

Features

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

Applications

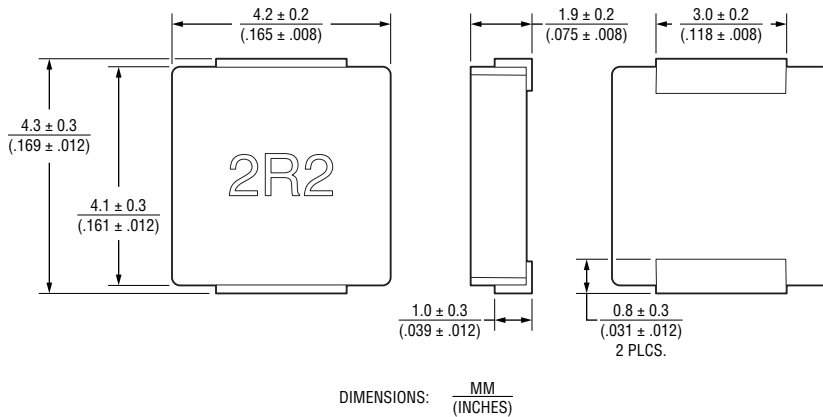
- DC-DC converters
- Power supplies

SRP4021HMCT 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		
SRP4021HMCT-R10M	0.10	±20	10	310	1.9	2.3	19	35
SRP4021HMCT-R15M	0.15			223	3.1	3.8	16.5	29
SRP4021HMCT-R33M	0.33			125	5	5.8	15	15
SRP4021HMCT-R47M	0.47			100	6	7.2	13	13
SRP4021HMCT-R68M	0.68			78	8.2	9.9	11	11
SRP4021HMCT-1R0M	1.0		15	60	11.5	13.8	10	10
SRP4021HMCT-1R5M	1.5			47	15.4	18.5	9	9
SRP4021HMCT-2R2M	2.2			35	25	30	7.2	7.2
SRP4021HMCT-3R3M	3.3			30	41	49.2	5.5	6.9
SRP4021HMCT-4R7M	4.7			25	60	69	4.7	5.8
SRP4021HMCT-5R6M	5.6		23	68	78.2	4.1	4.3	
SRP4021HMCT-6R8M	6.8		22	80.5	92.5	3.8	3.9	
SRP4021HMCT-8R2M	8.2		21	105	121	3.3	3.5	
SRP4021HMCT-100M	10		17	126	145	3.1	3.3	

Product Dimensions



Additional Information

Click these links for more information:



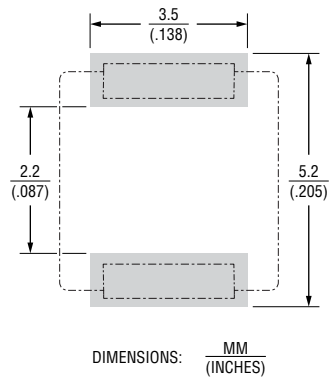
General Specifications

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

Materials

Core Carbonyl core powder
 Wire Enameled copper
 Terminal Finish Cu/Ni/Sn
 Packaging 3,000 pcs. per 13-inch reel

Recommended Layout

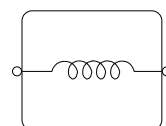


How to Order

SRP4021HMCT - R10 M

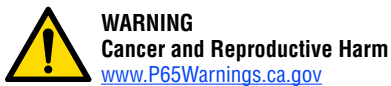
Model _____
 Value Code (see table) _____
 Tolerance _____
 M = ±20 %

Electrical Schematic



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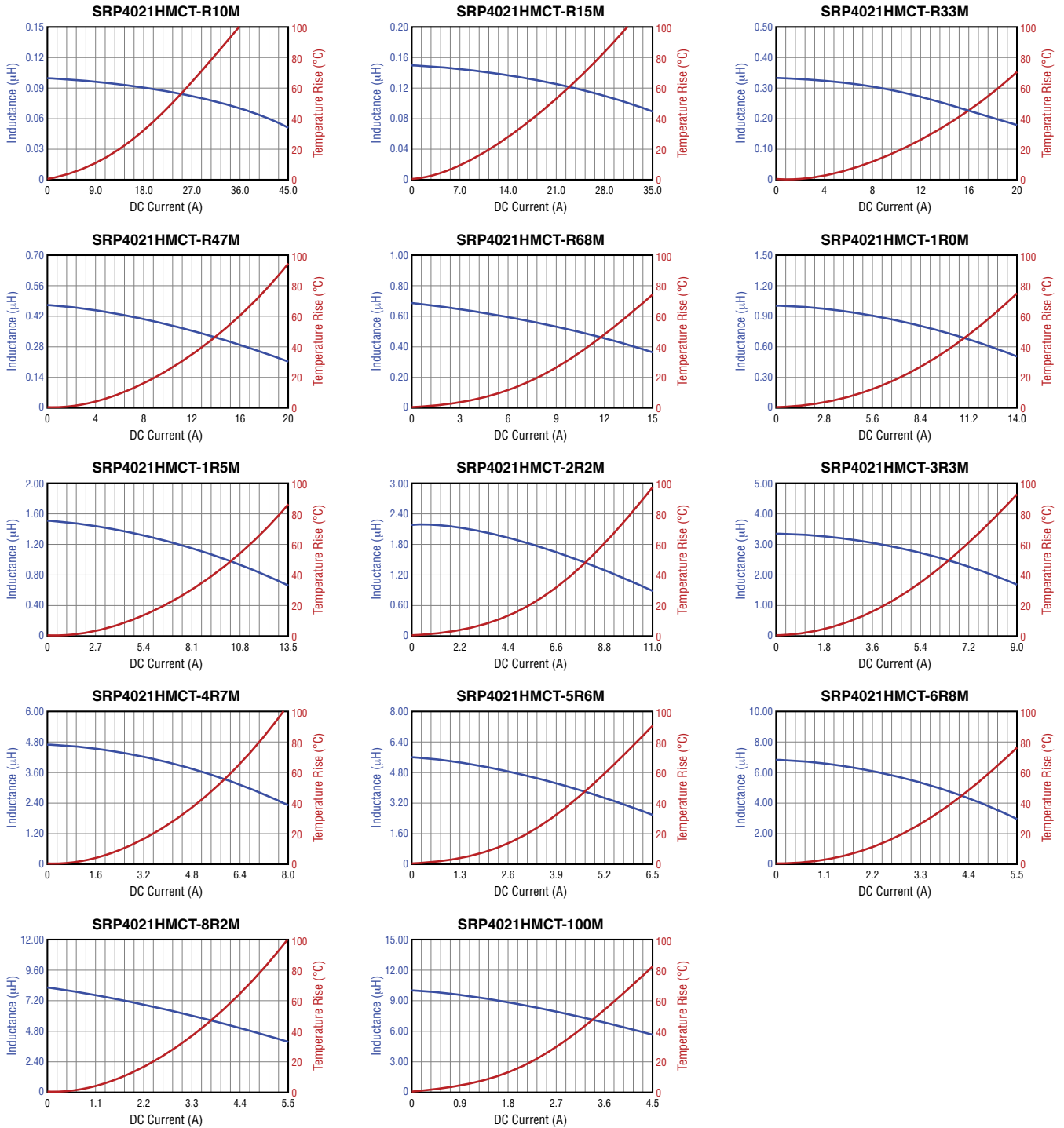


*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
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SRP4021HMCT Series – Shielded Power Inductors



L vs. I Charts

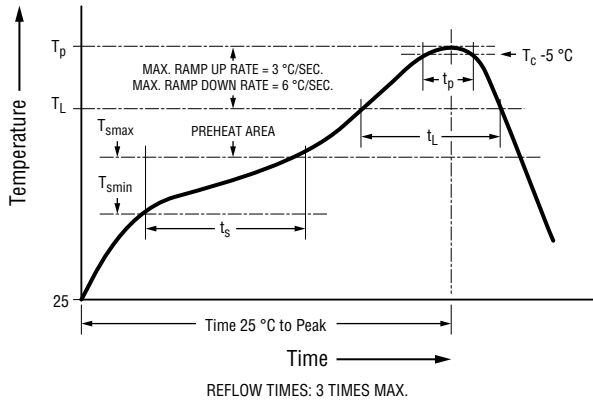


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SRP4021HMCT Series – Shielded Power Inductors

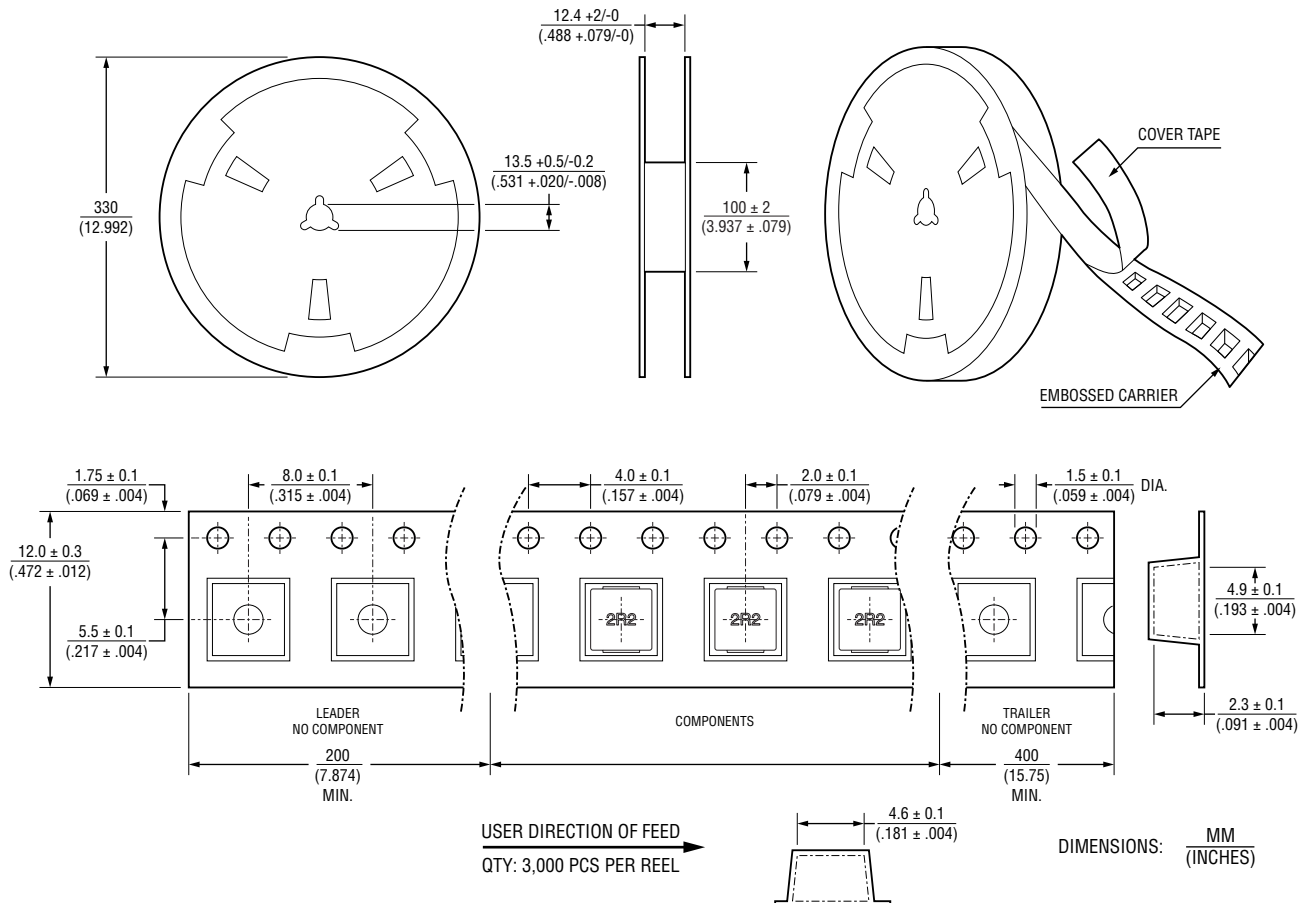
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Soldering Profile



Profile Feature	Pb Free Assembly
Preheat	
- Temperature Min. (T_{smin})	150 °C
- Temperature Max. (T_{smax})	200 °C
- Time (t_s) from T_{smin} to T_{smax}	60-120 seconds
Ramp-up Rate (T_L to T_p)	3 °C/second max.
Liquidous temperature (T_L)	217 °C
Time (t_L) maintained above T_L	60-150 seconds
Peak package body temperature (T_p)	260 °C
Time (t_p) at $T_c - 5^\circ\text{C}$ (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.

Packaging Specifications



REV. 05/25

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