

MD Series

SMD Low Profile High Current Molded Inductor Size 5012



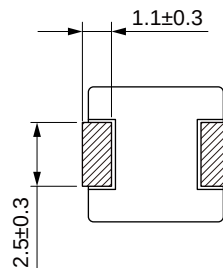
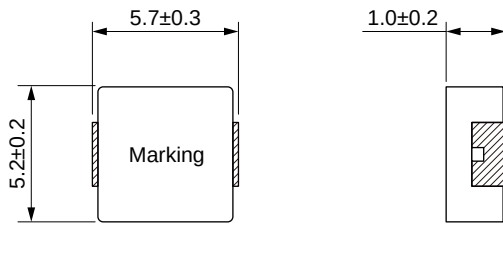
CHARACTERISTICS

- Molded type
- High saturation current due to CIP material
- Nature air gap and no acoustic noise
- Different sizes available
- Quantity: 4000pcs

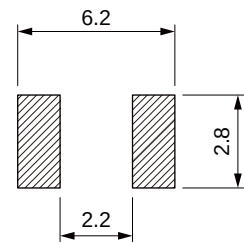
APPLICATION

- High current DC/DC converter
- LC filter

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Saturation Current Typ. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MD5012-R10N	0.10	±30%	14	14.5	4.3	5.2
MD5012-R15N	0.15	±30%	12	14.2	4.5	6.0
MD5012-R22N	0.22	±30%	10.7	14	5.5	6.7
MD5012-R33M	0.33	±20%	8.5	13.5	7.8	9.4
MD5012-R36M	0.36	±20%	8.0	13	10	11.5
MD5012-R47M	0.47	±20%	7.0	11	13.6	15.8
MD5012-R68M	0.68	±20%	6.0	9.0	21.5	24.5
MD5012-1R0M	1.00	±20%	5.0	6.0	26	30
MD5012-1R5M	1.50	±20%	4.0	5.0	38	44
MD5012-2R2M	2.20	±20%	3.5	4.0	65	75
MD5012-3R3M	3.30	±20%	3.0	3.8	75	86
MD5012-4R7M	4.70	±20%	2.5	3.2	100	115
MD5012-5R6M	5.60	±20%	2.4	3.2	175	201
MD5012-6R8M	6.80	±20%	2.0	3.0	193	222

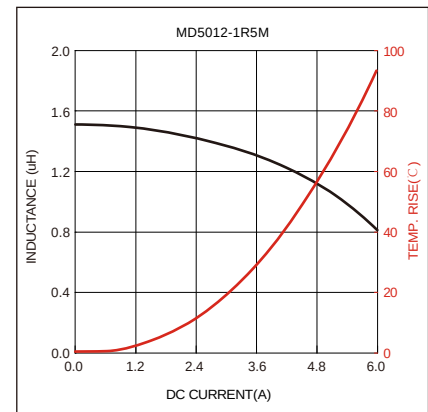
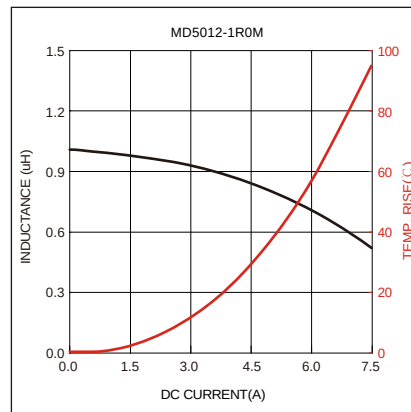
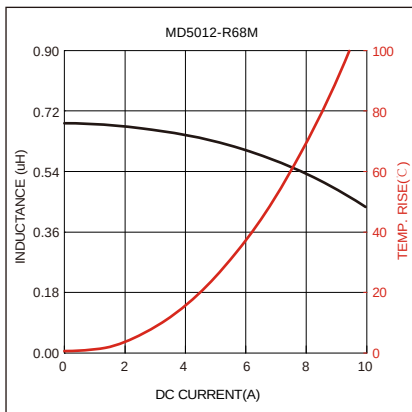
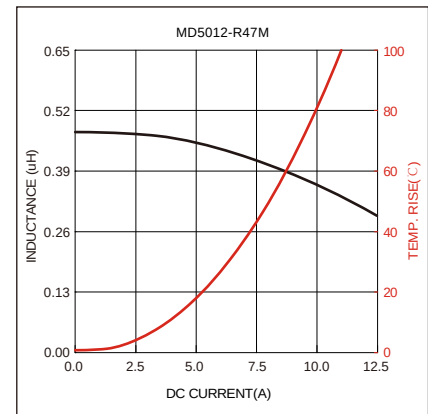
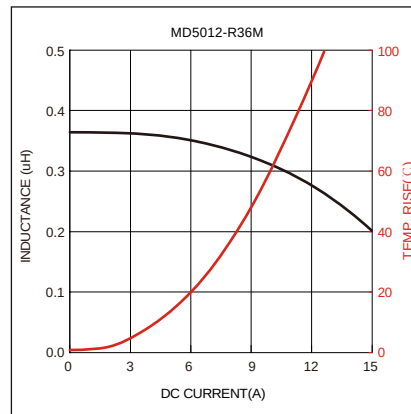
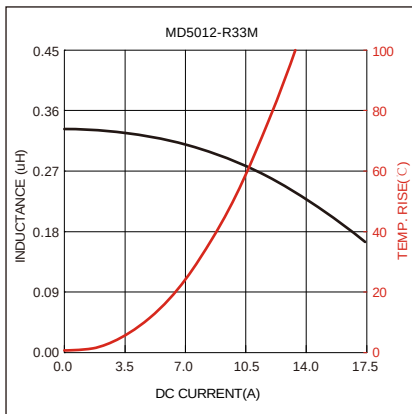
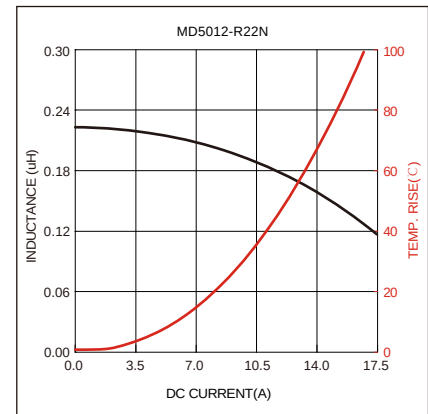
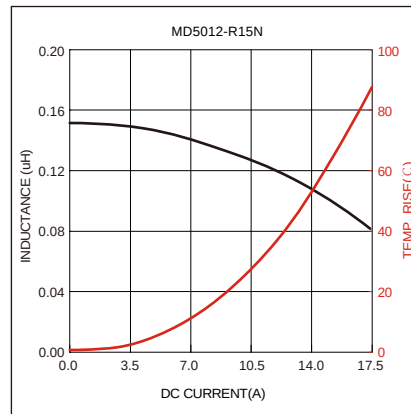
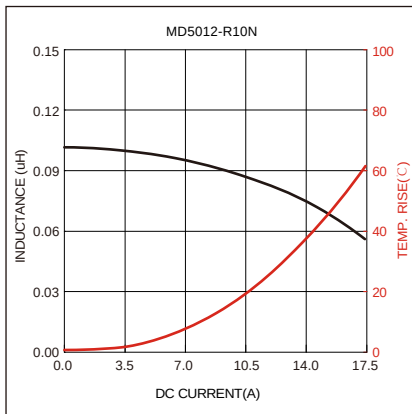
Part No	Inductance @ 100KHz/1V (μ H)	Tolerance	Temperature Rise Current Typ. (A)	Saturation current Typ. (A)	DC Resistance Typ. (m Ω)	DC Resistance Max. (m Ω)
MD5012-8R2M	8.20	$\pm 20\%$	1.7	2.8	327	378
MD5012-100M	10.0	$\pm 20\%$	1.5	1.8	335	385
MD5012-150M	15.0	$\pm 20\%$	1.3	1.6	410	470

Operating temperature : $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

Temperature rise current : The actual value of DC current when the temperature rise is $\Delta T 40^{\circ}\text{C}$

Saturation Current will cause L to drop approximately 30%

Typical Electrical Characteristics:



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