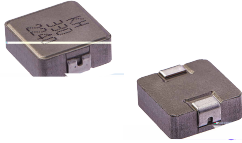


MDA Series

SMD Low Profile High Current Molded Inductor

Size 1040



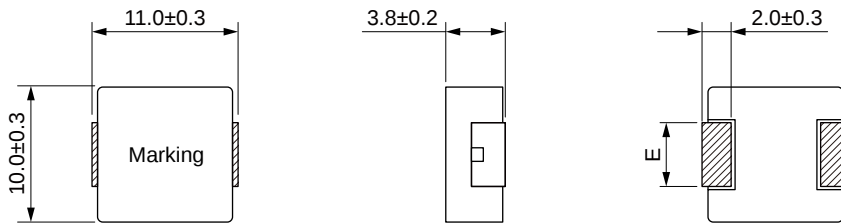
FEATURES

- Capable of corresponding high frequency .
- Low loss realized with low DCR.
- High performance (Isat) realized by metal dust core.
- 100% Lead(Pb)-Free and RoHS compliant.

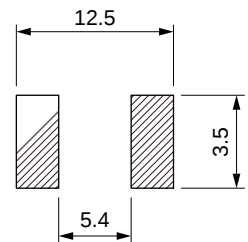
APPLICATION

- HVAC
- Audio subsystem
- Digital instrument cluster

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

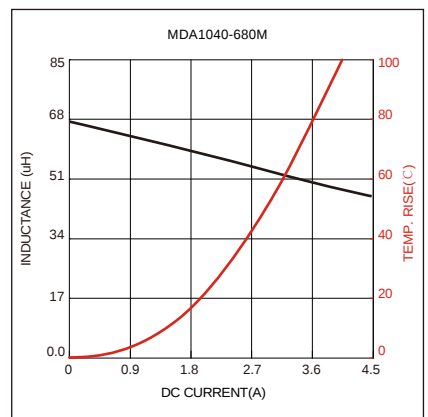
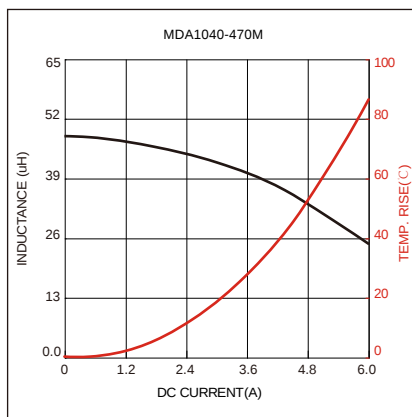
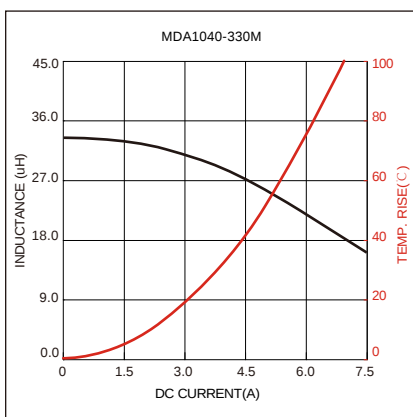
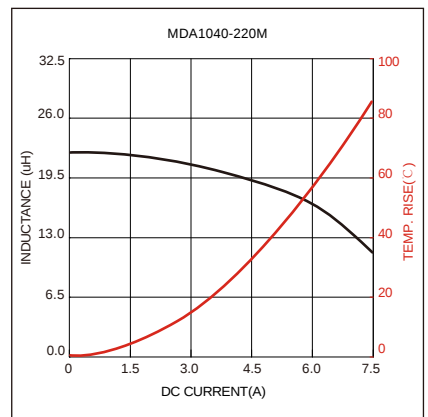
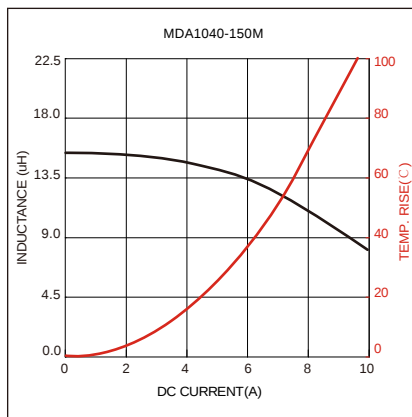
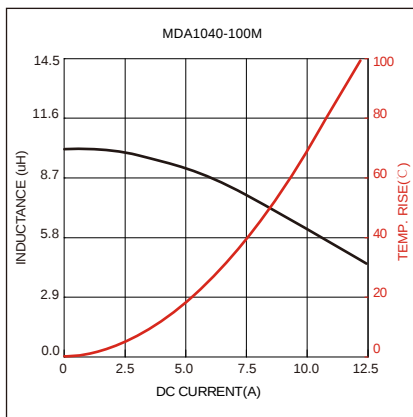
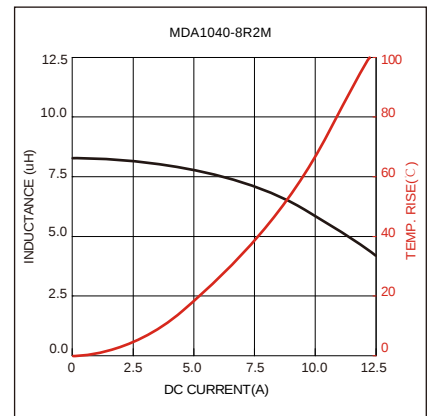
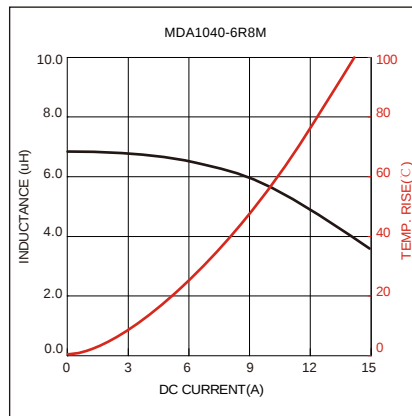
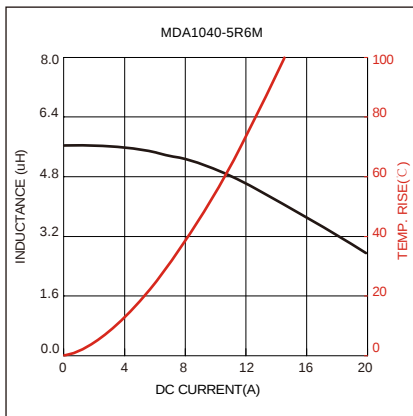
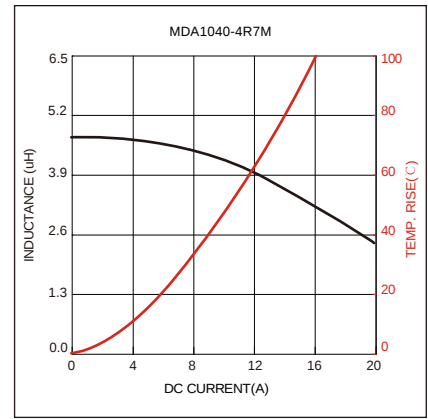
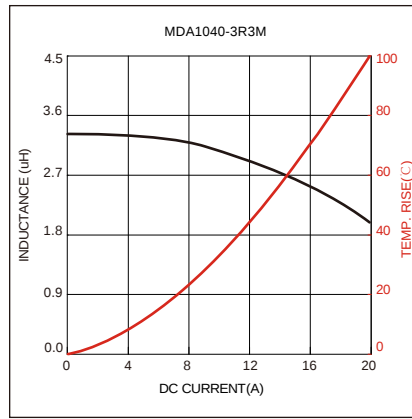
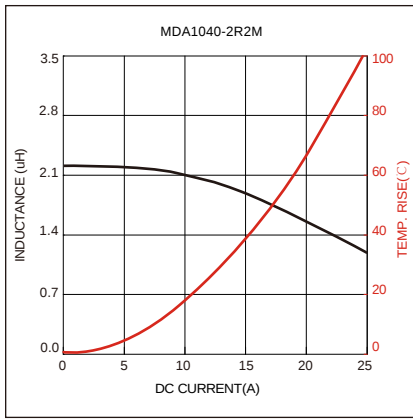
Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)	E
MDA1040-R15N	0.15	±30%	44.0	38.0	82.0	75.0	0.50	0.60	3.0±0.3
MDA1040-R22M	0.22	±20%	36.0	33.0	70.0	60.0	0.72	0.83	3.0±0.3
MDA1040-R36M	0.36	±20%	33.0	29.0	51.0	45.0	1.05	1.18	3.0±0.3
MDA1040-R47M	0.47	±20%	32.0	28.0	46.0	40.0	1.30	1.50	3.0±0.3
MDA1040-R56M	0.56	±20%	25.0	23.0	34.0	29.0	1.60	1.80	2.5±0.3
MDA1040-R68M	0.68	±20%	23.0	20.0	31.0	28.0	1.90	2.20	2.5±0.3
MDA1040-1R0M	1.00	±20%	20.0	18.0	29.0	26.0	2.90	3.25	2.5±0.3
MDA1040-1R5M	1.50	±20%	17.5	16.0	26.0	22.0	3.70	4.20	2.5±0.3
MDA1040-1R8M	1.80	±20%	16.5	15.0	23.0	20.0	5.10	5.70	3.0±0.3
MDA1040-2R2M	2.20	±20%	15.0	13.0	20.0	16.0	5.80	6.70	3.0±0.3
MDA1040-3R3M	3.30	±20%	11.0	10.0	17.5	14.0	10.5	11.8	3.0±0.3
MDA1040-4R7M	4.70	±20%	8.80	8.0	15.2	13.0	15.8	19.0	3.0±0.3
MDA1040-5R6M	5.60	±20%	8.00	7.2	14.1	11.5	19.0	22.8	3.0±0.3
MDA1040-6R8M	6.80	±20%	7.80	6.8	12.2	11.0	22.0	24.5	3.0±0.3

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Saturation Current Typ. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)	E
MDA1040-8R2M	8.20	±20%	7.60	9.50	25.0	28.0	3.0±0.3
MDA1040-100M	10.0	±20%	7.50	8.60	27.0	30.0	3.0±0.3
MDA1040-150M	15.0	±20%	6.25	7.00	41.0	45.0	3.0±0.3
MDA1040-220M	22.0	±20%	5.00	6.20	58.0	66.0	3.0±0.3
MDA1040-330M	33.0	±20%	4.40	5.50	84.0	91.0	3.0±0.3
MDA1040-470M	47.0	±20%	3.50	4.00	125	143	3.0±0.3
MDA1040-680M	68.0	±20%	2.60	3.20	192	210	3.0±0.3

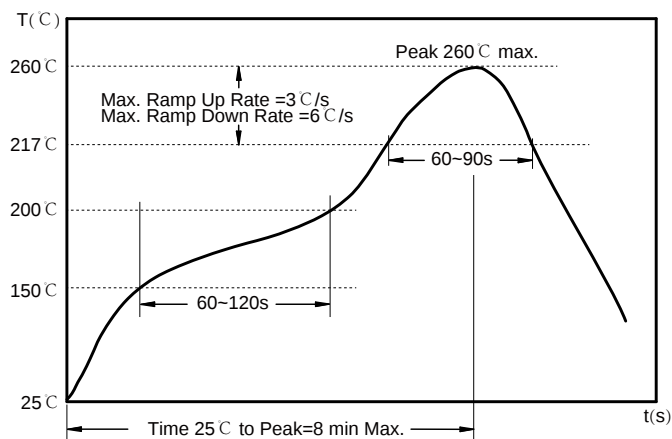
Saturation Current will cause L to drop approximately 30%

Temperature Rise Current: The actual value of DC current when the temperature rise is $\Delta 60 \pm 11^\circ\text{C}$ at $T_{\text{f}} = 38.906^\circ\text{C}$ and $T_{\text{d}} = 0^\circ\text{C}$ at $T_{\text{f}} = 110^\circ\text{C}$

Typical Electrical Characteristics:



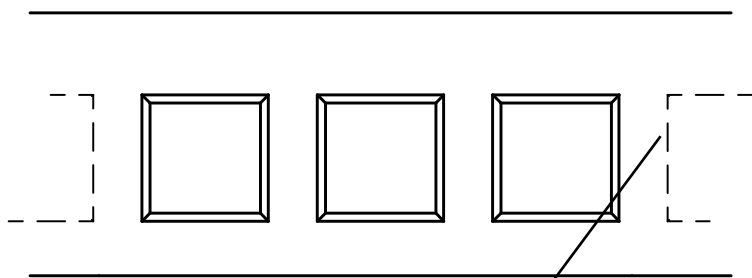
Soldering Reflow:



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.

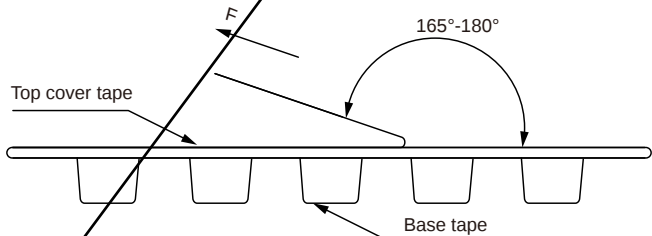
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDA1040	10.4±0.1	11.6±0.1	1.5±0.1	4.0±0.1	16.0±0.1	24.0±0.3	4.3±0.1	1.75±0.1	0.35±0.05

Peel force of top cover tape.

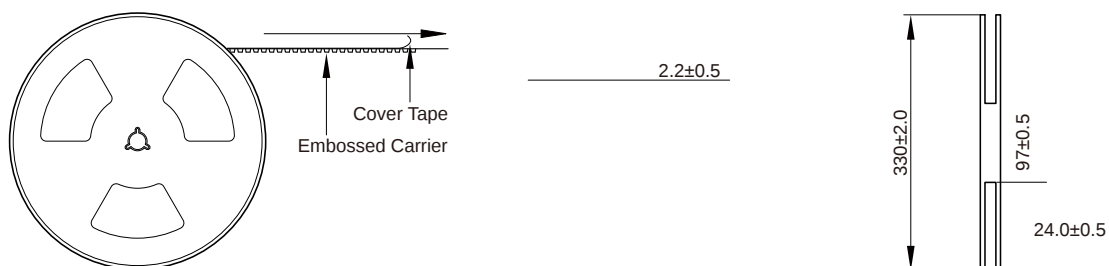


The peel force of top cover tape shall be between 0.1 to 1.3 N

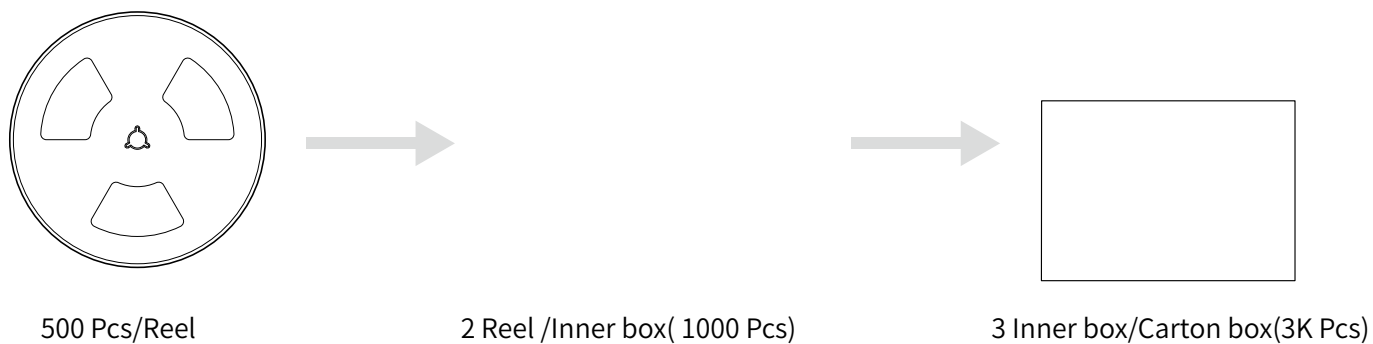
Product Marking:

Marking	KH+Printing (Inductance+period)
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Reel Dimension: [mm]



Packaging Quantity:



Cautions and Warnings:

Storage Conditions:

Operation Instructions: