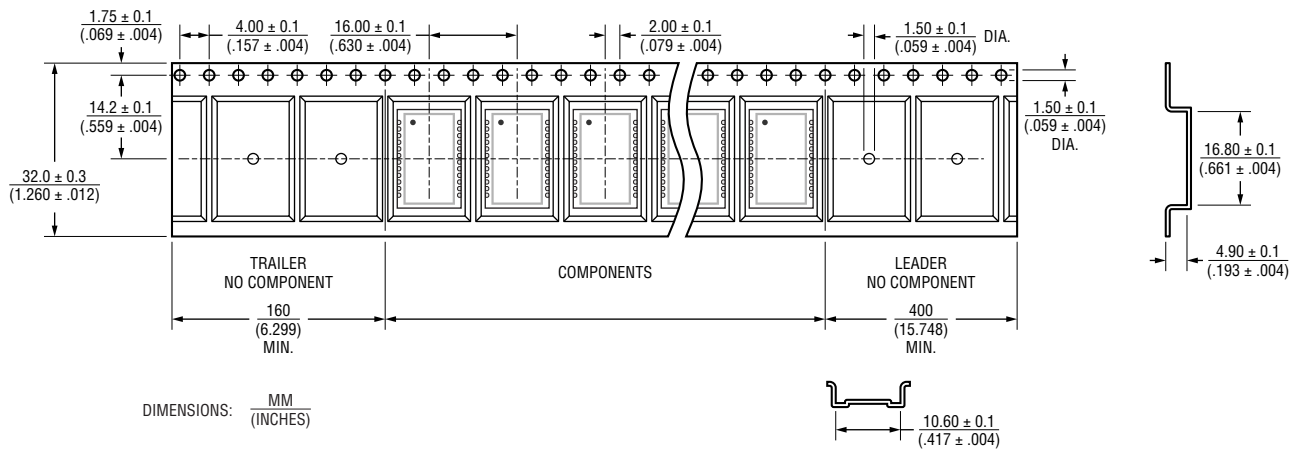
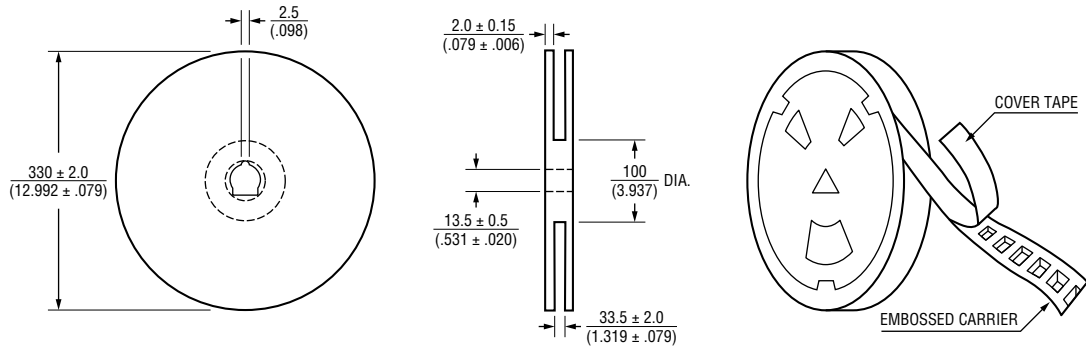
Solder Profile



Typical Part Marking



Packaging Specifications



USER DIRECTION OF FEED →
 QTY: 800 PCS. PER REEL

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