

## 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)

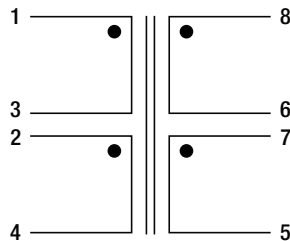
Operating Temperature Range  
 ..... -40 °C to +85 °C

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

### Packaging Specifications

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

### Electrical Schematic



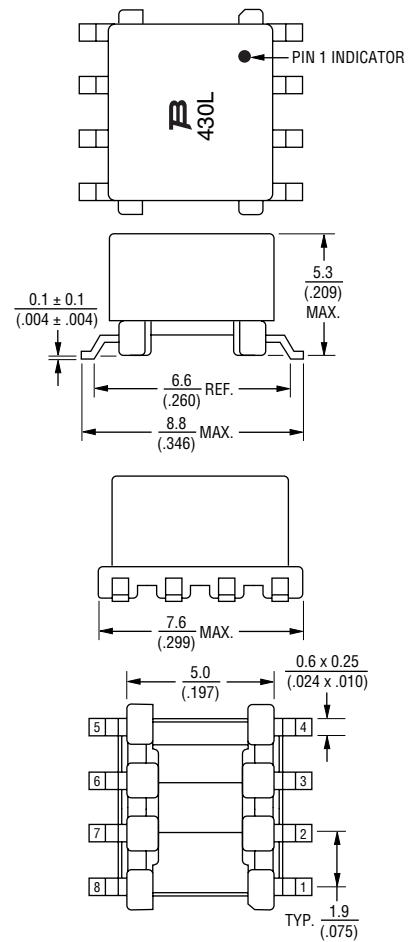
### How To Order

Model SM51430 E L

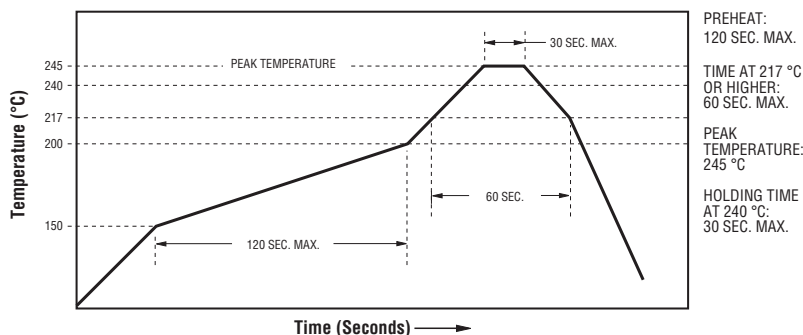
Packaging \_\_\_\_\_  
 E = Tape and Reel (900 pcs./reel)

Termination \_\_\_\_\_  
 L = Tin (RoHS Compliant)

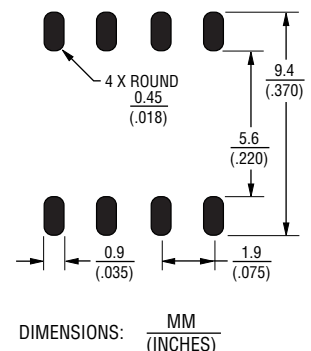
### Product Dimensions



### 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.

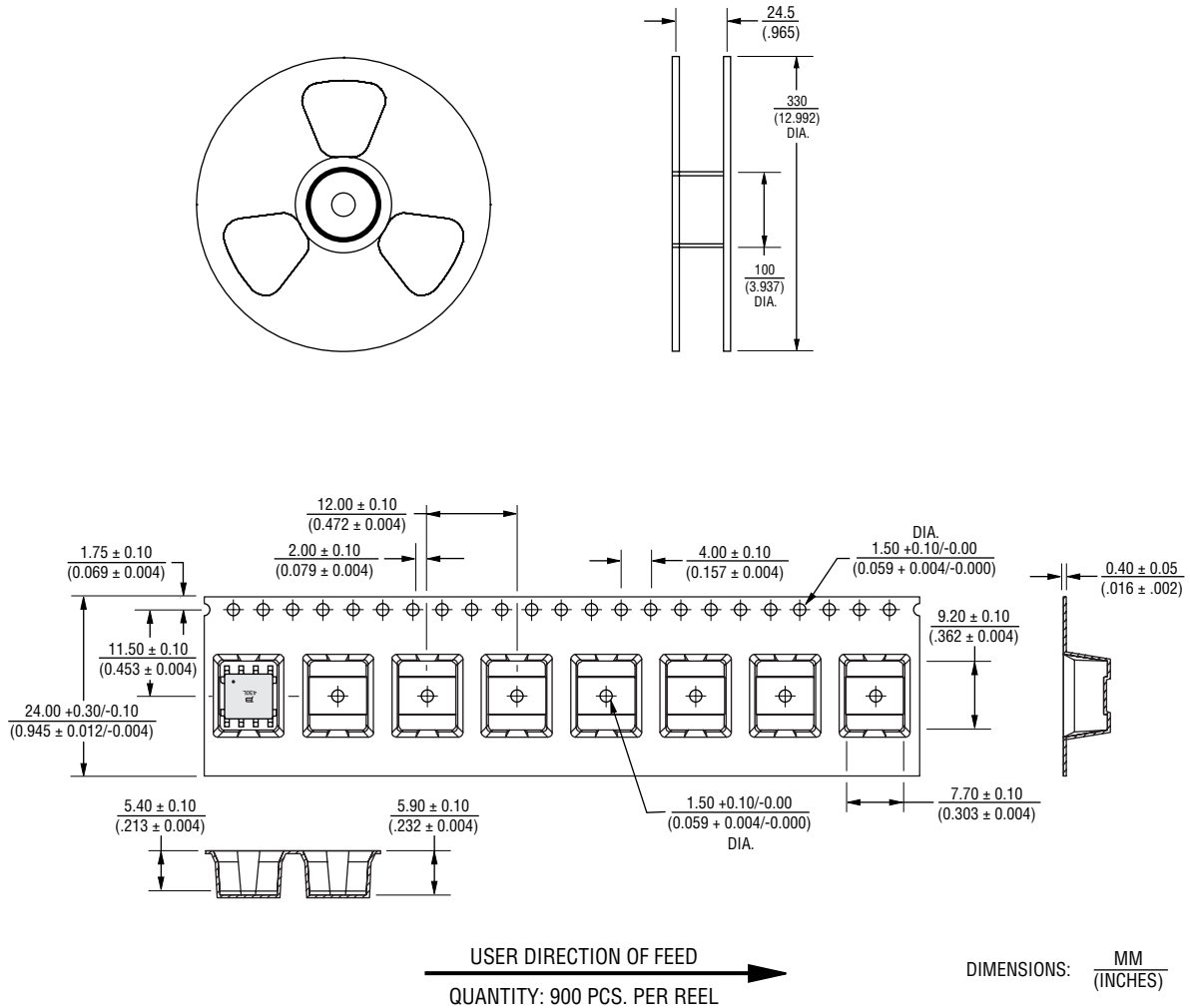
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

BROADCOM and MICROSEMI are trademarks or registered trademarks of their respective owners.

# SM51430EL G.Fast Transformer

**BOURNS®**

## 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

REV. 08/16

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.