

BOURNS®

Features

- Shielded construction for low radiation
- High rated current
- Low DCR
- RoHS compliant* and halogen free**

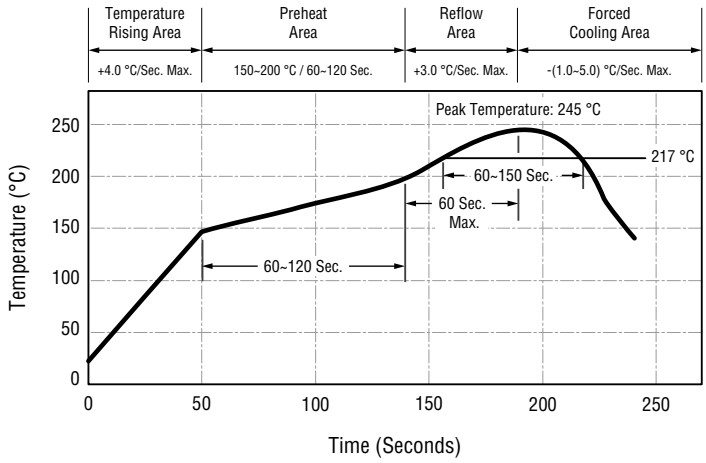
SPB1007 Series – Power Bead Inductors

Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 kHz / 0.1 V		DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A) Typ.	Isat (A) Typ.
	L (nH)	Tol. %				
SPB1007-R12M	115.0	20	0.28	0.35	61.0	94.0
SPB1007-R15M	150.0	20	0.28	0.35	61.0	76.0
SPB1007-R17M	175.0	20	0.28	0.35	61.0	66.0
SPB1007-R22M	215.0	20	0.28	0.35	61.0	50.0
SPB1007-R23M	230.0	20	0.28	0.35	61.0	48.0
SPB1007-R27M	270.0	20	0.28	0.35	61.0	40.0
SPB1007-R30M	300.0	20	0.28	0.35	61.0	35.0

Soldering Profile

Peak Temperature: 245 °C max.
Max. Peak Temperature -5 °C : 30 sec. max.
Max. Time Above 217 °C : 60~150 sec. max.

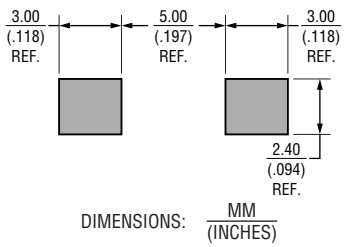


How to Order

SPB1007 - R12M

Model
Value Code (see table)

Recommended Layout



DIMENSIONS: MM (INCHES)

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

* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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.

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

General Specifications

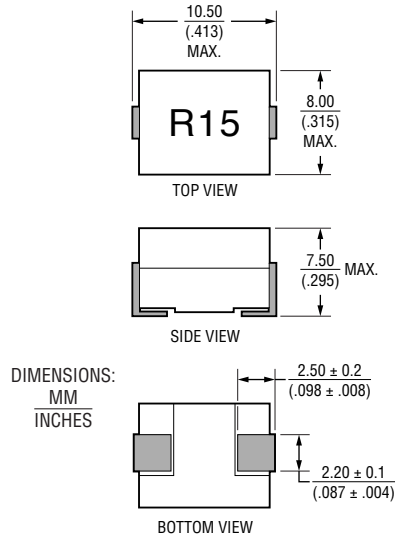
Operating Temperature
..... -40 °C to +125 °C
(Temperature rise included)
Storage Temperature
(Component Mounted)
..... -40 °C to +125 °C
Temperature Rise .... 40 °C at rated Irms[1]
Rated Current
..... Inductance drops 20 % at Isat
Moisture Sensitivity Level 1
ESD Classification (HBM) ..... N/A

[1] Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

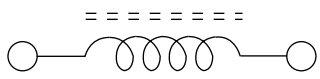
Materials

Core ..... Ferrite
Flat Wire ..... Copper
Terminal Finish ..... Ni/Sn
Packaging ..... 500 pcs. per 13-inch reel

Product Dimensions

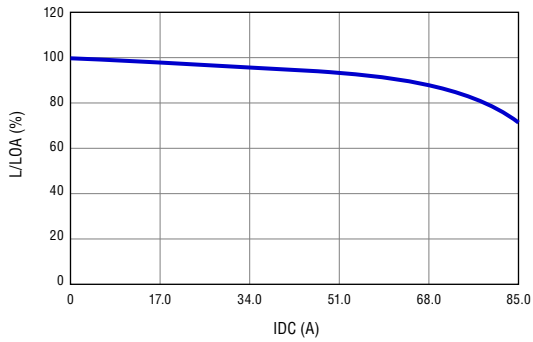


Electrical Schematic

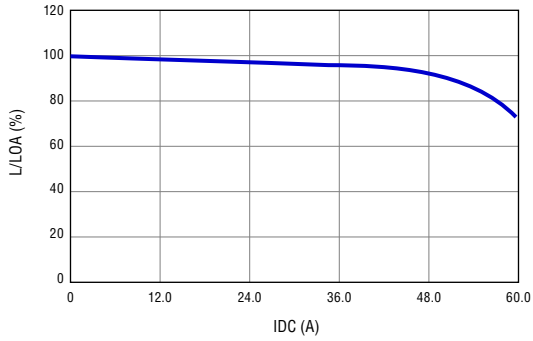


Typical Percentage of Inductance vs. Current Curves

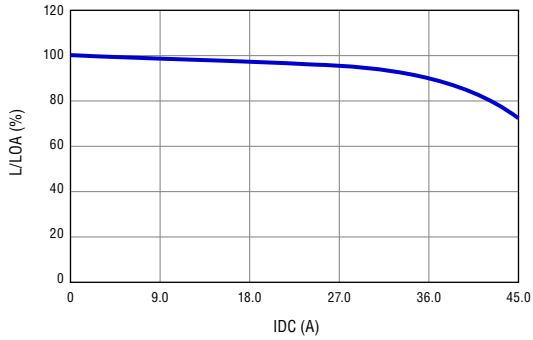
SPB1007-R15M



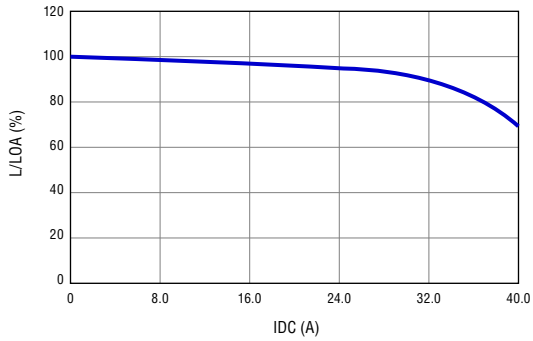
SPB1007-R22M



SPB1007-R27M

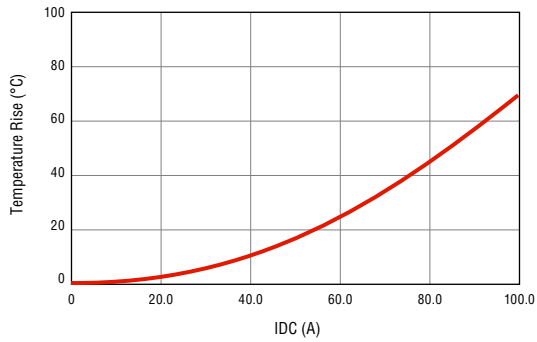


SPB1007-R30M

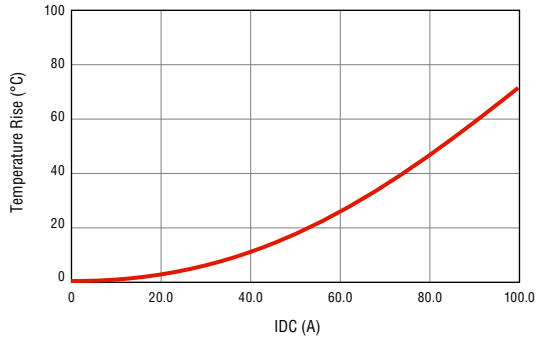


Temperature Rise vs. Current Plots

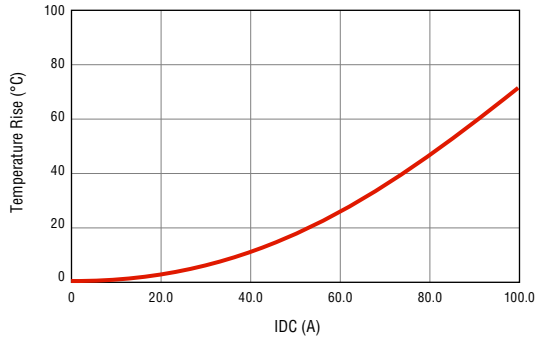
SPB1007-R15M



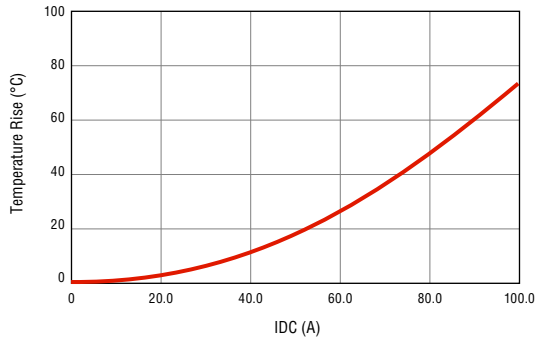
SPB1007-R22M



SPB1007-R27M

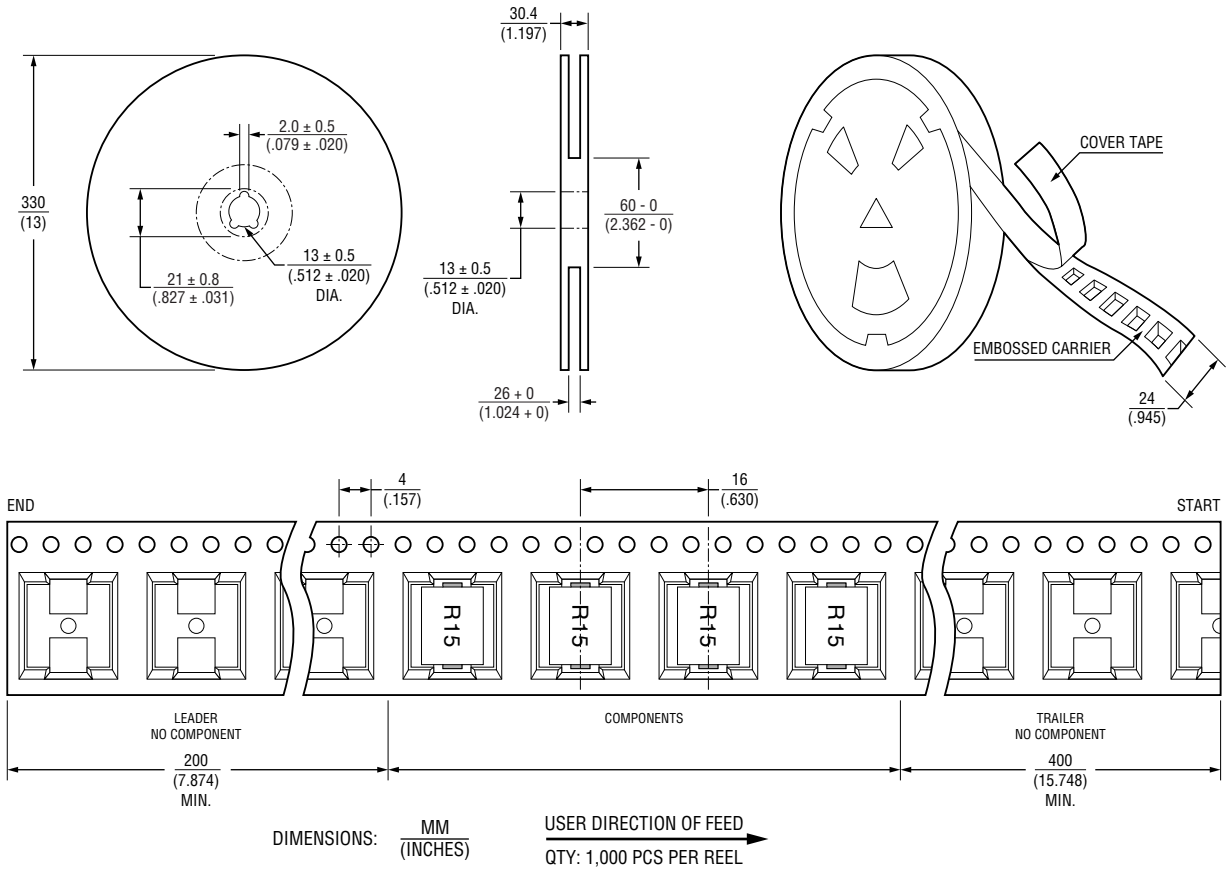


SPB1007-R30M



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Users should verify actual device performance in their specific applications.
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Packaging Specifications



BOURNS®

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REV. 10/22

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