

Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low DCR
- Low buzz noise
- RoHS compliant* and halogen free**

Applications

- Industrial high current filters
- High current battery charging
- DC-DC converters

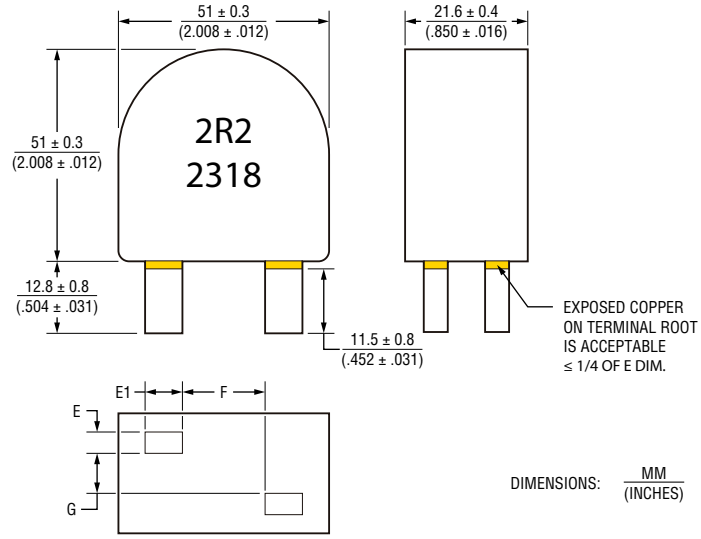
BOURNS®

HRP5022X Series – Shielded Power Inductors

Electrical Specifications

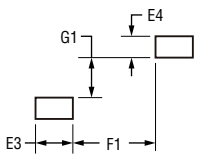
Bourns Part No.	Inductance @ 0 A		Irms (A) Typ.		Isat (A) Typ.		DCR (mΩ)		Q Min. @ 100 kHz	SRF (MHz) Ref.
	L (µH)	Tol. %	40 °C Rise	100 °C Rise	1	2	Typ.	Max.		
HRP5022X-2R2M	2.2	±20	125	187	190	280	0.21	0.23	280	12

Product Dimensions



Part Number	E	E1	F	G
HRP5022X-2R2M	4.0 ± 0.25 (.157 ± .010)	7.0 ± 0.25 (.276 ± .010)	25.0 ± 0.5 (.984 ± .020)	7.1 ± 0.4 (.280 ± .016)

Recommended Layout



Part Number	E3	E4	F1	G1
HRP5022X-2R2M	7.5 (.295)	4.5 (.177)	24.5 (.965)	6.6 (.260)

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 ... -40 °C to +125 °C
Temperature Rise
..... 40 °C and 100 °C at rated Irms[1]
Saturation Current
..... Inductance drops 20 % at Isat1, 30 % at Isat2
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

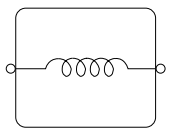
Core Material ..... Metal alloy powder
Wire ..... Enameled copper
Terminal ..... Sn
Packaging ..... 12 pcs. per tray

How to Order

HRP5022X - 2R2 M

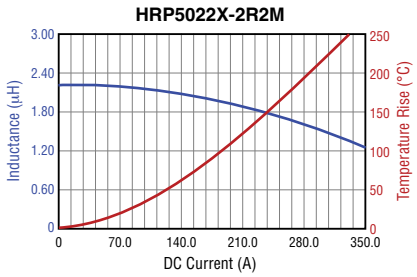
Model
Inductance Value Code
2R2 = 2.2 µH
Tolerance Code
M = ±20 %

Electrical Schematic

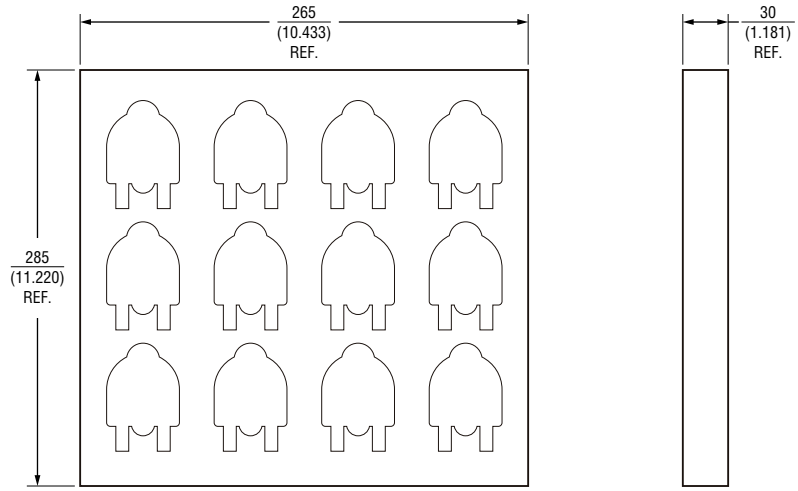


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Inductance vs. IDC



Packaging Information



12 pcs./tray

DIMENSIONS: MM (INCHES)

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REV. 03/25

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