



Features

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

Applications

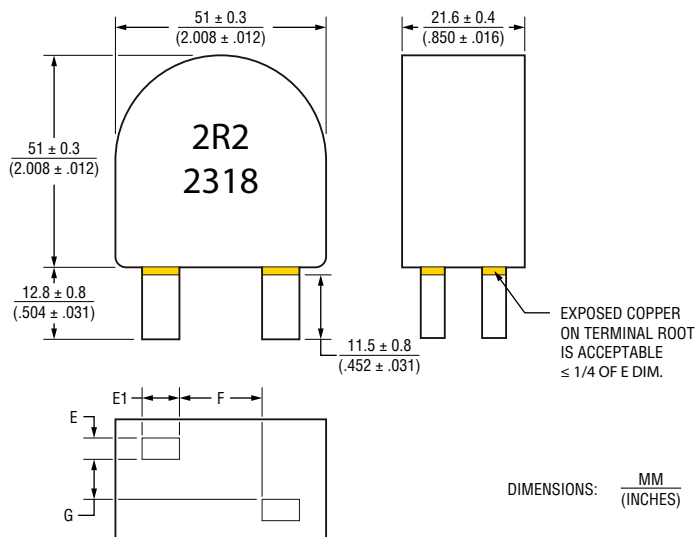
- Industrial high current filters
- High current battery charging
- DC-DC converters

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

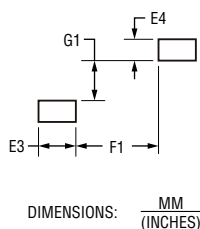
Product Dimensions



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	$\frac{7.5}{(.295)}$	$\frac{4.5}{(.177)}$	$\frac{24.5}{(.965)}$	$\frac{6.6}{(.260)}$

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 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

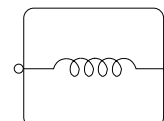
Terminal Sn

Packaging 12 pcs. per tray

How to Order

Model **HRP5022X - 2R2 M**
Inductance Value Code _____
2R2 = 2.2 μH
Tolerance Code _____
M = ±20 %

Electrical Schematic



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.

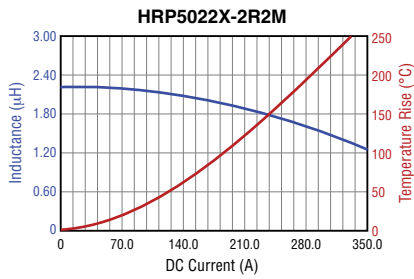
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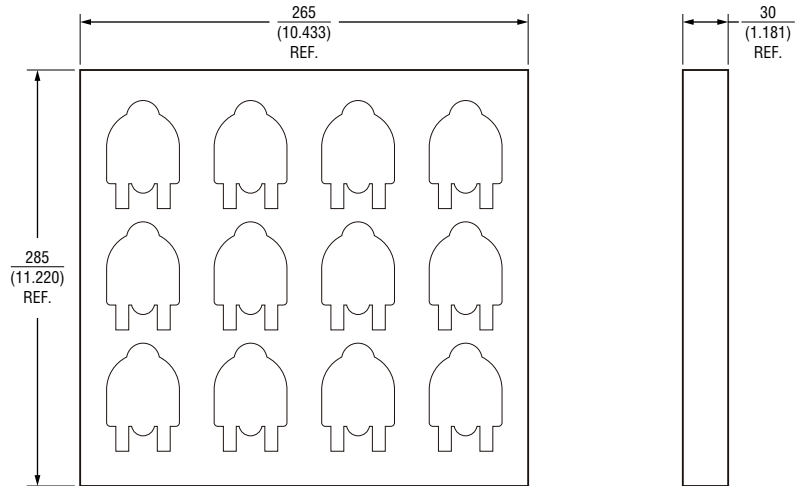
HRP5022X Series – Shielded Power Inductors

BOURNS®

Inductance vs. IDC



Packaging Information



12 pcs./tray

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

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