

Features

- Compact size
- Targeted speed up to 1 Gbps
- Meets EN60950-1 Functional Insulation
- RoHS compliant*

Applications

- Broadcom G.Fast chipset BCM6594x and BCM6524x
- Microsemi line driver Le87282

SM51430EL G.Fast Transformer

Electrical Specifications @ 25 °C

DCR

Pin 1-4..... 1 Ω max.
Pin 5-8..... 1 Ω max.

Inductance @10 kHz, 0.1 Vrms

Pin 1-4..... 10 μH ±10 %
(Pin 2,3 Short)

Leakage Inductance @100 kHz, 0.1 Vrms

Pin 1-4..... 1 μH max.
(Pin 2-3, 5-6-7-8 Short)

Interwinding Capacitance

@100 kHz, 0.1 Vrms

Pin 1-8..... 50 pF max.
(Pin 2-3, 6-7 Short)

THD @200 kHz, 1 Vrms

Pin 1-4..... -68 dB min.
(Pin 1-4, Pin 5-8: 100 Ω termination;
Pin 2-3, 6-7 Short)

Longitudinal Balance

Pin 1-4..... 44 dB min. @<12 MHz
(Pin 2-3 Short)

Pin 1-4..... 41 dB min. @17 MHz
(Pin 2-3 Short)

Pin 1-4..... 36 dB min. @30 MHz
(Pin 2-3 Short)

Turns Ratio @10 kHz, 0.1 Vrms

Pin 1-4 : Pin 5-8 1:1 ±2 %
(Pin 2-3, 6-7 Short)

Hi-Pot @1500 VAC, 1 sec., 0.5 mA

Pin 1-8..... (Pin 2-3, 6-7 Short)

Operating Temperature Range

..... -40 °C to +85 °C

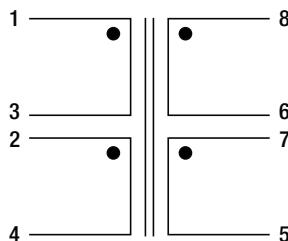
Storage Temperature Range

..... -40 °C to +85 °C

Packaging Specifications

Tape & Reel..... 900 pcs./reel

Electrical Schematic



How To Order

SM51430 E L

Model _____

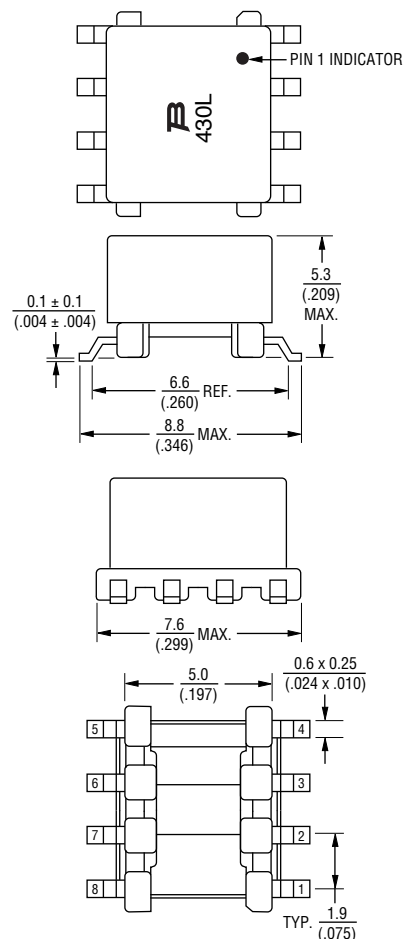
Packaging _____

E = Tape and Reel (900 pcs./reel)

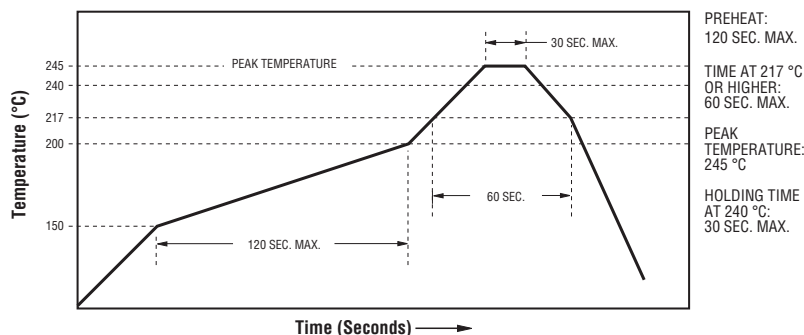
Termination _____

L = Tin (RoHS Compliant)

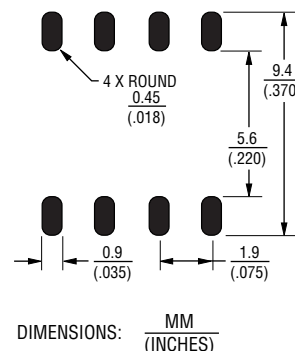
Product Dimensions



Reflow Solder Profile



Recommended Layout



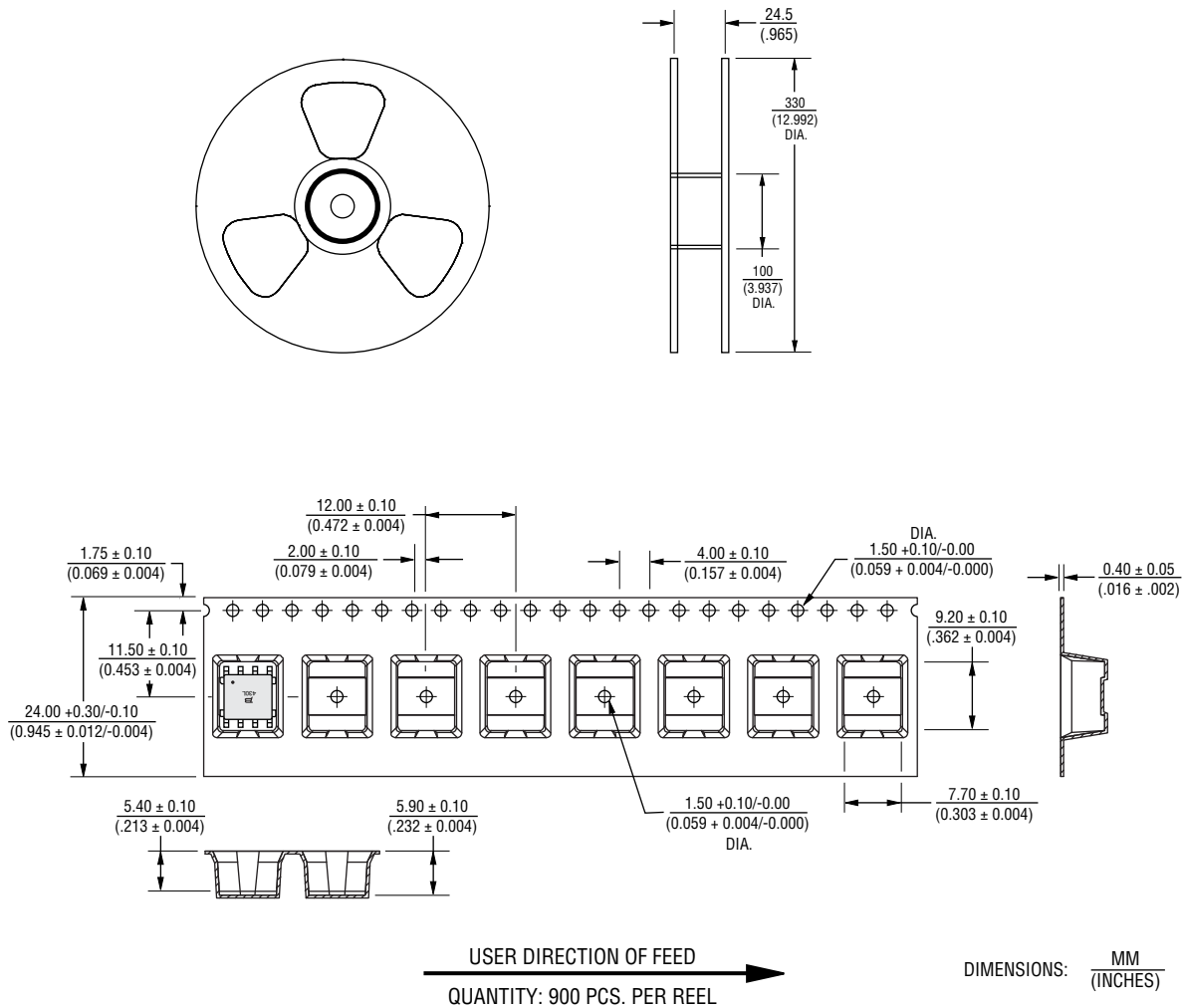
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*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. 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.

SM51430EL G.Fast Transformer

BOURNS®

Packaging Specifications



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REV. 08/16

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