

*RoHS COMPLIANT



BOURNS®

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)

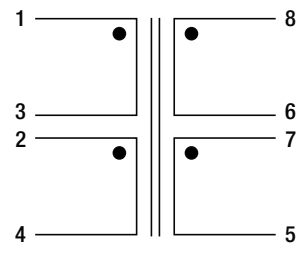
Operating Temperature Range
 0 °C to +85 °C

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

Packaging Specifications

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

Electrical Schematic



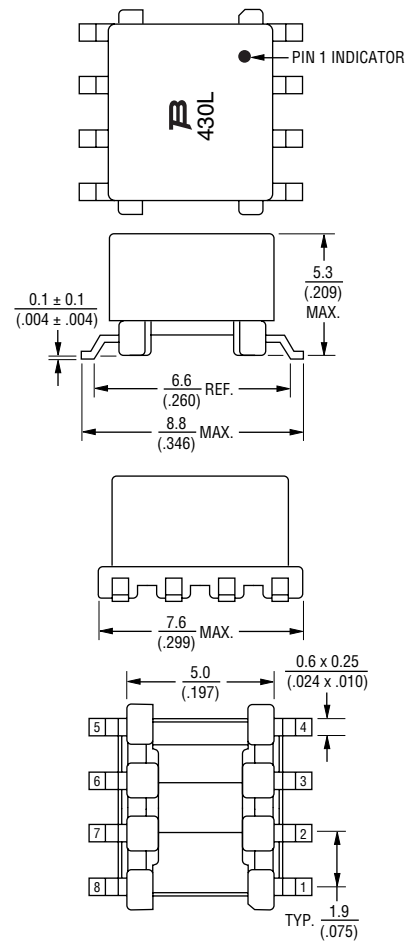
How To Order

Model **SM51430 E L**

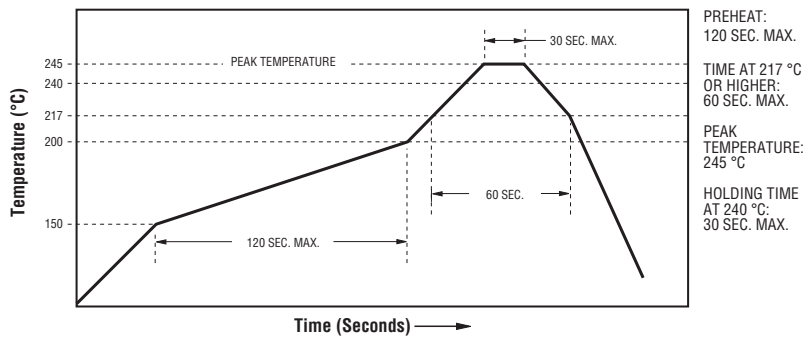
Packaging _____
 E = Tape and Reel (900 pcs./reel)

Termination _____
 L = Tin (RoHS Compliant)

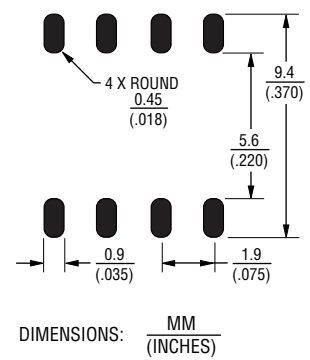
Product Dimensions



Reflow Solder Profile



Recommended Layout

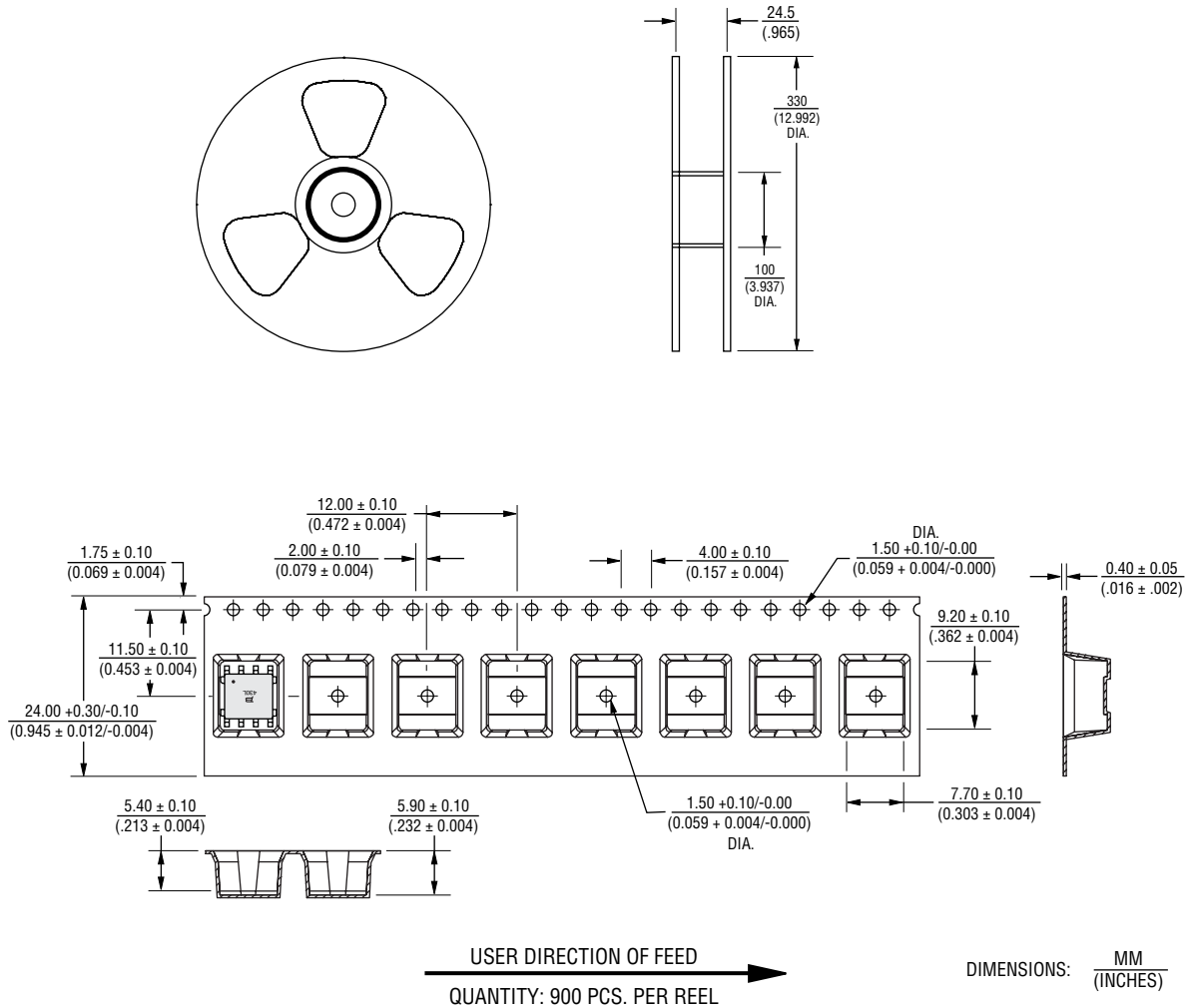


*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications. BROADCOM and MICROSEMI are trademarks or registered trademarks of their respective owners.

SM51430EL G.Fast Transformer

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Packaging Specifications



BOURNS®

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

EMEA: Tel: +36 88 520 390 • Email: eurocus@bourns.com

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

www.bourns.com

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