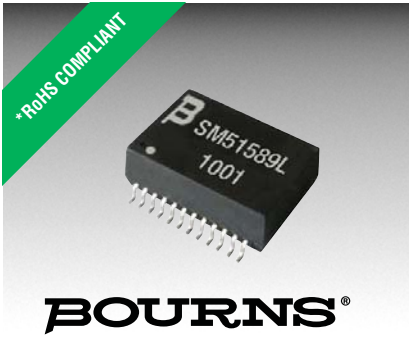




**THE DATASHEET OF
SM51589EL**





Features

- Compliant with IEEE802.3 standards
- Designed for 10/100/1000 Base-T and PoE
- 5K VAC dielectric withstanding voltage
- RoHS compliant*

Applications

- LAN
- Ethernet
- Power over Ethernet - PoE

SM51589L LAN 10/100/1000 Base-T Transformer (PoE) Modules

Electrical Specifications @ 25 °C

Turns Ratio TX/RX.....	1CT:1CT
Cross Talk	
30 MHz.....	45 dB min.
60 MHz.....	40 dB min.
80 MHz.....	35 dB min.
Insertion Loss	
1-100 MHz.....	-1.0 dB max.
Return Loss (@ 100 Ohms)	
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.
PRI OCL (@100 KHz, 0.1 V, 8 mA, DC Bias)	350 µH min.
DCMR	
30 MHz.....	43 dB min.
60 MHz.....	37 dB min.
80 MHz.....	33 dB min.
PoE Current.....	Up to 600 mADC for 1000 Base-T
Isolation Hi-Pot	5000 VAC, 1 mA, 2 seconds
Operating Temperature	
.....	-40 °C to +85 °C

Packaging Specifications

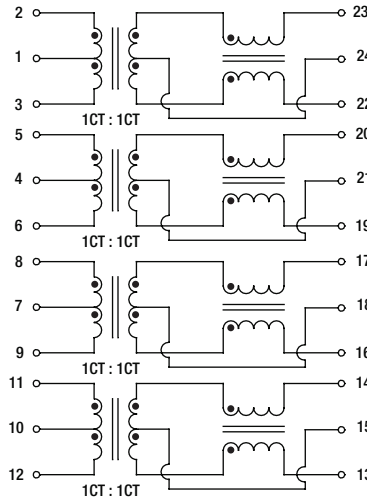
Tape & Reel..... 400 pcs./reel

How To Order

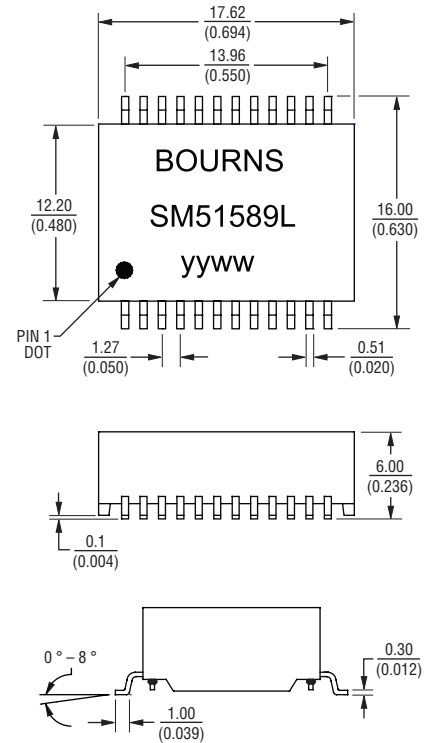
SM51589E L

Model _____
Termination _____
L = Tin only (RoHS compliant)

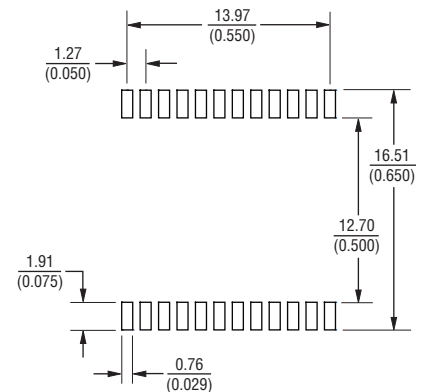
Electrical Schematic



Product Dimensions



Recommended Layout



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

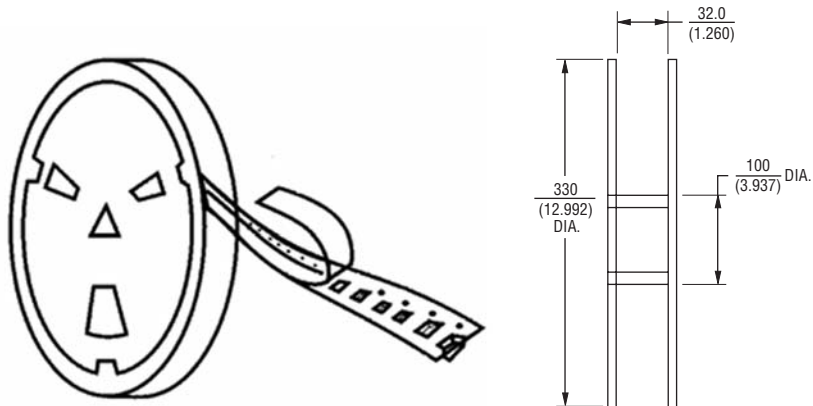
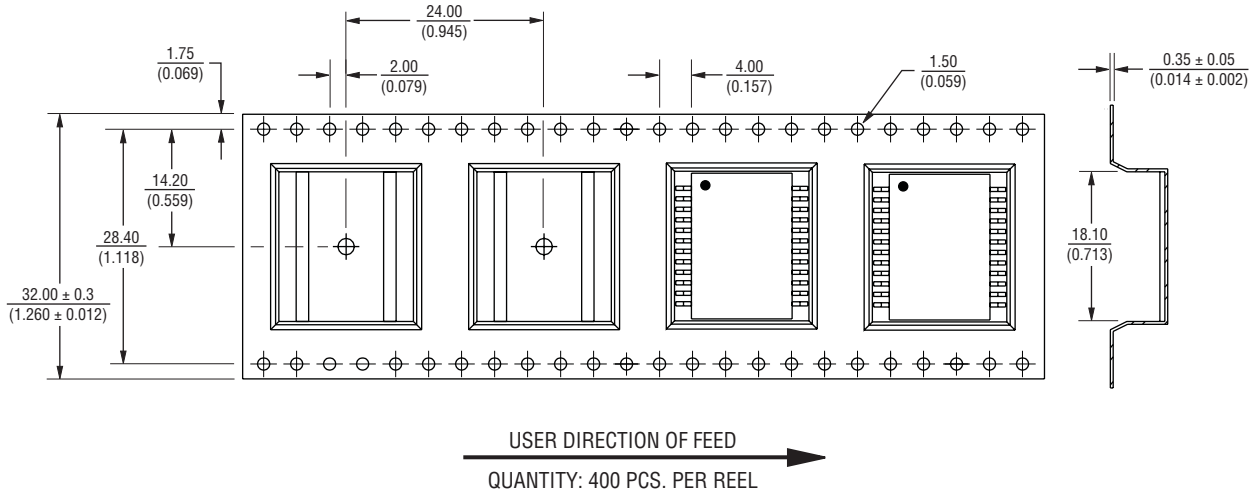
TOLERANCES: $\pm \frac{0.25}{(.010)}$

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

SM51589L LAN 10/100/1000 Base-T Transformer (PoE) Modules



Packaging Specifications



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



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Europe: Tel: +41-41 768 5555 • Fax: +41-41 768 5510

The Americas: Tel: +1-951 781-5500 • Fax: +1-951 781-5700

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Specifications are subject to change without notice.
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