

Features

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

Applications

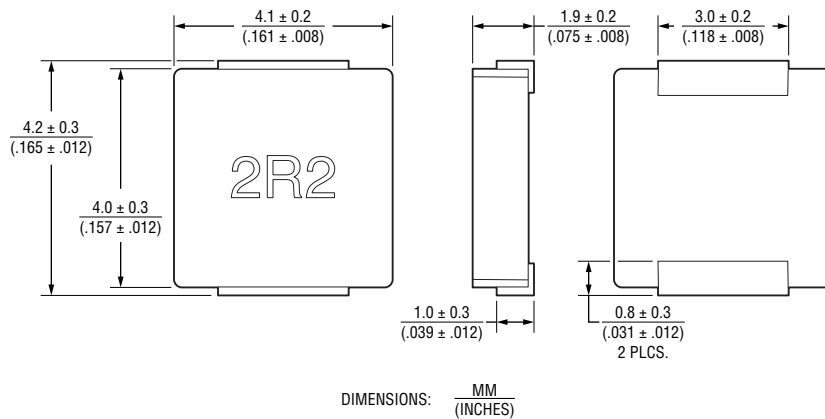
- DC-DC converters
- Power supplies

SRP4021HMT 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		
SRP4021HMT-R10M	0.10	±20	6	255	1.6	2	24	26
SRP4021HMT-R15M	0.15			10	186	2.9	3.5	18
SRP4021HMT-R22M	0.22		10		170	4.1	4.9	16
SRP4021HMT-R33M	0.33			15	108	4.8	5.8	15
SRP4021HMT-R47M	0.47		15		86	6	7	13
SRP4021HMT-R68M	0.68			20	67	7.6	8.8	11
SRP4021HMT-1R0M	1.0		20		55	9.5	11	10
SRP4021HMT-1R5M	1.5			20	41	14	16	8.5
SRP4021HMT-2R2M	2.2		20		35	20.9	23	7.5
SRP4021HMT-3R3M	3.3			20	31	38	45.6	5.6
SRP4021HMT-4R7M	4.7		20		23	54	64.8	4.5
SRP4021HMT-5R6M	5.6			20	22	63	75.6	4.1
SRP4021HMT-6R8M	6.8		20		21	80.5	92.5	3.5
SRP4021HMT-8R2M	8.2			20	19	103	118.5	3.2
SRP4021HMT-100M	10		20		17	115	132	2.8

Product Dimensions



Additional Information

Click these links for more information:



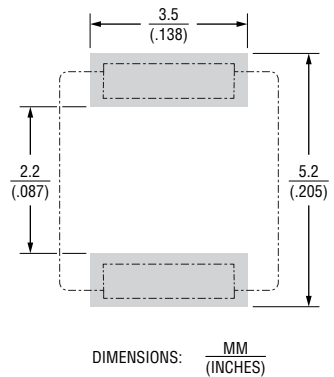
General Specifications

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

Recommended Layout

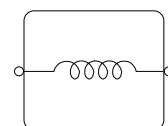


How to Order

SRP4021HMT - R10 M

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

Electrical Schematic



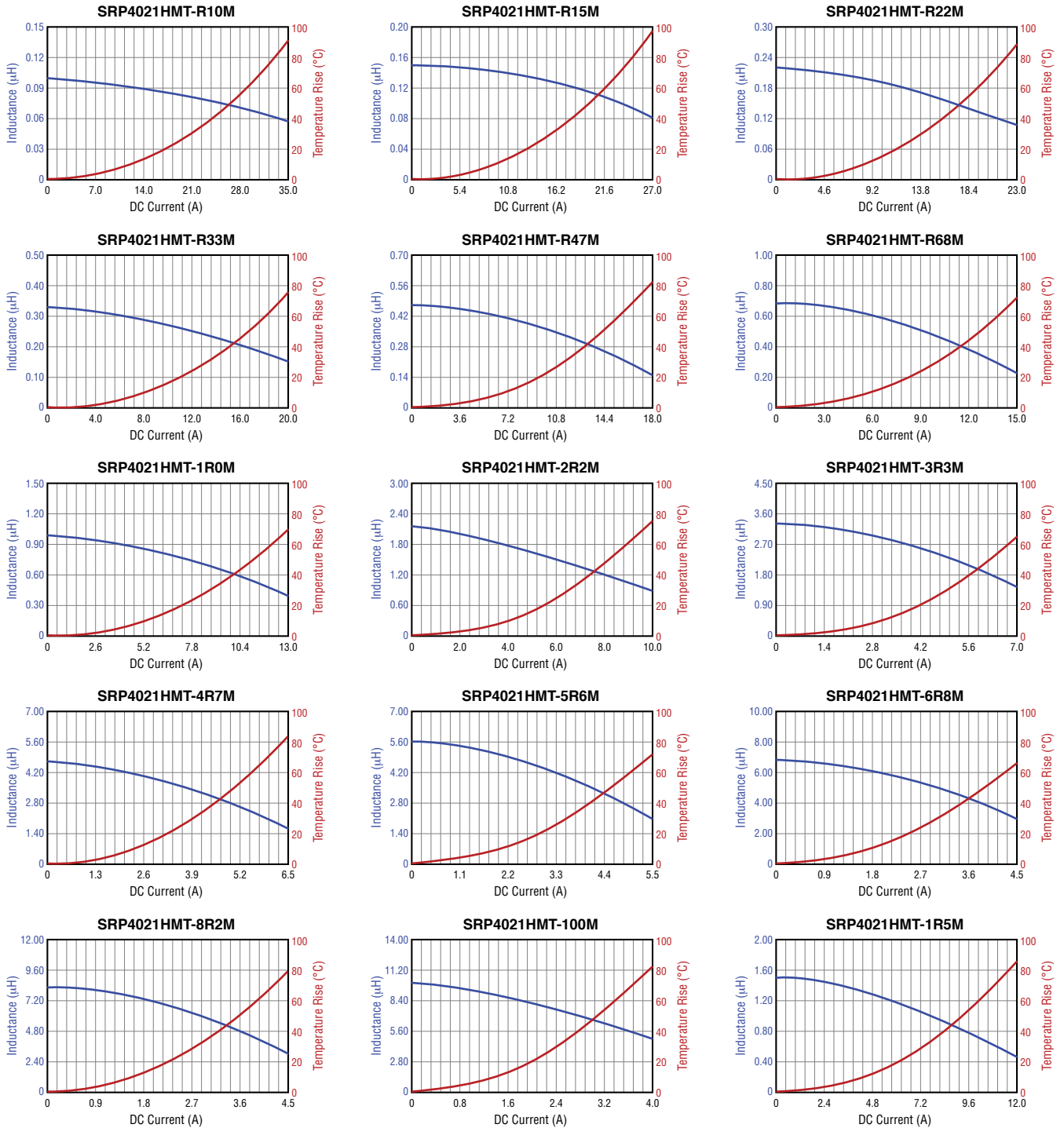
WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
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SRP4021HMT Series – Shielded Power Inductors



L vs. I Charts

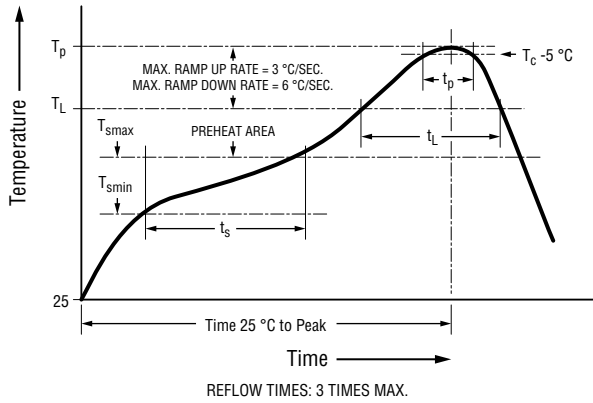


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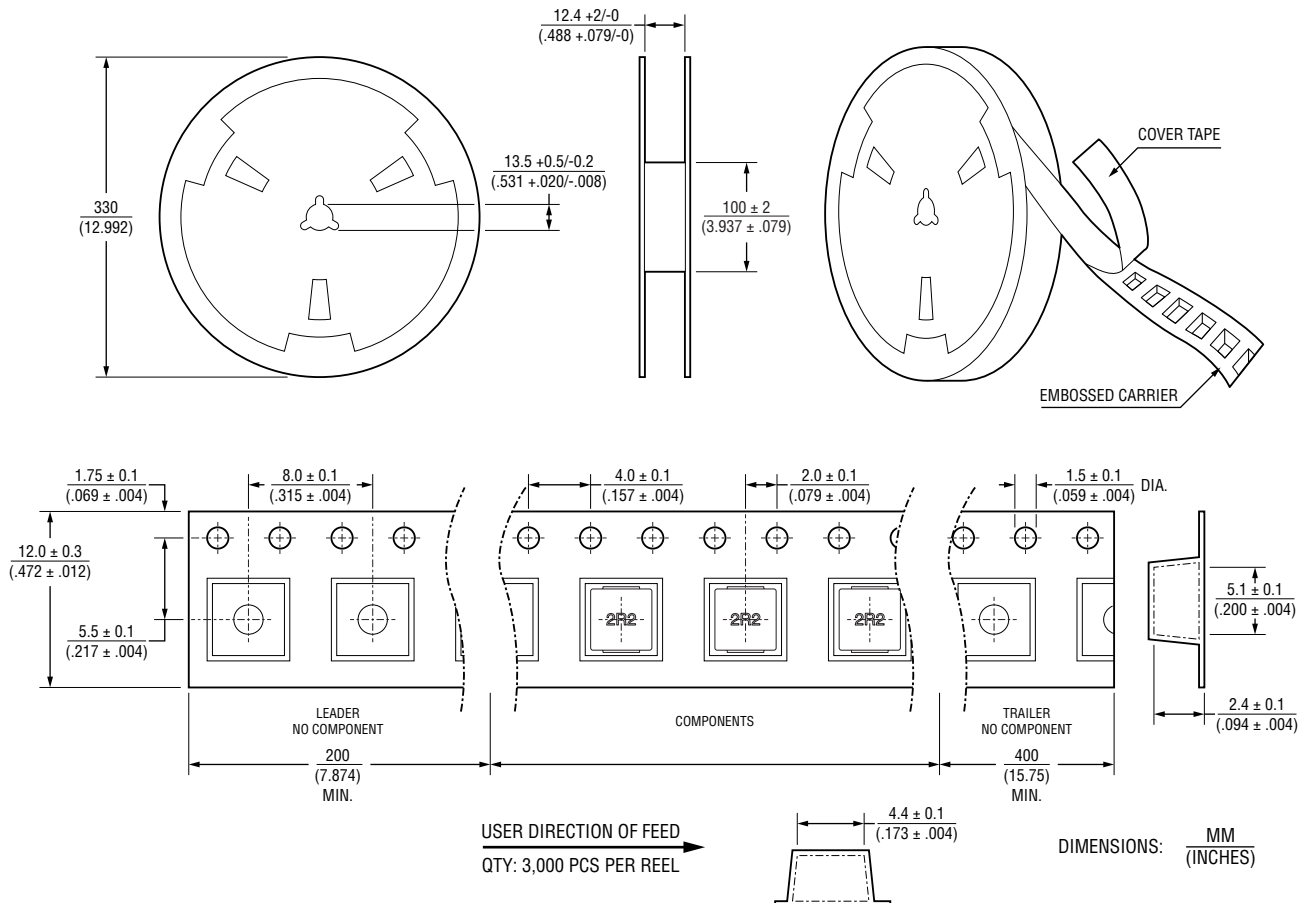
BOURNS®

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 $T_c - 5$ °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. 03/25

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