

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 - 04BZ - 100 M - S1

① Product Code

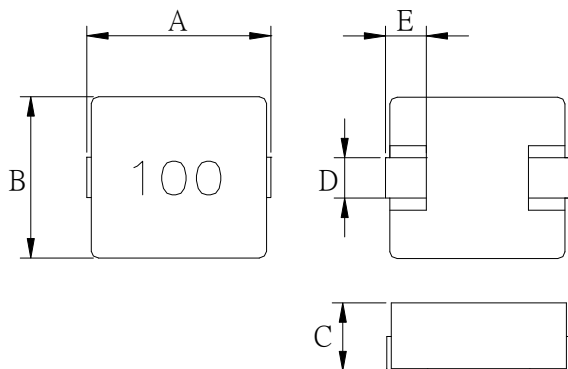
② Dimensions : 4.7 x 4.3 x 2.0 mm

③ Inductance : 100 = 10 μ H

④ Tolerance : M = $\pm 20\%$

⑤ Series Type : S1 Type

PRODUCT DIMENSION



NOTE : Dimensions in mm

PRODUCT NO.	A	B	C	D	E
MMD-04BZ	4.45 \pm 0.25	4.06 \pm 0.25	2.0 Max	2.0 \pm 0.3	0.76 \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-04BZ-R10M-X2	0.10	3.5	4.0	12	22
MMD-04BZ-R22M-X2	0.22	6.0	6.6	9.0	12.5
MMD-04BZ-R47M-X2	0.47	12.5	14	7.0	9.5
MMD-04BZ-1R0M-X2	1.0	24	27	4.5	7.0
MMD-04BZ-1R2M-X2	1.2	24	27	4.5	7.0
MMD-04BZ-1R5M-X2	1.5	38	46	4.0	6.0
MMD-04BZ-2R2M-X2	2.2	52	58	3.0	5.0
MMD-04BZ-3R3M-X2	3.3	74	87	2.5	4.0
MMD-04BZ-4R7M-S1	4.7	118	132	2.4	2.8
MMD-04BZ-6R8M-S1	6.8	162	178	2	2.1
MMD-04BZ-8R2M-S1	8.2	188	207	1.8	2.0
MMD-04BZ-100M-S1	10	256	282	1.6	1.8
MMD-04BZ-220M-S1	22	460	550	0.8	1.0

TEST FREQUENCY: 100 KHz, 0.25V

TESTING INSTRUMENT L :Agilent4284A,WK4235,CH3302/G LCR METER
CH1320,CH1320S BIAS CURRENT SOURCE

R_{dc}:CH11025,GOM802 MICRO OHMMETER

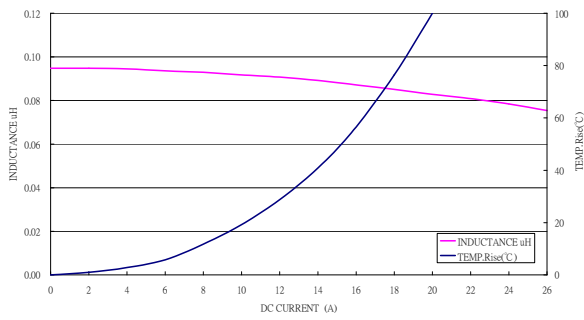
NOTES:

1. DC current (I_{dc}) that will cause an approximate Δ T 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 the worst 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.

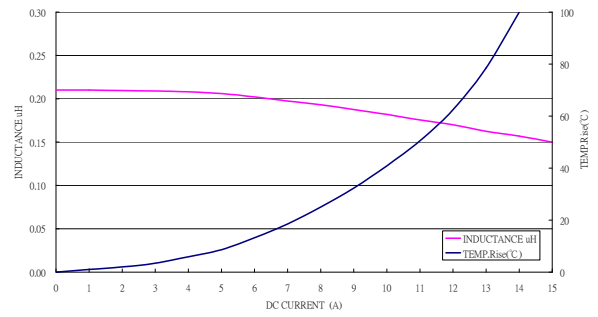
ELECTRICAL CHARACTERISTICS

Reference data

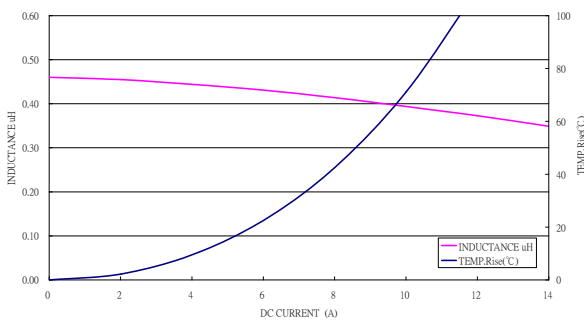
MMD-04BZ -R10M-X2



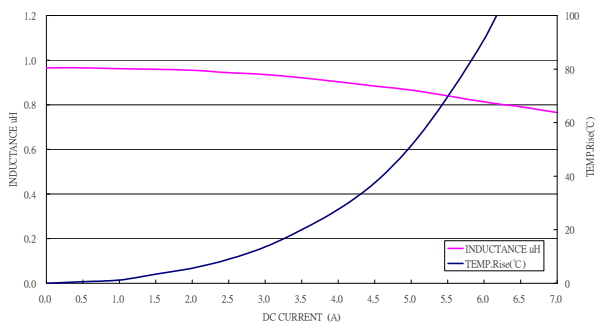
MMD-04BZ-R22M-X2



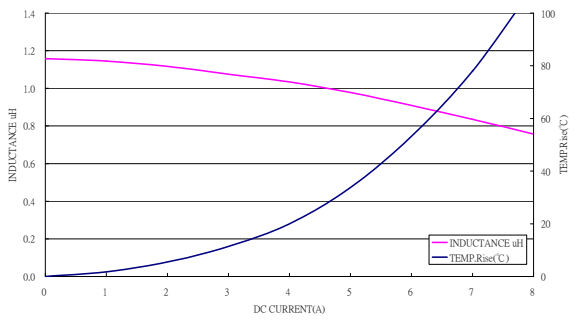
MMD-04BZ-R47M-X2



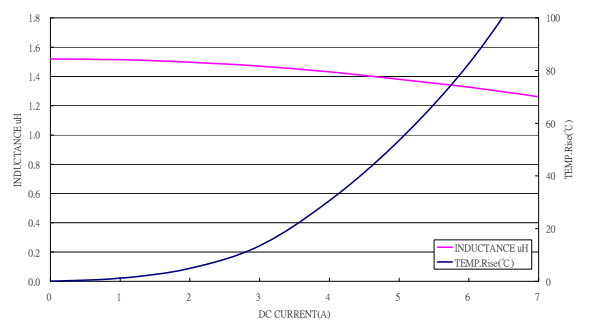
MMD-04BZ-1R0M-X2



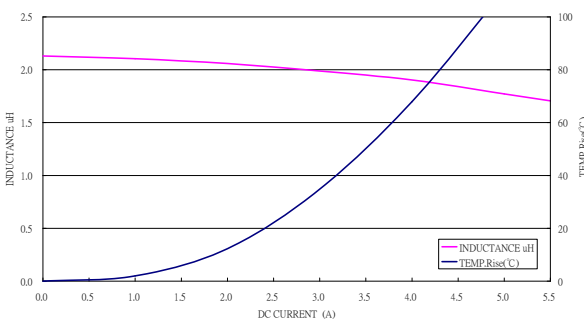
MMD-04BZ-1R2M-X2



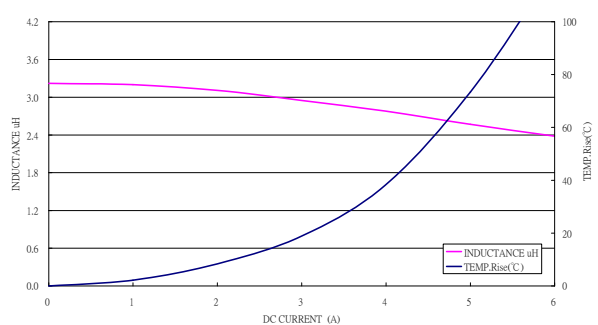
MMD-04BZ-1R5M-X2



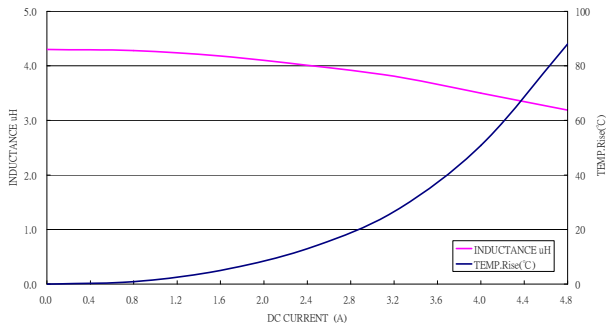
MMD-04BZ-2R2M-X2



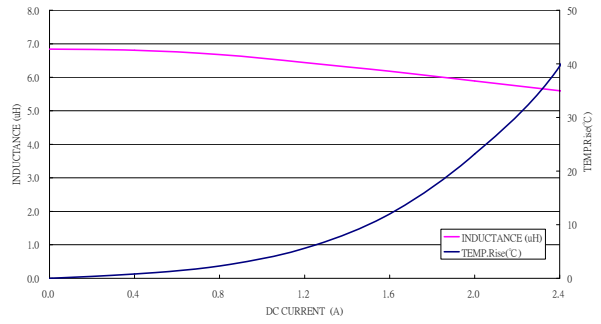
MMD-04BZ-3R3M-X2



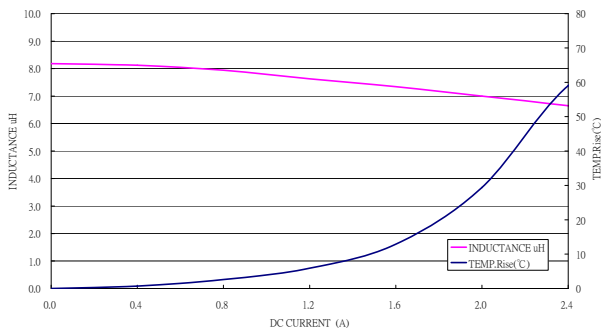
MMD-04BZ-4R7M-S1



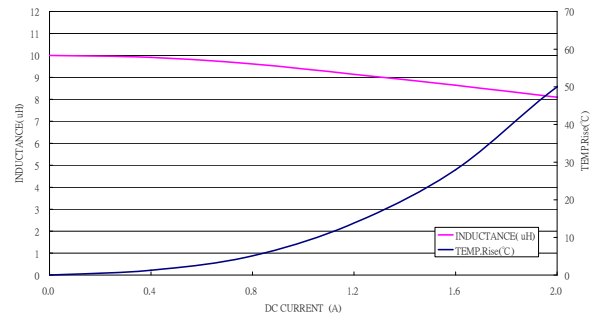
MMD-04BZ-6R8M-S1



MMD-04BZ-8R2M-S1



MMD-04BZ-100M-S1



MMD-04BZ-220M-S1

