



Features

- Shielded construction – low radiation
- Low buzz noise
- Hot press molding process
- High current
- Low DCR
- RoHS compliant*

Applications

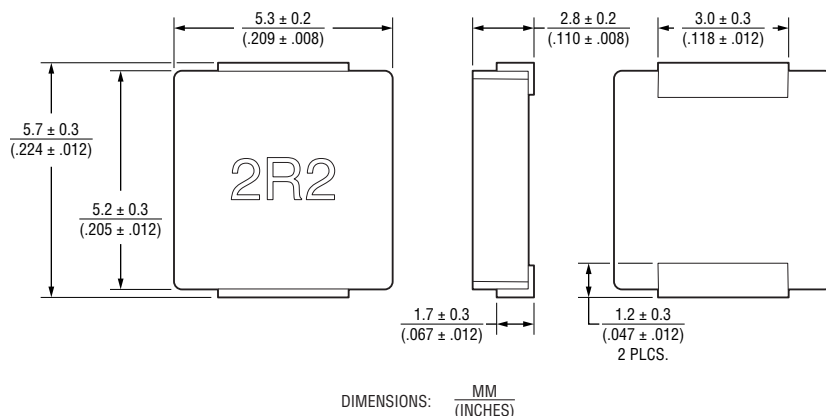
- DC-DC converters
- Power supplies

SRP5030HMCT Series – Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V		Q 100 kHz	SRF (MHz)	DCR (mΩ)		I _{rms} (A)	I _{sat} (A)
	L (μH)	Tol. (%)			Typ.	Max		
SRP5030HMCT-R24M	0.24	±20	20	120	2.5	3	25	38
SRP5030HMCT-R33M	0.33			80	2.8	3.4	21	25
SRP5030HMCT-R36M	0.36		15	70	2.9	3.5	20	24
SRP5030HMCT-R47M	0.47			60	3.2	3.9	19	20
SRP5030HMCT-R68M	0.68		20	50	4.3	5.2	17	18
SRP5030HMCT-1R0M	1.0			40	5.6	6.7	15	16
SRP5030HMCT-1R2M	1.2			32	7	8.4	14.5	15.3
SRP5030HMCT-1R5M	1.5			28	8.3	10	14	15
SRP5030HMCT-2R2M	2.2			20	12	14.4	12	12.5
SRP5030HMCT-3R3M	3.3			17	17.5	21	10	10.5
SRP5030HMCT-4R7M	4.7			14	27	32.4	8.5	10
SRP5030HMCT-5R6M	5.6			13	37	44.4	7.2	8
SRP5030HMCT-6R8M	6.8			12	41.5	50	6.6	7.5
SRP5030HMCT-8R2M	8.2			10	52	62.4	5.8	7.3
SRP5030HMCT-100M	10			9	65	78	5	6.8
SRP5030HMCT-150M	15			8	98	118	3.5	3.7
SRP5030HMCT-220M	22			6	133	160	3.1	3.5

Product Dimensions



Additional Information

Click these links for more information:



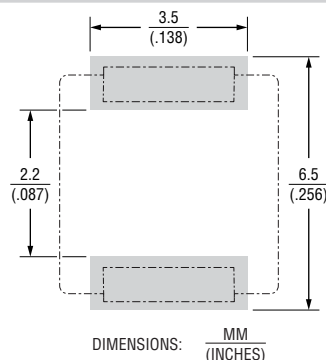
General Specifications

Operating Temperature -40 °C to +125 °C
 Storage Temperature -40 °C to +125 °C
 Temperature Rise 40 °C at rated I_{rms}
 Inductance Drop 30 % typ. at I_{sat}
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

Materials

Core Carbonyl core powder
 Wire Enameled copper
 Terminal Finish Cu/Ni/Sn
 Packaging 2,000 pcs. per 13-inch reel

Recommended Layout

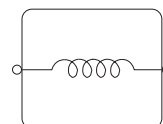


How to Order

SRP5030HMCT - R24 M

Model _____
 Value Code (see table) _____
 Tolerance _____
 M = ±20 %

Electrical Schematic



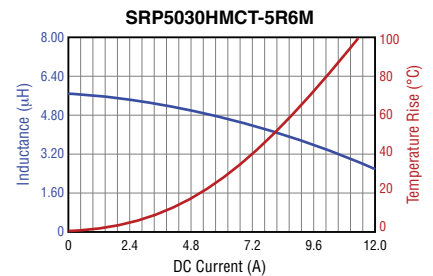
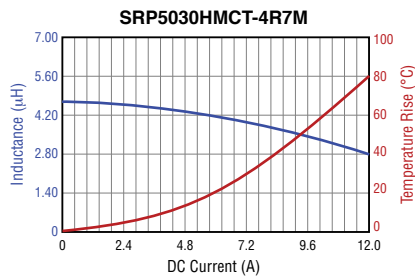
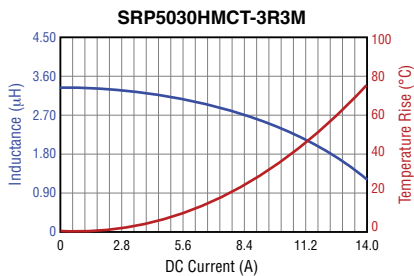
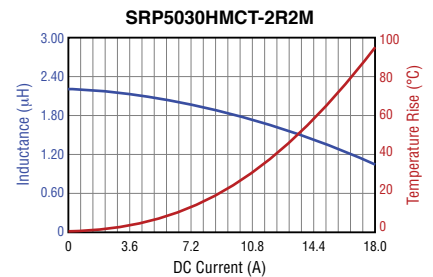
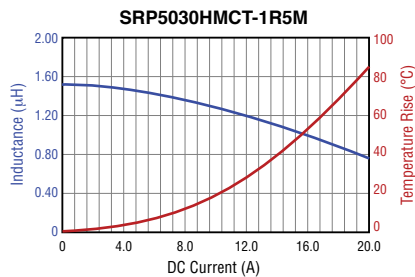
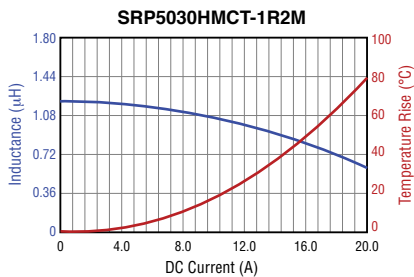
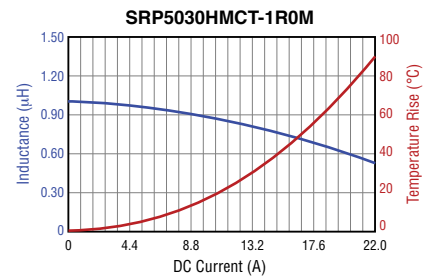
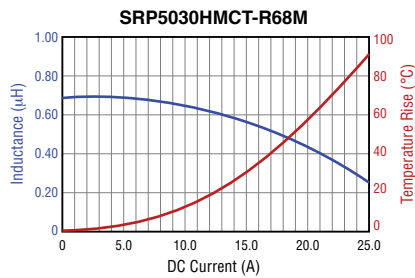
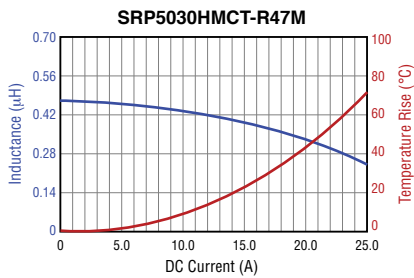
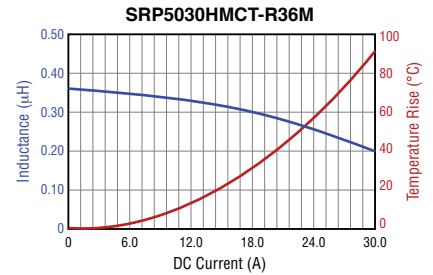
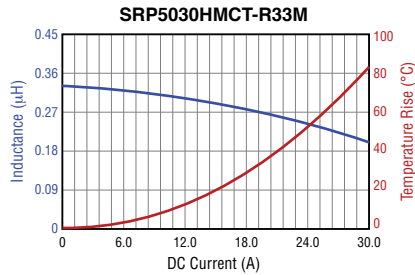
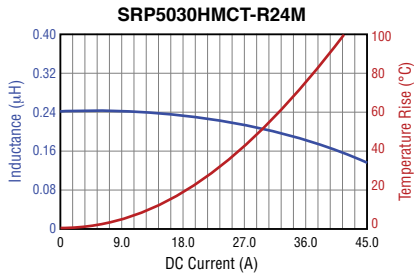
CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant.
 See www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
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SRP5030HMCT Series – Shielded Power Inductors

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L vs. I Charts



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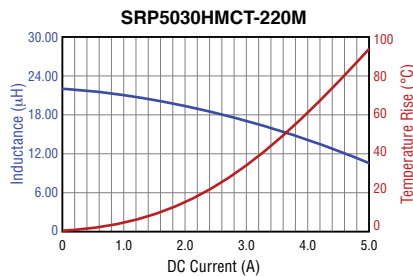
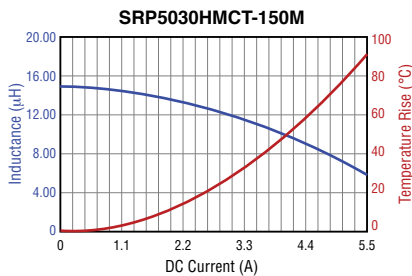
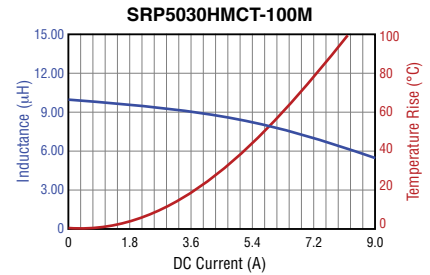
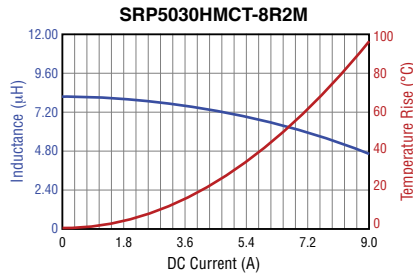
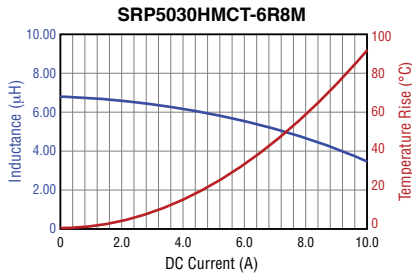
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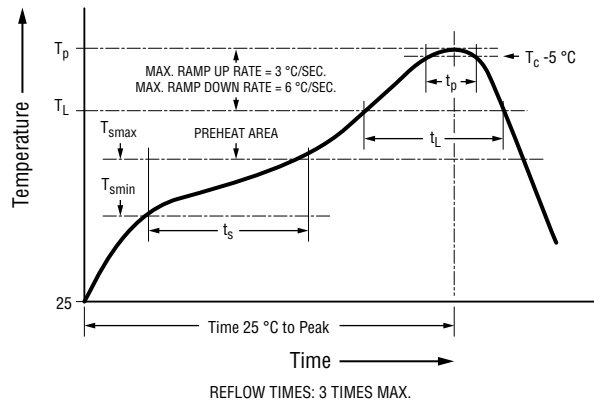
SRP5030HMCT Series – Shielded Power Inductors

BOURNS®

L vs. I Charts (continued)



Soldering Profile



Profile Feature	Pb Free Assembly
Preheat - Temperature Min. (T_{smin}) - Temperature Max. (T_{smax}) - Time (t_s) from T_{smin} to T_{smax}	150 °C 200 °C 60-120 seconds
Ramp-up Rate (T_L to T_p)	3 °C/second max.
Liquidous temperature (T_L) Time (t_L) maintained above T_L	217 °C 60-150 seconds
Peak package body temperature (T_p)	250 °C
Time (t_p) at $T_c - 5$ °C (T_p should be equal to or less than T_c)	< 30 seconds
Ramp-Down Rate (T_p to T_L)	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

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Technical drawing of a 2R2 component showing top, side, and end views with dimensions in mm and inches.

Top View Dimensions:

- Overall Diameter: 330 ± 0.12 (12.992)
- Inner Diameter: 12.4 ± 0.0 (.488 ± 0.079/-0)
- Central Feature Diameter: $13.5 \pm 0.5/-0.2$ (.531 ± .020/-0.008)
- Carrier Thickness: 100 ± 2 (3.937 ± .079)

Side View Dimensions:

- Carrier Thickness: 100 ± 2 (3.937 ± .079)
- COVER TAPE
- EMBOSSED CARRIER

End View Dimensions:

- Overall Length: 200 ± 0.1 (7.874) MIN.
- Leader Length: 8.0 ± 0.1 (.315 ± .004)
- Component Length: 4.0 ± 0.1 (.157 ± .004)
- Trailer Length: 400 ± 0.1 (15.75) MIN.
- Carrier Thickness: 6.5 ± 0.1 (.256 ± .004)
- Carrier Width: 3.3 ± 0.1 (.130 ± .004)
- Carrier Diameter: 0.35 ± 0.05 (.014 ± .002)

USER DIRECTION OF FEED

QTY: 2,000 PCS PER REEL

DIMENSIONS: MM (INCHES)

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