

APPLICATION

PDA, notebook, desktop, and server applications
Low profile , high current power supplies
Battery powered devices
DC/DC converters in distributed power systems
DC/DC converters for field programmable gate array

FEATURES

RoHS Compliant.
Super low resistance ,ultra high current rating
High performance (I sat) realized by metal dust core
Frequency Range :up to 1MHz

PRODUCT IDENTIFICATION

① ② ③ ④ ⑤

MMD - 06AB - R68 M - S1

①Product Code

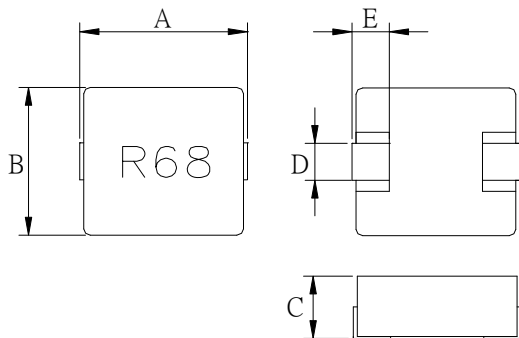
②Dimensions : 6.8 x 6.4 x 1.2 mm

③Inductance : R68 = 0.68 μ H

④Tolerance : M = $\pm 20\%$

⑤Series Type : S1 Type

PRODUCT DIMENSION



NOTE : Dimensions in mm

PRODUCT NO.	A	B	C	D	E
MMD-06AB-SERIES-S1-IN	6.86 $\pm$ 0.38	6.47 $\pm$ 0.25	1.2Max	3.0 $\pm$ 0.3	1.3 $\pm$ 0.3

ELECTRICAL REQUIREMENTS

PART NUMBER	INDUCTANCE Lo (μ H) $\pm$ 20% @0A	R _{dc} (m Ω)		HEAT RATING CURRENT(I _{dc}) DC AMPS ¹	SATURATION CURRENT(I _{sat}) DC AMPS ²
		Typ.	Max		
MMD-06AB-R47M-S1	0.47	15	17	8	11
MMD-06AB-R68M-S1	0.68	17	19	7	8
MMD-06AB-1R0M-S1	1.0	26	28	6	7
MMD-06AB-1R5M-S1	1.5	35.5	40.8	4	6
MMD-06AB-3R3M-S1	3.3	90	103	3	3.6
MMD-06AB-4R7M-S1	4.7	155	170	2.4	2.8
MMD-06AB-6R8M-S1	6.8	189	217	2.1	2.4
MMD-06AB-100M-S1	10	250	290	1.8	2.2

TEST FREQUENCY:100KHz,0.25V

TESTING INSTRUMENT L :Agilent4284A,WK4235,CH3302/G LCR METER

CH1320,CH1320S BIAS CURRENT SOURCE

R_{dc} :CH11025,GOM802 MICRO OHMMETER

NOTES:

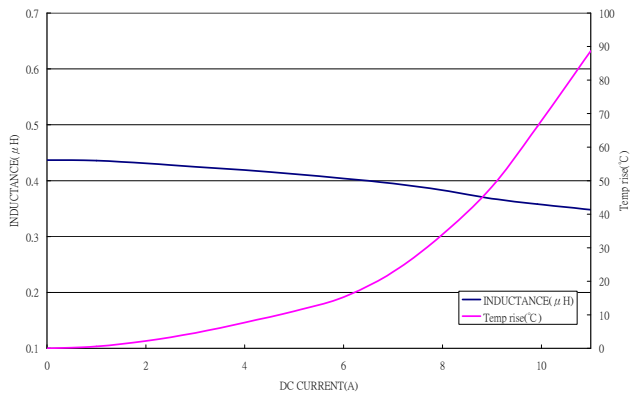
- 1.DC current (I_{dc}) that will cause an approximate ΔT of 40°C
- 2.DC current (I_{sat}) that will cause Lo to drop approximately 20%
- 3.All test data is referenced to 25°C ambient
- 4.Operating Temperature Range -55°C to +125°C
- 5.The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



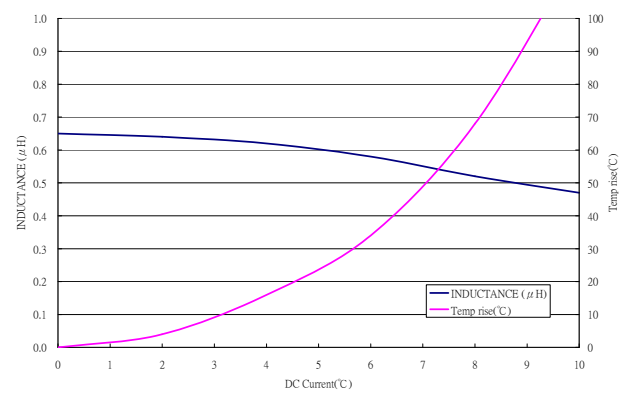
ELECTRICAL CHARACTERISTICS

Reference data

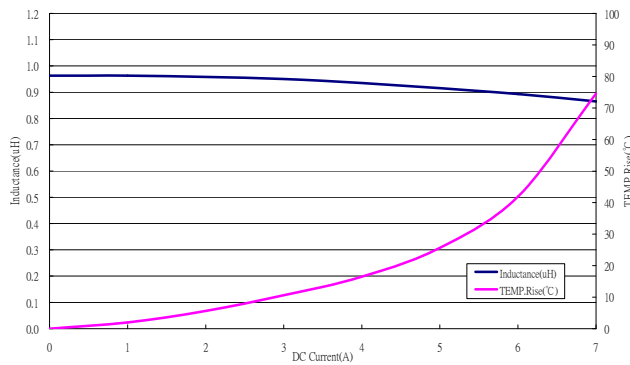
MMD-06AB-R47M-S1



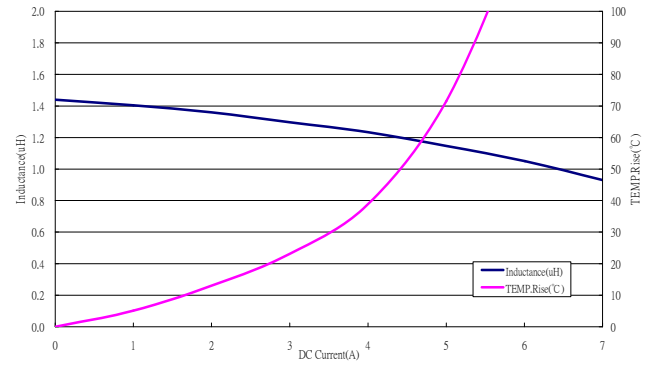
MMD-06AB-R68M-S1



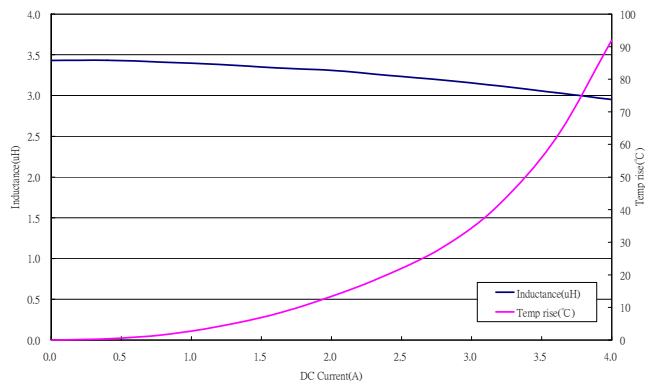
MMD-06AB-1R0M-S1



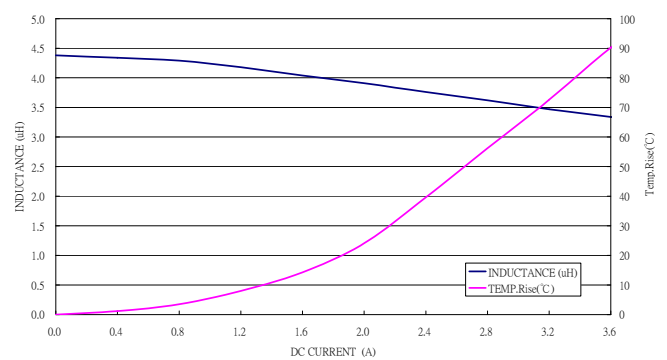
MMD-06AB-1R5M-S1



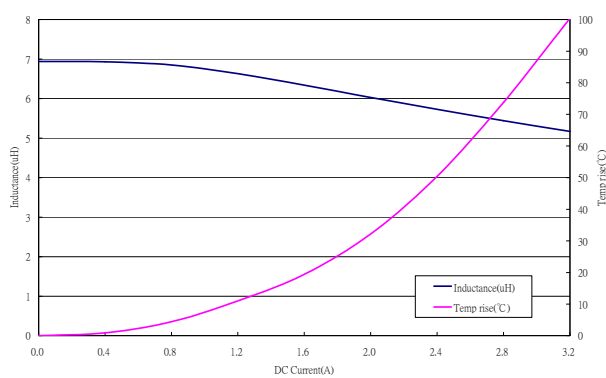
MMD-06AB-3R3M-S1



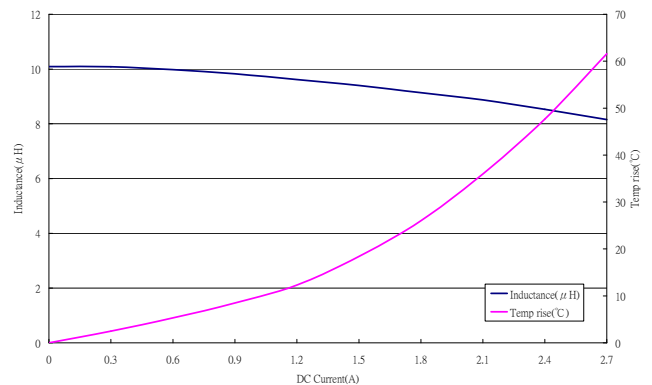
MMD-06AB-4R7M-S1



MMD-06AB-6R8M-S1



MMD-06AB-100M-S1



MAG.LAYERS

MMD-06AB-SERIES-S1