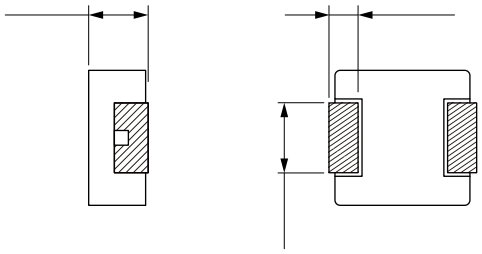
MDCA Series
SMD Power Indutor
Size 5030

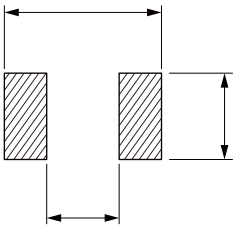
FEATUERS

-
-
- , , high e ciency.
- Very low acous c noise and very low leakage flux noise.
-
-
- AEC-Q200 qualified
- Opera ng temperature: -55 to +125 ℃ (including self-temperature rise)
- Quan ty:2000pcs

Dimensions: [mm]



Land Pattern: [mm]



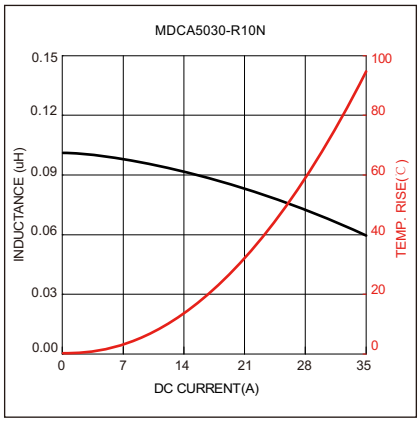
Electrical Properties:

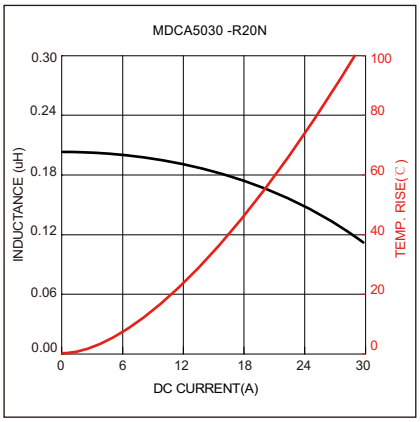
MDCA5030-R10N					2.50	
MDCA5030-R20N				25.0		
MDCA5030-R22M			15.5			
MDCA5030-R33M						5.00
MDCA5030-R47M						
MDCA5030-R68M			8.50			
MDCA5030-1R0M						
MDCA5030-1R2M			6.50			
MDCA5030-1R5M	1.50					25.0
MDCA5030-2R2M			5.50		25.0	35.0
MDCA5030-3R3M			5.00			
MDCA5030-3R6M						54.0
MDCA5030-4R7M					50.0	53.0
MDCA5030-5R6M	5.60		4.25	4.50	55.0	
MDCA5030-6R8M						

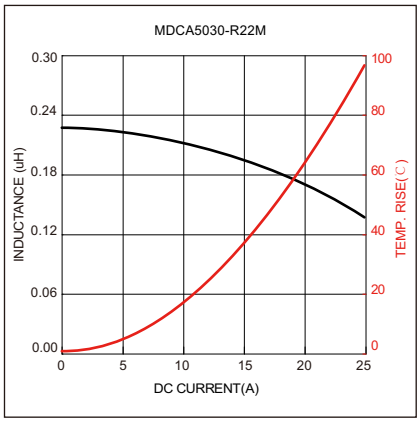
MDCA5030-100M			2.75	3.50		
MDCA5030-150M	15.0				165	
MDCA5030-180M					195	
MDCA5030-220M						250

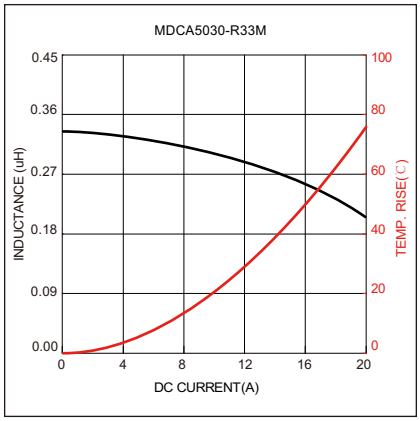
Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

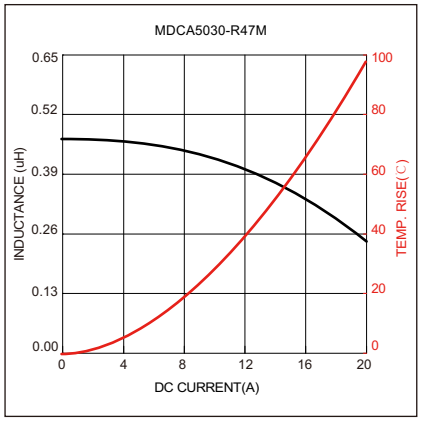
Typical Electrical Characteristics:

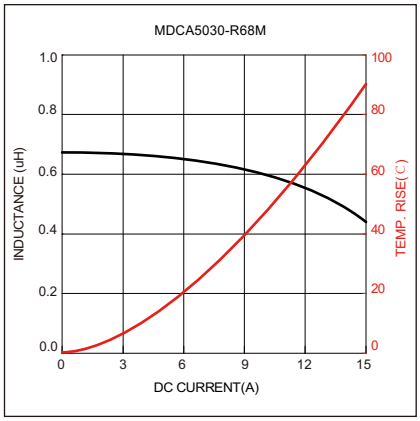


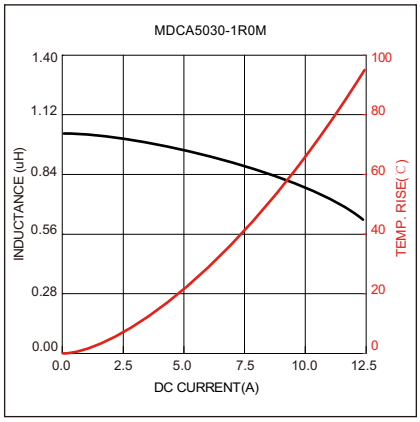


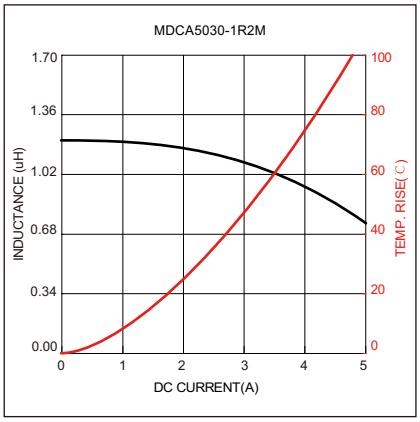


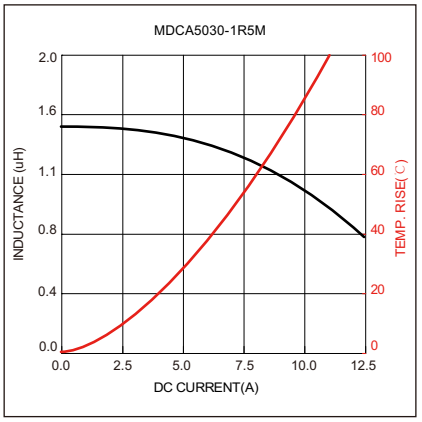


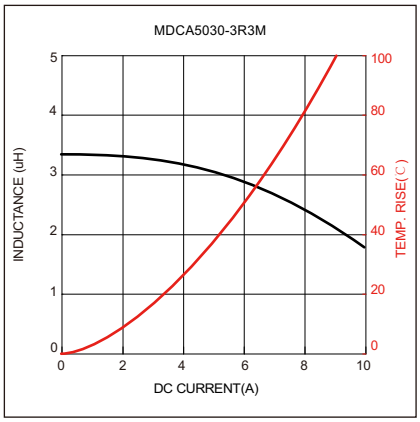


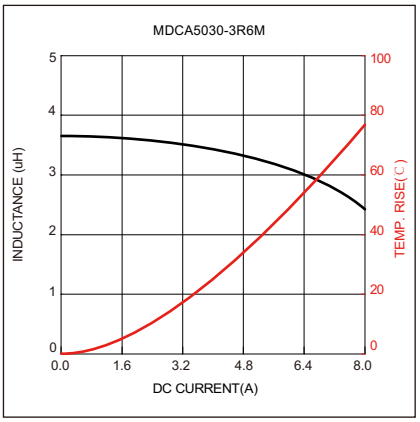


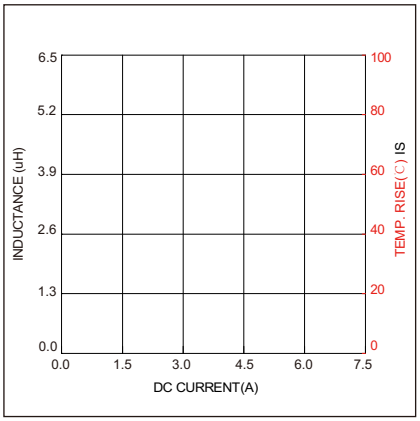


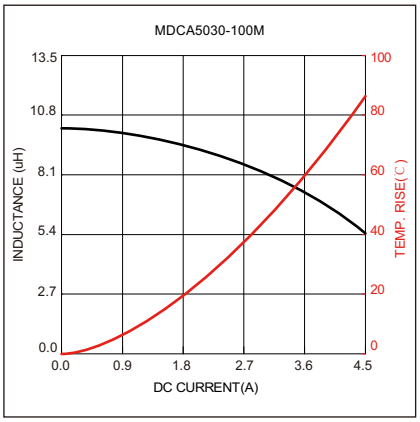


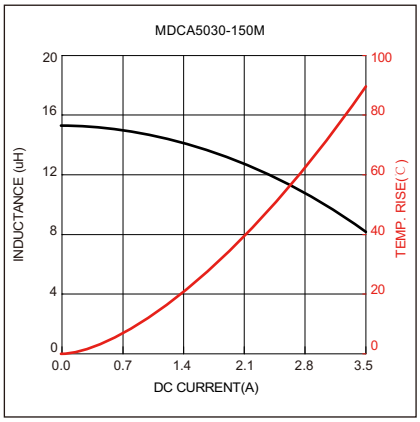


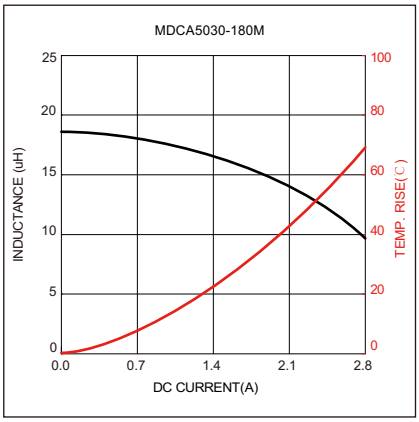

MDCA5030-3R3M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
0 1 2 3 4 5
0 20 40 60 80 100
0 2 4 6 8 10

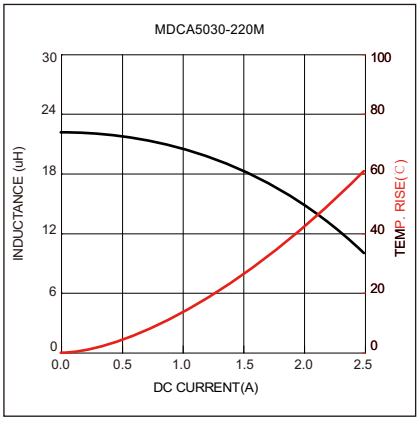

MDCA5030-3R6M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
0 1 2 3 4 5
0 20 40 60 80 100
0.0 1.6 3.2 4.8 6.4 8.0


INDUCTANCE (uH)
TEMP. RISE(℃)
IS
DC CURRENT(A)
0.0 1.3 2.6 3.9 5.2 6.5
0 20 40 60 80 100
0.0 1.5 3.0 4.5 6.0 7.5

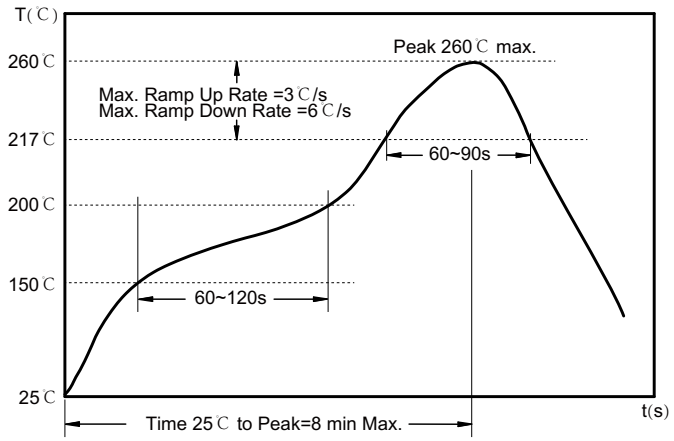

MDCA5030-100M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
0.0 2.7 5.4 8.1 10.8 13.5
0 20 40 60 80 100
0.0 0.9 1.8 2.7 3.6 4.5


MDCA5030-150M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
0 4 8 12 16 20
0 20 40 60 80 100
0.0 0.7 1.4 2.1 2.8 3.5


MDCA5030-180M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
0 5 10 15 20 25
0 20 40 60 80 100
0.0 0.7 1.4 2.1 2.8


MDCA5030-220M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
0 6 12 18 24 30
0 20 40 60 80 100
0.0 0.5 1.0 1.5 2.0 2.5

Soldering Reflow:



Preheat condition: 150 ~200℃/ 60~120 sec.

Allowed time above 217℃: 60~90 sec.

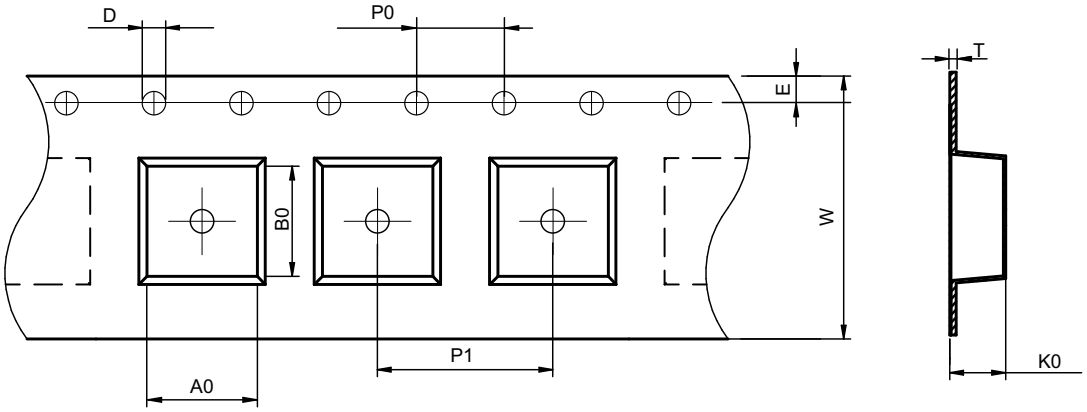
Max temperature: 260℃.

Max time at max temperature: 10 sec.

Allowed Reflow time: 2x max.

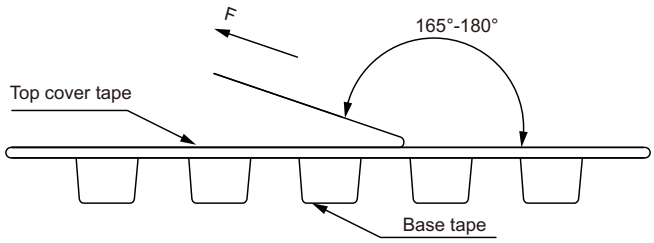
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
5030	5.5±0.1	5.9±0.1	1.5±0.1	4.0±0.1	8.0±0.1	12.0±0.3	3.3±0.1	1.75±0.1	0.35±0.05

Peel force of top cover tape:

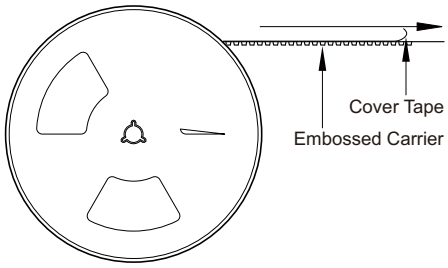


The peel force of top cover tape shall be between 0.1 to 1.3 N

Product Marking:

Marking	K+Printing (Inductance+period)

Reel Dimension：[mm]



Packaging Quantity: