

## FEATURES

RoHS compliant.

Super low resistance, ultra high current rating.

High performance (I sat) realized by metal dust core.

Frequency Range: up to 1MHz.

## APPLICATION

PDA, notebook, desktop, and server applications.

Low profile, high current power supplies.

DC/DC converters in distributed power systems.

DC/DC converters for field programmable gate array.

## PRODUCT IDENTIFICATION

①            ②            ③ ④    ⑤

MMD - 10CF - 1R0 M - M1F

① Product Code

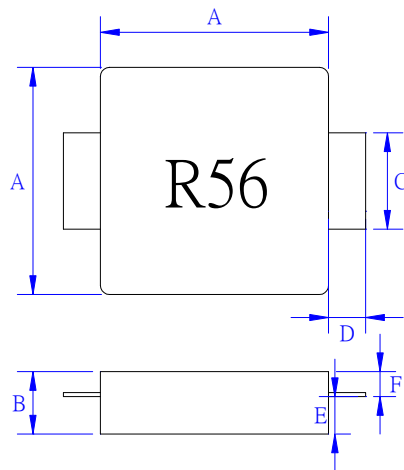
② Dimensions: 10CF = 10 x 10 x 3.6 mm

③ Inductance Code: 1R0 = 1.0  $\mu$  H

④ Tolerance: M =  $\pm 20\%$

⑤ Series Type : M1F Type

## PRODUCT DIMENSION



PRODUCT NO.	A	B	C	D	E	F
MMD-06CF-Series-M1F	$6.6 \pm 0.15$	3.6 Max	$3.0 \pm 0.3$	$2.0 \pm 0.3$	$\leq 2.1$	$1.3 \pm 0.2$
MMD-10CF-Series-M1F	$10.15 \pm 0.15$	$3.6 \pm 0.2$	$3.0 \pm 0.3$	$2.0 \pm 0.2$	$\leq 2.3$	$1.3 \pm 0.2$
MMD-12CE-Series-M1F	$12.8 \pm 0.2$	$3.5 \pm 0.2$	$3.0 \pm 0.3$	$2.0 \pm 0.2$	$\leq 2.3$	$1.3 \pm 0.2$



## MMD-06CF SPECIFICATION

PART NUMBER	INDUCTANCE Lo( $\mu$ H) $\pm$ 20% @0A	R <sub>dc</sub> (m $\Omega$ )		HEAT RATING CURRENT(I <sub>dc</sub> ) DC AMPS <sup>1</sup>	SATURATION CURRENT(I <sub>sat</sub> ) DC AMPS <sup>2</sup>
		Typ.	Max		
MMD-06CF-R47M-M1F	0.47	3.9	4.2	18	26
MMD-06CF-R68M-M1F	0.68	4.7	5.3	15.5	25
MMD-06CF-R82M-M1F	0.82	5.7	7.2	13	24
MMD-06CF-1R0M-M1F	1.0	9	10	11	22
MMD-06CF-1R5M-M1F	1.5	12	14	9	18

## MMD-10CF SPECIFICATION

PART NUMBER	INDUCTANCE Lo( $\mu$ H) $\pm$ 20% @0A	R <sub>dc</sub> (m $\Omega$ )		HEAT RATING CURRENT(I <sub>dc</sub> ) DC AMPS <sup>1</sup>	SATURATION CURRENT(I <sub>sat</sub> ) DC AMPS <sup>2</sup>
		Typ.	Max		
MMD-10CF-R47M-M1F	0.47	2.22	2.40	23.4	42
MMD-10CF-R56M-M1F	0.56	2.61	2.82	21.5	39
MMD-10CF-R68M-M1F	0.68	3.07	3.32	20.0	36
MMD-10CF-R82M-M1F	0.82	3.19	3.44	19.5	35.5
MMD-10CF-1R0M-M1F	1.0	3.46	3.74	18.5	34

## MMD-12CF SPECIFICATION

PART NUMBER	INDUCTANCE Lo( $\mu$ H) $\pm$ 20% @0A	R <sub>dc</sub> (m $\Omega$ )		HEAT RATING CURRENT(I <sub>dc</sub> ) DC AMPS <sup>1</sup>	SATURATION CURRENT(I <sub>sat</sub> ) DC AMPS <sup>2</sup>
		Typ.	Max		
MMD-12CE-R33M-M1F	0.33	1.3	1.5	36.5	62
MMD-12CE-R47M-M1F	0.47	1.6	2.0	32	55
MMD-12CE-R68M-M1F	0.68	2.3	2.5	28	49
MMD-12CE-R82M-M1F	0.82	2.6	3.0	26	45
MMD-12CE-1R0M-M1F	1.0	3.3	3.5	24	40

### NOTES:

1. I<sub>dc</sub> : DC current (A) that will cause an approximate  $\Delta$ T of 40°C
2. I<sub>sat</sub> : DC current (A) that will cause Lo to drop approximately 20%

