MDSA Series

SMD Low Profile High Current Molded Inductor

Size 5030

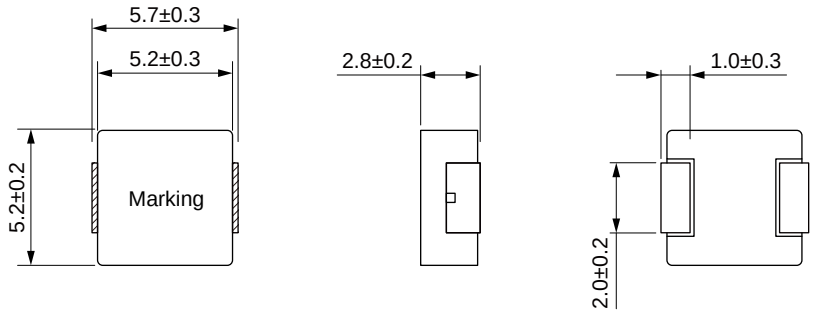
FEATURES

- Shielded construc on
- Capable of corresponding high frequency .
- Low loss realized with low DCR.
- High performance (Isat) realized by metal dust core.
- Ultra low buzz noise, due to composite construc on.
- 100% Lead(Pb)-Free and RoHS compliant.
- AEC-Q200 qualified
- Opera ng temperature: -55 to +155 °C(including self-temperature rise)
- Quan ty: 2000PCS

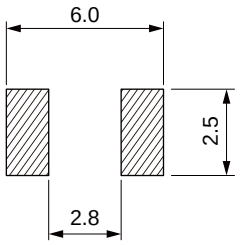
APPLICATION

- Noise filter for various drive circuitry requiring high temp. opera on and peak current handing capability.
- Boost-Converter
- Buck-Converter DC/DC

Dimensions: [mm]



Land Pattern: [mm]



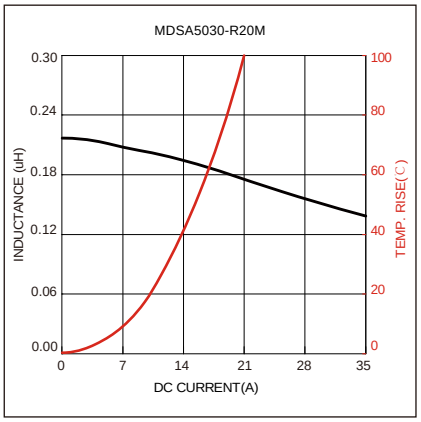
Electrical Properties:

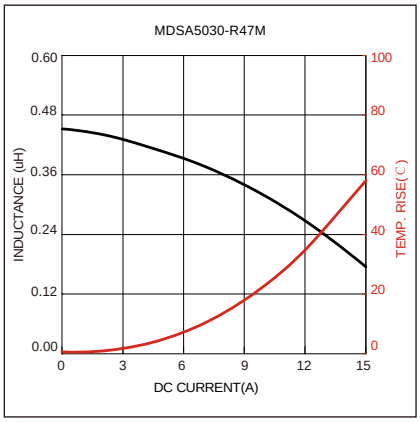
Part No	Inductance @ 100KHz/1V	Tolerance	Temperature Rise Current Typ. (A)	Current Typ. (A)	DC Resistance Typ.	DC Resistance Max.
MDSA5030-R20M	0.20	±20%	13.8	19.6	3.80	4.10
MDSA5030-R47M	0.47	±20%	13.2	9.8	5.30	6.20
MDSA5030-R68M	0.68	±20%	12.3	8.7	7.70	8.80
MDSA5030-R82M	0.82	±20%	9.8	8.5	8.20	9.40
MDSA5030-1R0M	1.00	±20%	8.9	8.4	11.2	12.6
MDSA5030-1R5M	1.50	±20%	7.9	7.3	13.9	16.0
MDSA5030-2R2M	2.20	±20%	6.9	6.3	22.0	25.8
MDSA5030-3R3M	3.30	±20%	6.3	5.9	28.3	34.0
MDSA5030-4R7M	4.70	±20%	5.5	5.2	39.0	45.0

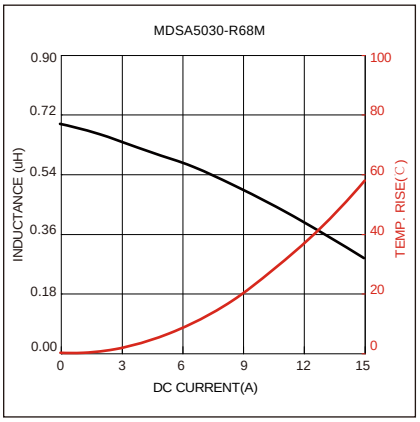
Part No	Inductance @ 100KHz/1V	Tolerance	Temperature Rise Current Typ. (A)	Current Typ. (A)	DC Resistance Typ.	DC Resistance Max.
MDSA5030-5R6M	5.60	±20%	4.9	4.5	52.0	60.0
MDSA5030-6R8M	6.80	±20%	4.3	3.4	58.0	68.0
MDSA5030-100M	10.0	±20%	3.7	2.4	89.0	105.0
MDSA5030-150M	15.0	±20%	2.8	2.1	142.0	173.0

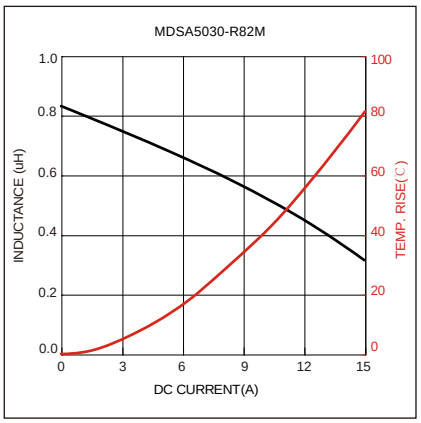
Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

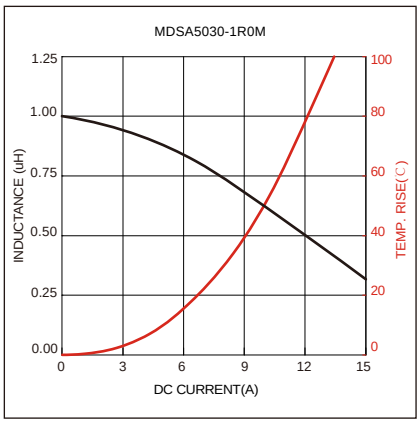
Typical Electrical Characteristics:

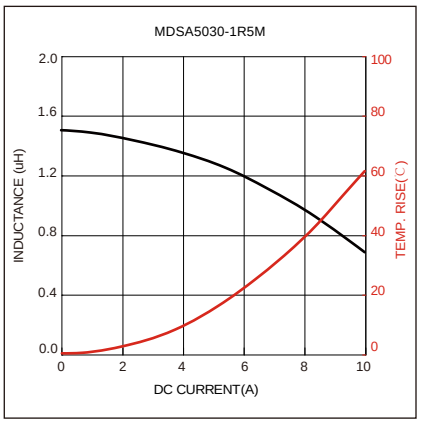


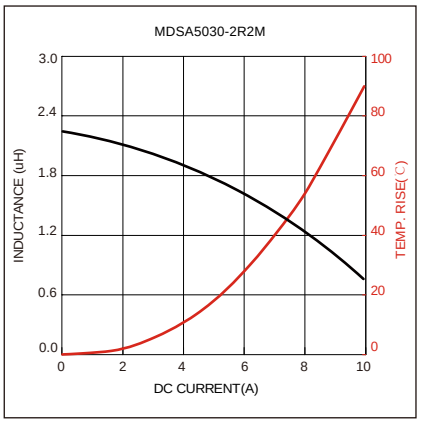


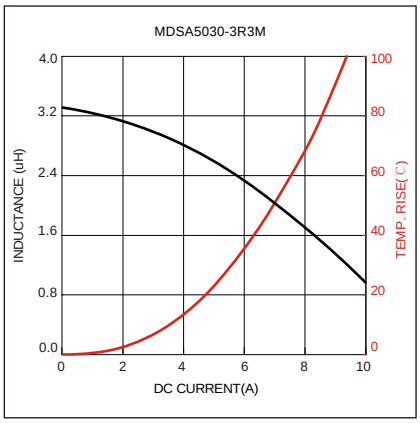


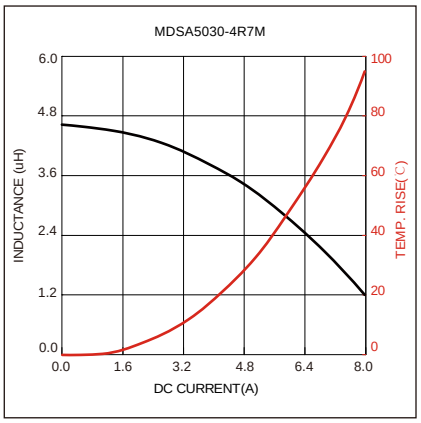


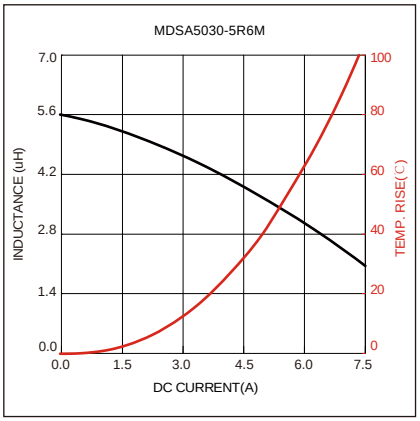


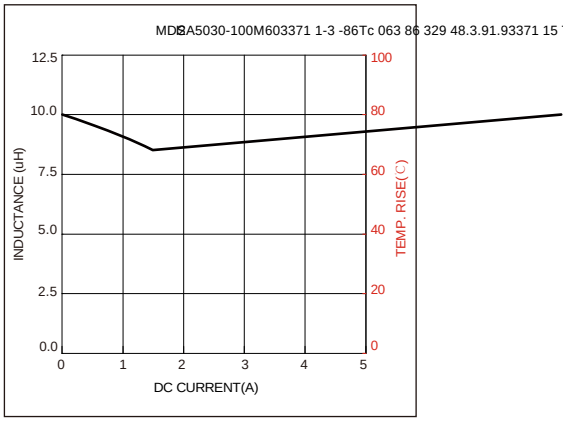


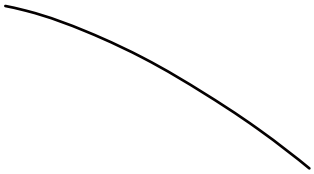












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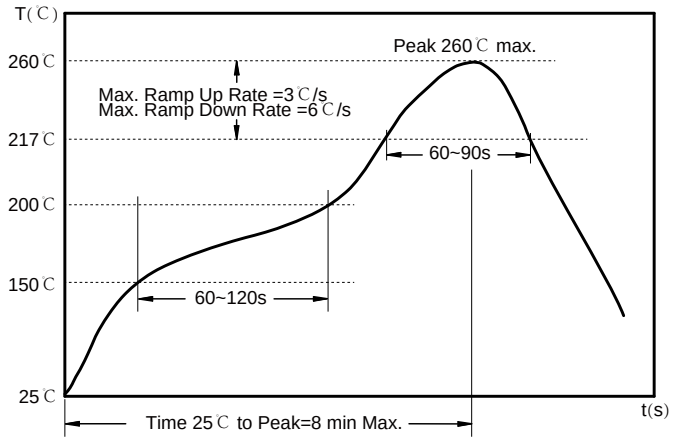
4546 BATES DRIVE, YORBLINDA CA 92886 USA
714-325-4789 Contact@kohergroup.com

Soldering Reflow:



Preheat condition: 150 ~200℃/ 60~120 se

Allowed time above 217℃: 60~90

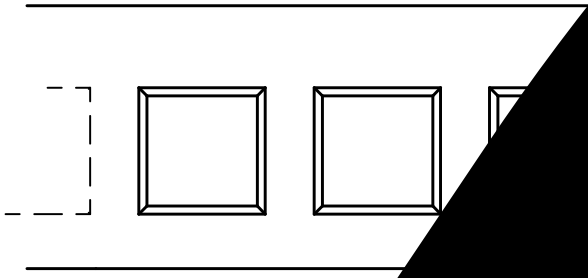
Max temperature: 260℃.

Max time at max temper

Allowed Reflow tim

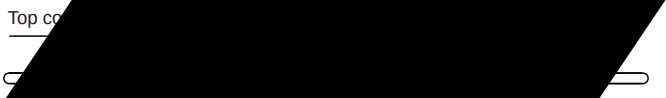
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm			K0 (mm)	E (mm)	T (mm)
MDSA5030	5.5±0.1	5.5		±0.3	3.3±0.1	1.75±0.1	0.35±0.05

Peel force of top c



tween 0.1 to 1.3 N

nting (Inductance)

Reel Dimension：[mm]

Packaging Quantity: