

## Features

- 4.5 to 60 V input voltage
- 6 to 28 V output voltage
- Covered by reference designs with Analog Device's Model ADP1031 Chipset
- 2.2 kV isolation voltage
- Isolation type: Basic creepage and clearance >3 mm
- RoHS compliant\*

## BS64042CS - Flyback Transformer

### Electrical Specifications @ 25 °C

Inductance  
(@250 KHz, 1.0 V)  
1-4 ..... 270  $\mu$ H  $\pm$ 20 %

DC Bias  
(@250 KHz, 1.0 V, DC 0.4 A)  
1-4 ..... LOA \* 90 % min.

Leakage Inductance  
(@250 KHz, 1.0 V with 8-5 Short)  
1-4 ..... 8.5  $\mu$ H max.

DCR  
1-4 ..... 1.40 ohms max.  
8-5 ..... 2.85 ohms max.

Hi-Pot  
PRI-SEC..... 2.2k Vac 2.0 mA, 60 sec.  
PRI-CORE... 0.6k Vac 2.0 mA, 60 sec.  
SEC-CORE.. 0.6k Vac 2.0 mA, 60 sec.

Turns Ratio ( $\pm$ 2 %) & Polarity  
@ 20 kHz, 1 V  
Input Terminal (1-4)  
(1-4): (8-5) ..... 1:1

### Environmental Specifications

Operating Temperature  
..... -40 °C to +125 °C  
(including temperature rise)

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

Moisture Sensitivity Level ..... 1

ESD Classification (HBM) ..... N/A

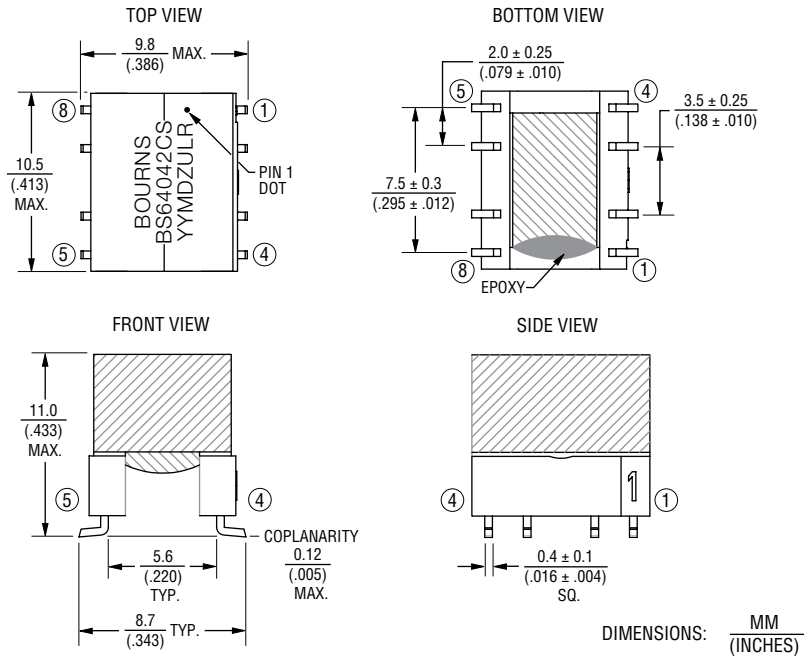
### Packaging Specifications

Packaging ..... 350 pcs./13-inch reel

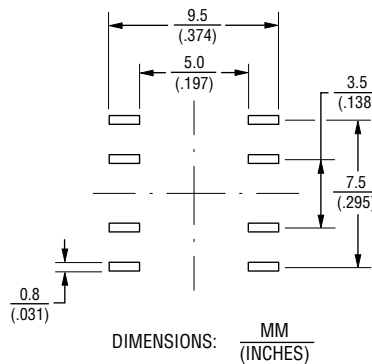
### How To Order

Model BS64042CS

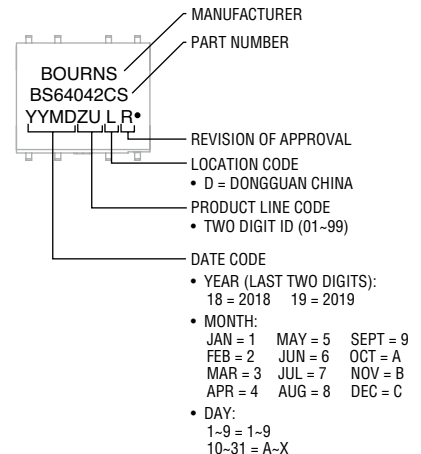
### Product Dimensions



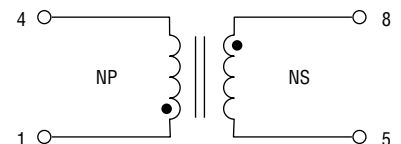
### Recommended Layout



### Typical Part Marking



### Electrical Schematic



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**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.

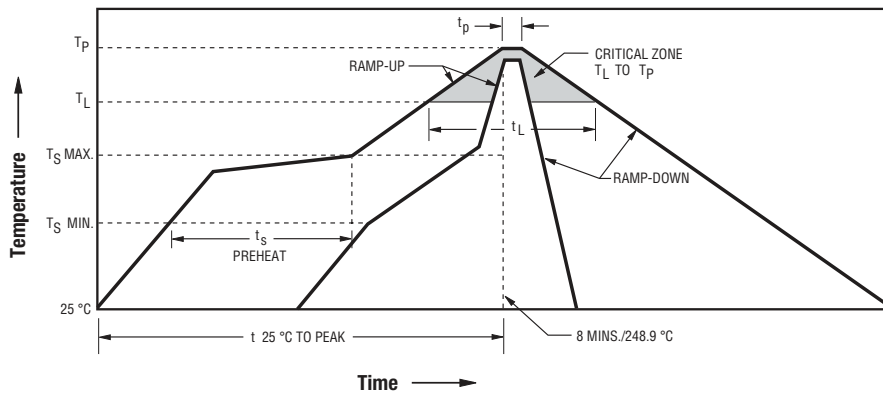
Users should verify actual device performance in their specific applications.

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# BS64042CS - Flyback Transformer

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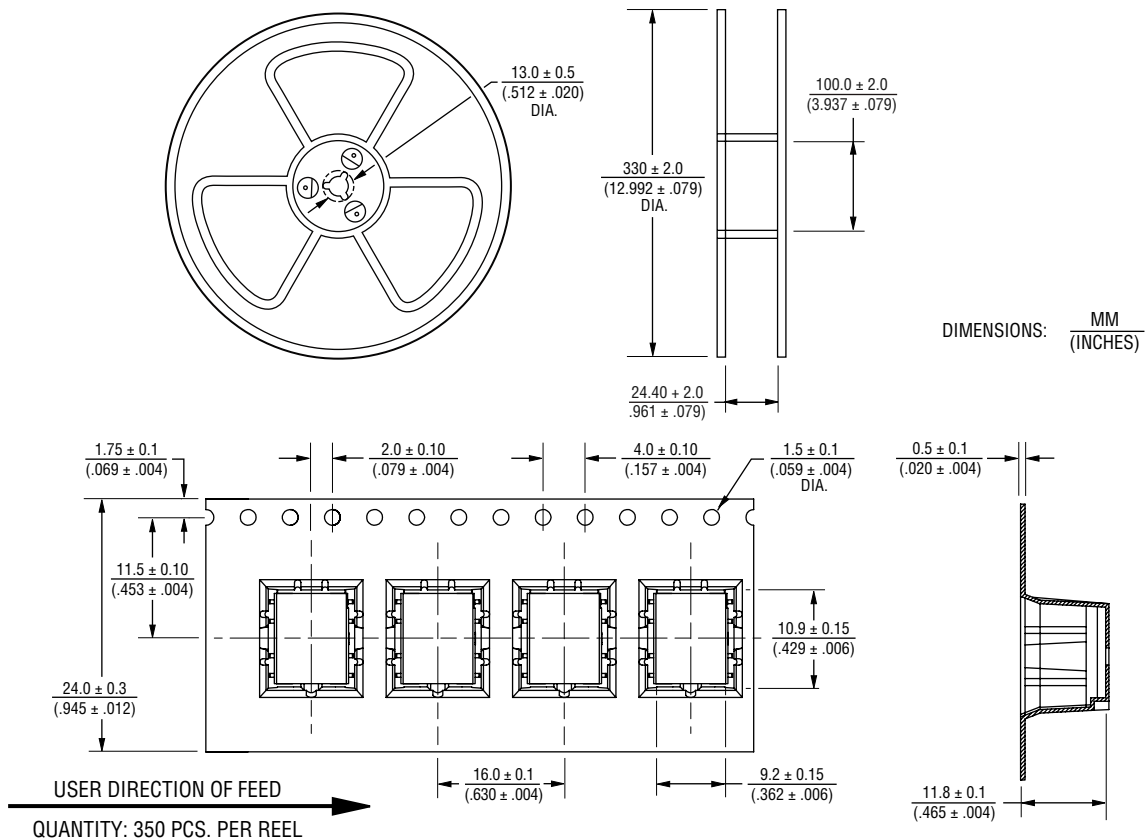
## Soldering Profile



- Ramp-up rate = 3 °C/sec. max.
- Ramp-down rate = 6 °C/sec. max.

- T<sub>L</sub> = 217 °C
- t<sub>L</sub> = 60-150 sec.
- T<sub>P</sub> = 245 ± 5 °C
- Time within 5 °C of actual Peak Temp (t<sub>p</sub>) = 20-40 sec.
- T<sub>S</sub> min = 150 °C
- T<sub>S</sub> max = 200 °C
- T<sub>S</sub> min to T<sub>S</sub> max = 60-180 sec., 25 °C to Peak Temperature = 6 min. max.

## Packaging Specifications



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

REV. D 05/19

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