

MD Series

SMD Low Profile High Current Molded Inductor

Size 5012



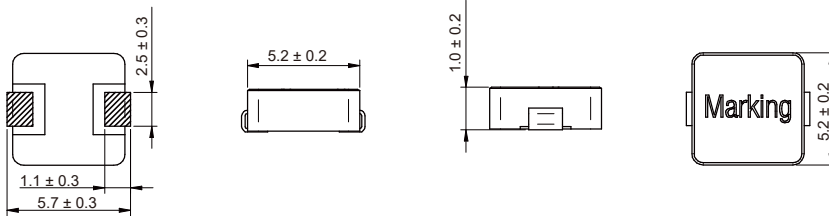
CHARACTERISTICS

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

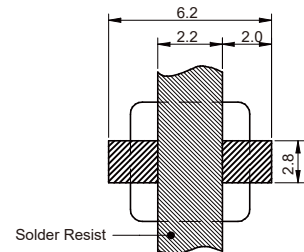
APPLICATION

- High current DC/DC converter
- LC filter

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

Part No	Inductance (μ H)	Tolerance	Temperature Rise Current Typ. (A)	Saturation current Typ. (A)	DCR Typ. (m Ω)	DCR Max. (m Ω)
MD5012-R10N	0.10	$\pm 30\%$	14.0	14.5	4.3	5.2
MD5012-R15N	0.15	$\pm 30\%$	12.0	14.2	4.5	6.0
MD5012-R22N	0.22	$\pm 30\%$	10.7	14.0	5.5	6.7
MD5012-R33M	0.33	$\pm 20\%$	8.5	13.5	7.8	9.4
MD5012-R36M	0.36	$\pm 20\%$	8.0	13.0	10.0	11.5
MD5012-R47M	0.47	$\pm 20\%$	7.0	11.0	13.6	15.8
MD5012-R68M	0.68	$\pm 20\%$	6.0	9.0	21.5	24.5
MD5012-1R0M	1.00	$\pm 20\%$	5.0	6.0	26	30
MD5012-1R2M	1.20	$\pm 20\%$	4.5	5.5	33	40
MD5012-1R5M	1.50	$\pm 20\%$	4.0	5.0	38	44
MD5012-2R2M	2.20	$\pm 20\%$	3.5	4.0	65	75
MD5012-3R3M	3.30	$\pm 20\%$	3.0	3.8	75	86
MD5012-4R7M	4.70	$\pm 20\%$	2.5	3.2	100	115
MD5012-5R6M	5.60	$\pm 20\%$	2.4	3.2	175	201
MD5012-6R8M	6.80	$\pm 20\%$	2.0	3.0	193	222

Part No	Inductance (μH)	Tolerance	Temperature Rise Current Typ. (A)	Saturation current Typ. (A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
MD5012-8R2M	8.20	±20%	1.7	2.8	327	378
MD5012-100M	10.0	±20%	1.5	1.8	335	385
MD5012-150M	15.0	±20%	1.3	1.6	410	470

Operating temperature : -40℃ ~ +125℃

Temperature rise current : The actual value of DC current when the temperature rise is ΔT40℃

Saturation Current that will cause initial inductance to drop 20% approximately .

Typical Electrical Characteristics:

