

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 μ 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 μ 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

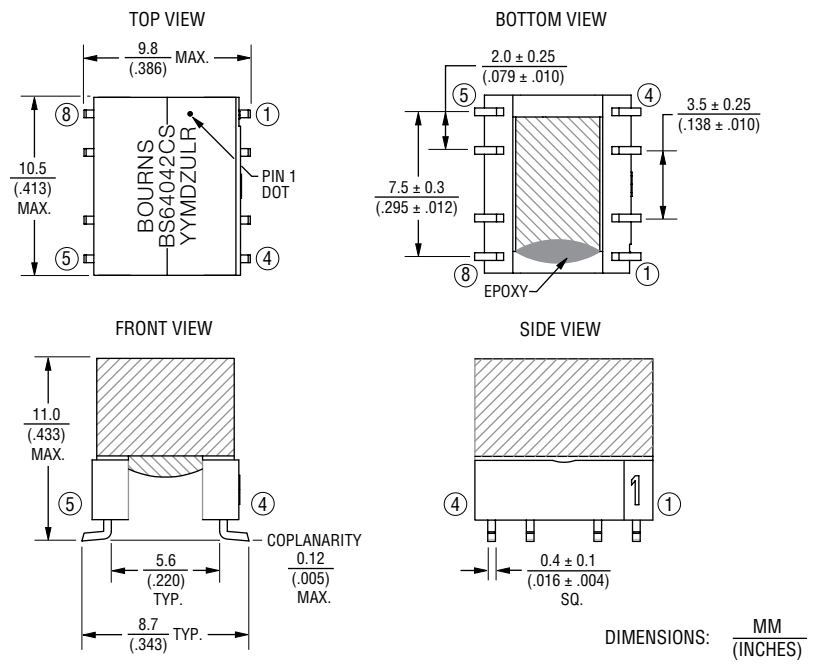
Packaging Specifications

Packaging 350 pcs./13-inch reel

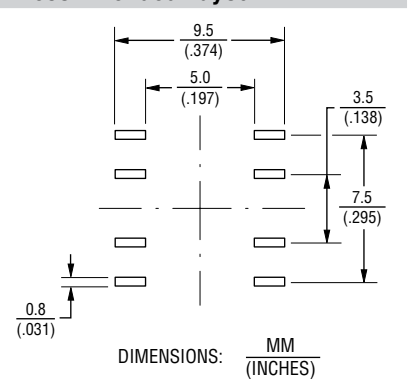
How To Order

Model BS64042CS

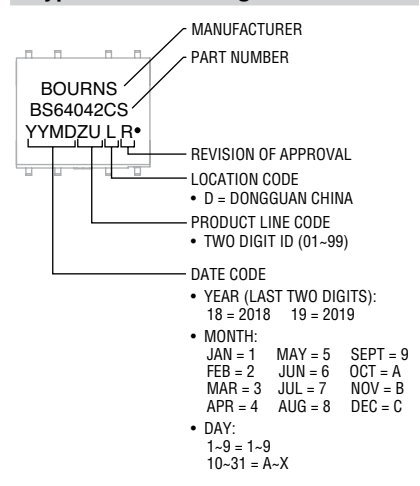
Product Dimensions



Recommended Layout



Typical Part Marking



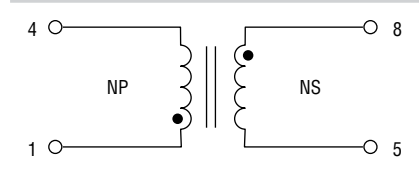
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WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*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. 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.

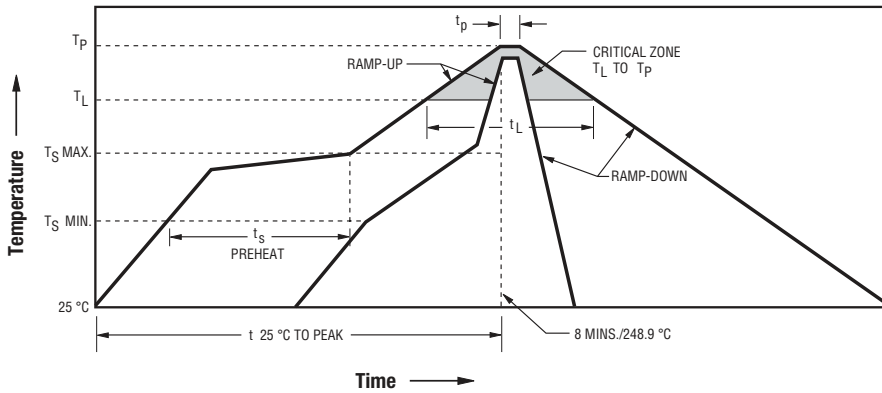
Electrical Schematic



BS64042CS - Flyback Transformer

BOURNS®

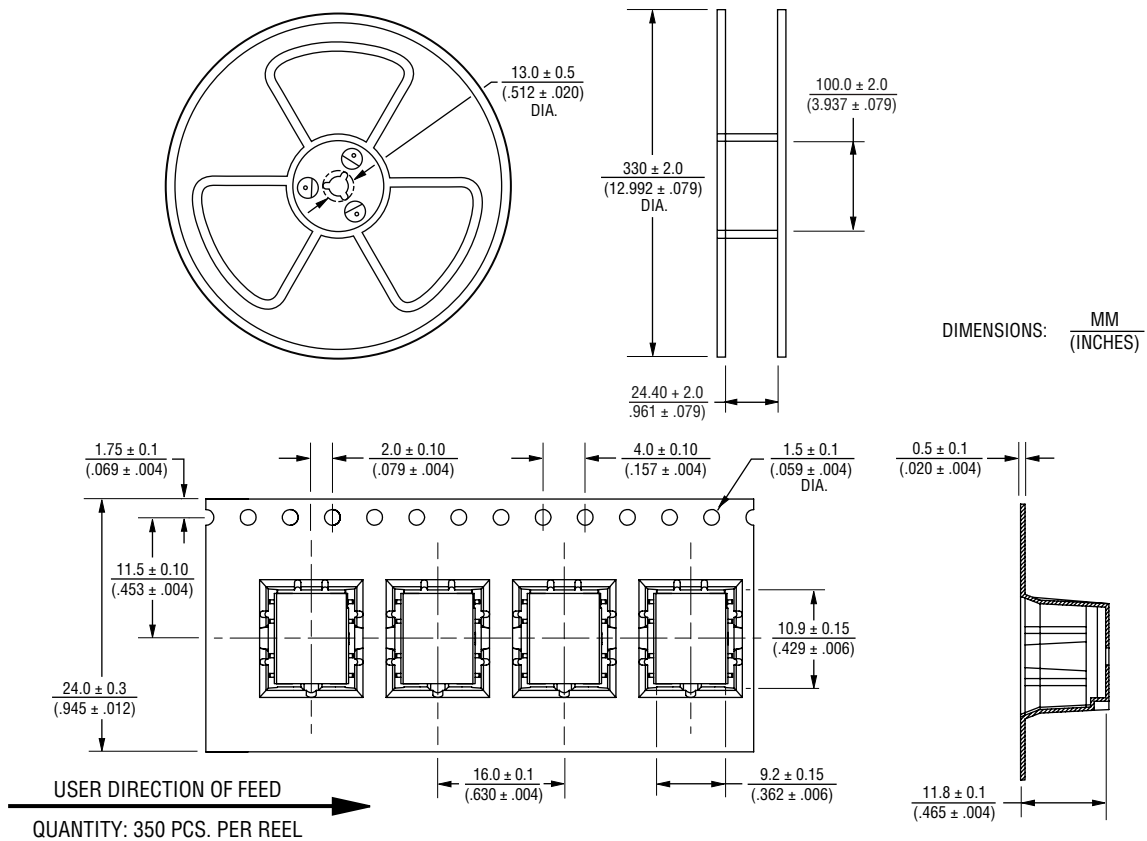
Soldering Profile



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

- T_L = 217 °C
- t_L = 60-150 sec.
- T_P = 245 ± 5 °C
- Time within 5 °C of actual Peak Temp (t_p) = 20-40 sec.
- T_S min = 150 °C
- T_S max = 200 °C
- T_S min to T_S 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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