



Features

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

Applications

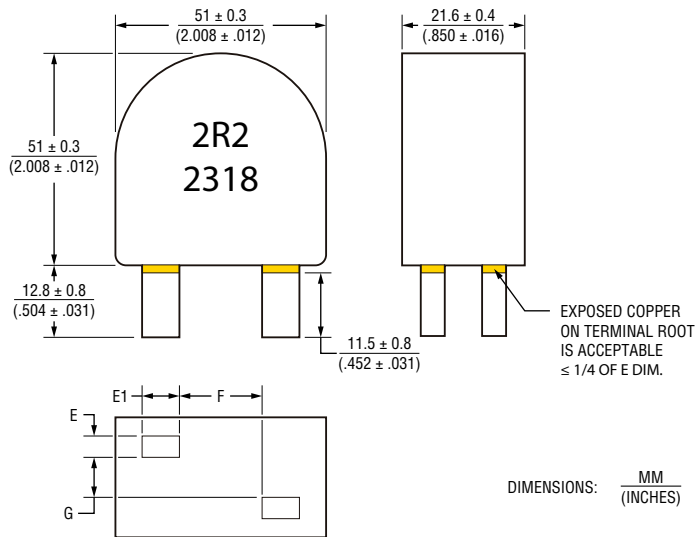
- Industrial high current filters
- High current battery charging
- DC-DC converters

HRP5022X Series – Shielded Power Inductors

Electrical Specifications

Bourns Part No.	Inductance @ 0 A		I _{rms} (A) Typ.		I _{sat} (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

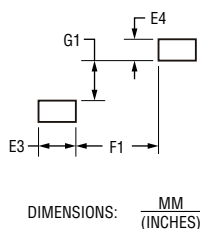
Product Dimensions



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

Part Number	E	E1	F	G
HRP5022X-2R2M	$\frac{4.0 \pm 0.25}{(.157 \pm .010)}$	$\frac{7.0 \pm 0.25}{(.276 \pm .010)}$	$\frac{25.0 \pm 0.5}{(.984 \pm .020)}$	$\frac{7.1 \pm 0.4}{(.280 \pm .016)}$

Recommended Layout



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



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:



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 I_{rms}¹

Saturation Current

..... Inductance drops 20 % at I_{sat}1,

30 % at I_{sat}2

Moisture Sensitivity Level

..... 1

ESD Classification (HBM)

..... N/A

¹Circuit 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 _____

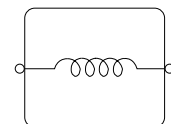
Inductance Value Code _____

2R2 = 2.2 μH

Tolerance Code _____

M = ±20 %

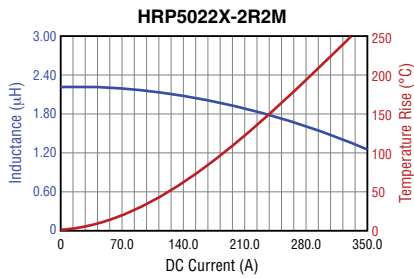
Electrical Schematic



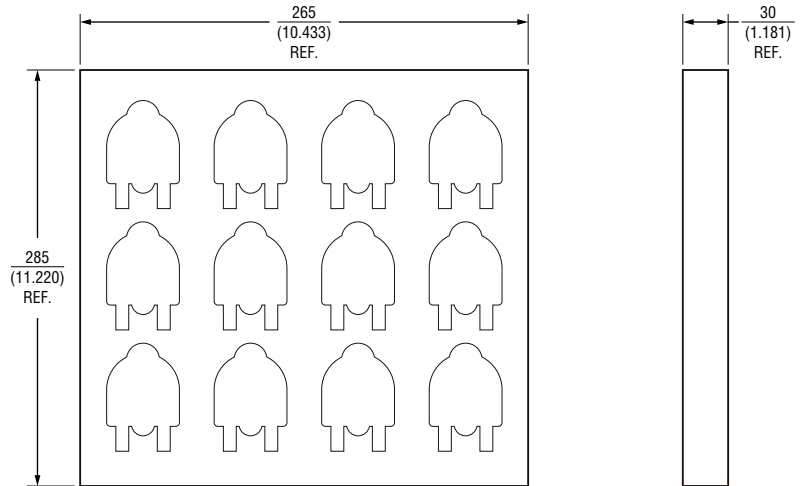
HRP5022X Series – Shielded Power Inductors

BOURNS®

Inductance vs. IDC



Packaging Information



12 pcs./tray

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

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REV. 03/25

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