MDCA Series

SMD Power Indutor

Size 3012



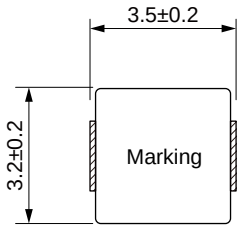
FEATUERS

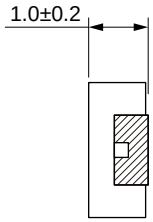
- Carbonyl Powder.
- Compact design.
- High current， low DCR，
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- High reliability.
- 100% Lead(Pb)-Free and RoHS compliant.
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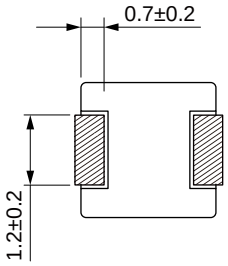
APPLICATION

- Note PC power system， incl. IMVP-6
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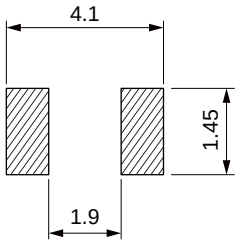
Dimensions: [mm]







Land Pattern: [mm]



Electrical Properties:

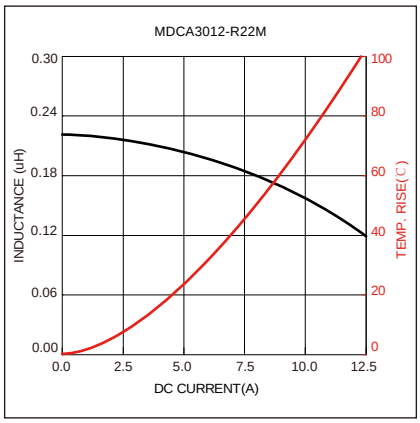
Part No	Inductance @ 100KHz/1V	Tolerance	Temperature Rise Current Typ.	Current Typ.	DC Resistance Typ.	DC Resistance Max.
MDCA3012-R22M	0.22	±20%		10.0	14.0	17.0
MDCA3012-R33M	0.33	±20%	6.2	9.2	16.0	20.0
MDCA3012-R36M	0.36	±20%	6.0			23.0
MDCA3012-R47M	0.47	±20%		7.2		30.0
		±20%		6.6	31.0	36.0
MDCA3012-R68M	0.68	±20%	4.0	6.1	34.0	40.0
MDCA3012-R82M	0.82	±20%			41.0	48.0
MDCA3012-1R0M	1.00	±20%	3.3			60.0
		±20%	3.0	4.0	71.0	
MDCA3012-2R2M	2.20	±20%	2.7	3.4	98.0	
MDCA3012-3R3M	3.30	±20%	2.0	3.1	191	210
MDCA3012-4R7M	4.70	±20%	1.6	2.8	266	293
		±20%		2.2	310	360
MDCA3012-6R8M	6.80	±20%	1.4	2.0	360	400

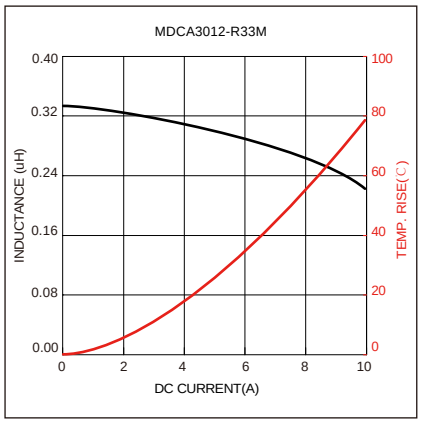
KOHER Electronic
4546 BATES DRIVE, YORBLINDA CA 92886 USA
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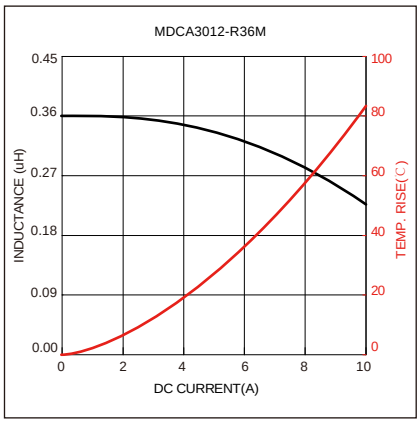
Part No	Inductance @ 100KHz/1V	Tolerance	Temperature Rise Current Typ.	Current Typ.	DC Resistance Typ.	DC Resistance Max.
MDCA3012-8R2M	8.20	±20%	1.2	1.7	420	463
MDCA3012-100M	10.0	±20%	1.0	1.4	498	

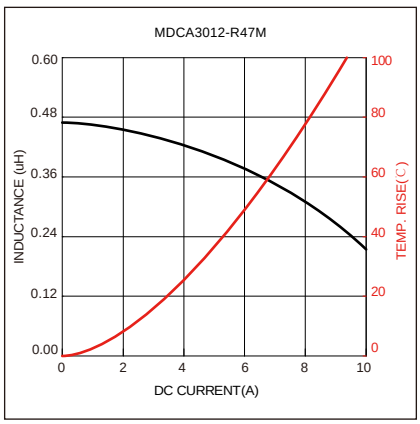
Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

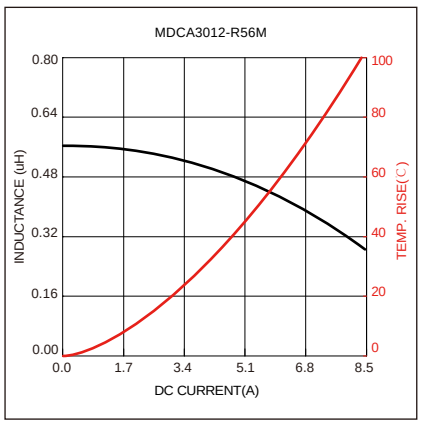
Typical Electrical Characteristics:

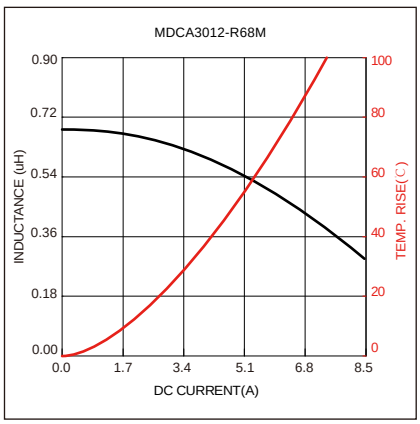


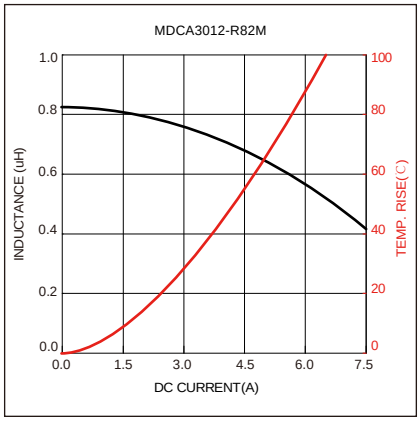


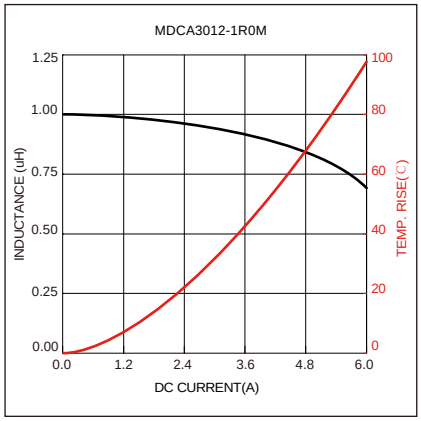


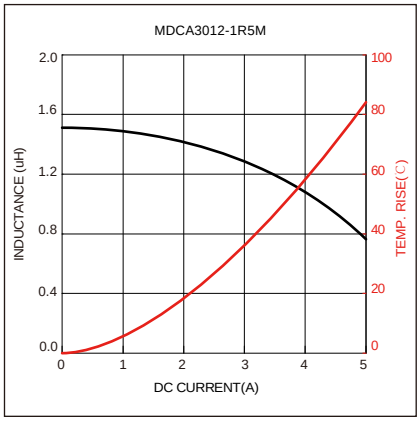


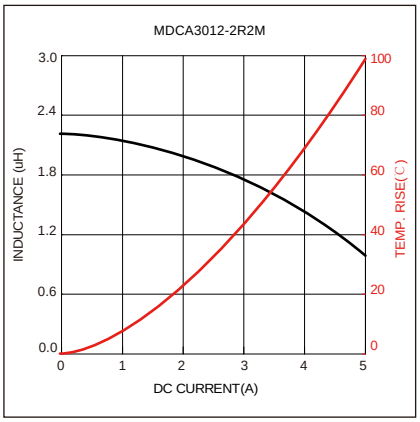


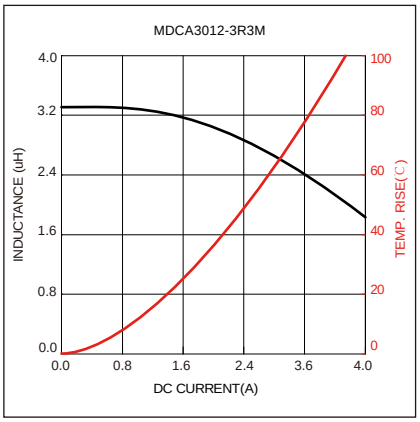


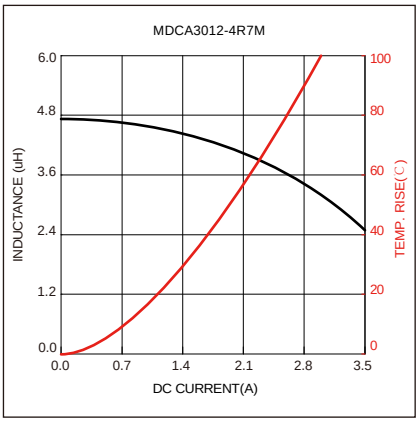


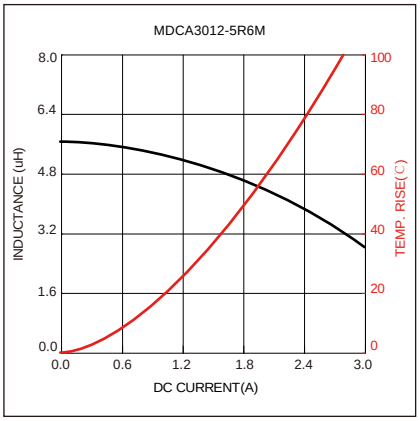


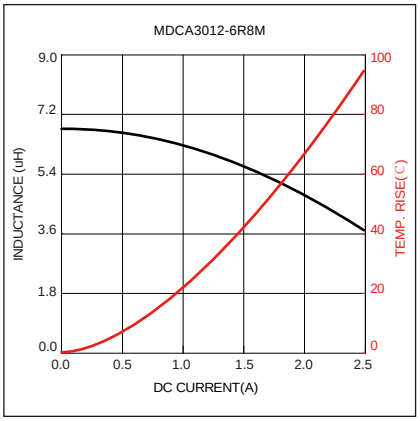


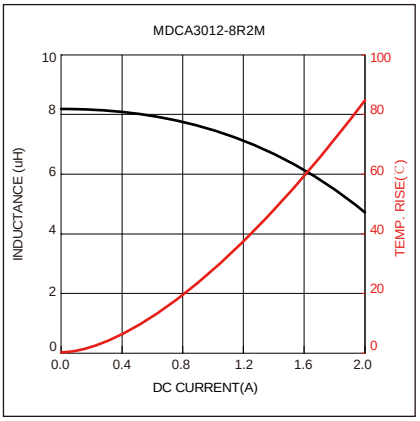

MDCA3012-2R2M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
3.0
2.4
1.8
1.2
0.6
0.0
100
80
60
40
20
0
0
1
2
3
4
5

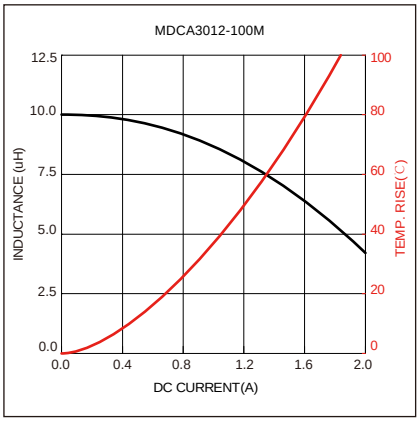

MDCA3012-3R3M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
4.0
3.2
2.4
1.6
0.8
0.0
100
80
60
40
20
0
0.0
0.8
1.6
2.4
3.6
4.0


MDCA3012-4R7M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
6.0
4.8
3.6
2.4
1.2
0.0
100
80
60
40
20
0
0.0
0.7
1.4
2.1
2.8
3.5


MDCA3012-5R6M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
8.0
6.4
4.8
3.2
1.6
0.0
100
80
60
40
20
0
0.0
0.6
1.2
1.8
2.4
3.0


MDCA3012-6R8M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
9.0
7.2
5.4
3.6
1.8
0.0
100
80
60
40
20
0
0.0
0.5
1.0
1.5
2.0
2.5


MDCA3012-8R2M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
10
8
6
4
2
0
100
80
60
40
20
0
0.0
0.4
0.8
1.2
1.6
2.0


MDCA3012-100M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
12.5
10.0
7.5
5.0
2.5
0.0
100
80
60
40
20
0
0.0
0.4
0.8
1.2
1.6
2.0