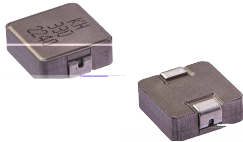


# MDA Series

## SMD Low Profile High Current Molded Inductor

### Size 1040



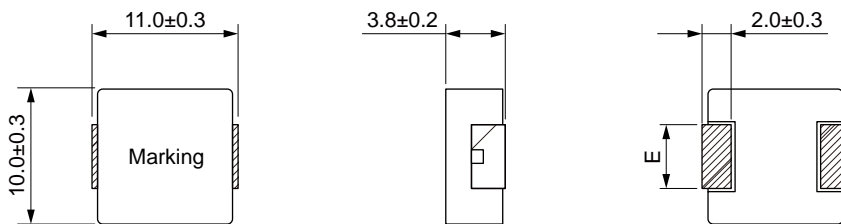
#### FEATURES

- Shielded construction
- 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 construction.
- 100% Lead(Pb)-Free and RoHS compliant.
- AEC-Q200 qualified
- Operating temperature: -55 to +155 °C (including self-temperature rise)
- Quantity: 500PCS

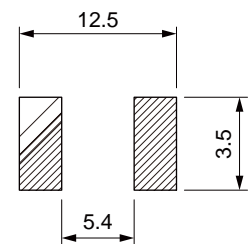
#### APPLICATION

- Headlamps, tail lamps and interior lighting
- HVAC
- Doors, window lift and seat control
- Audio subsystem
- Digital instrument cluster
- In-Vehicle Infotainment and navigation

#### Dimensions: [mm]



#### Land Pattern: [mm]



#### Electrical Properties:

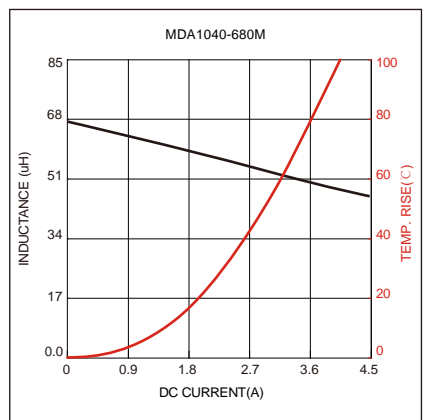
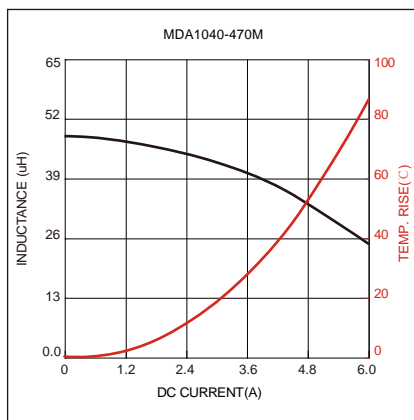
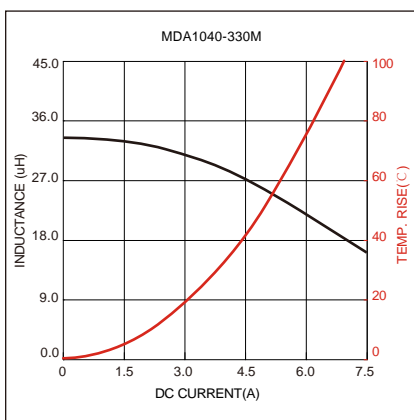
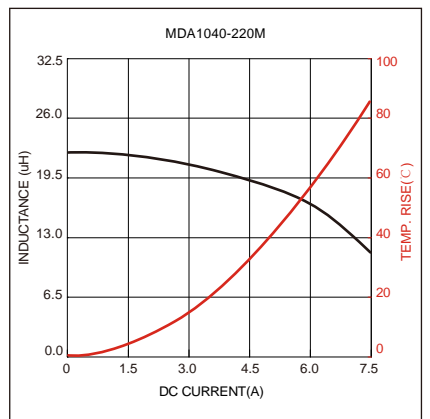
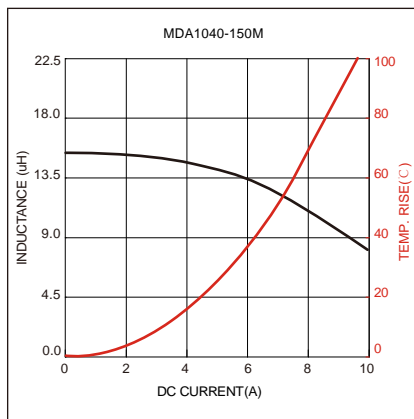
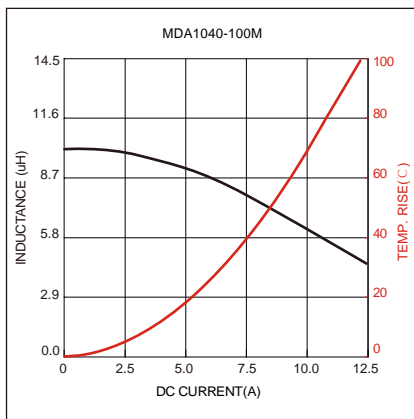
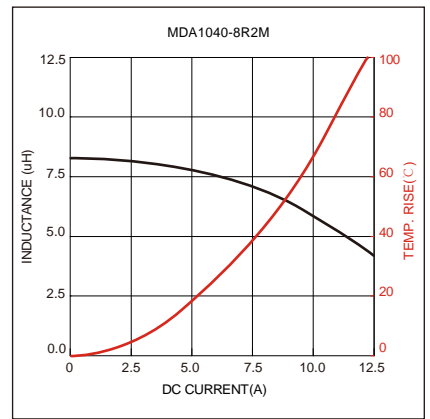
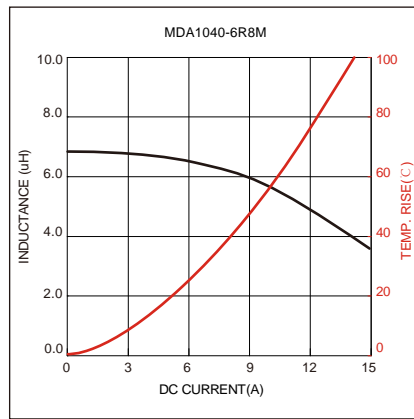
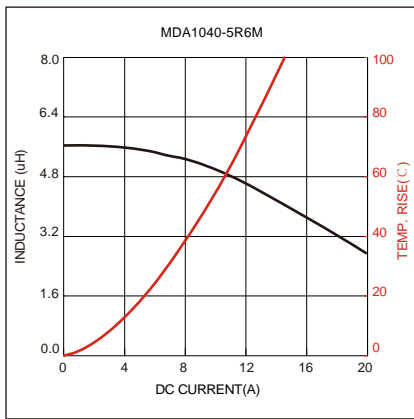
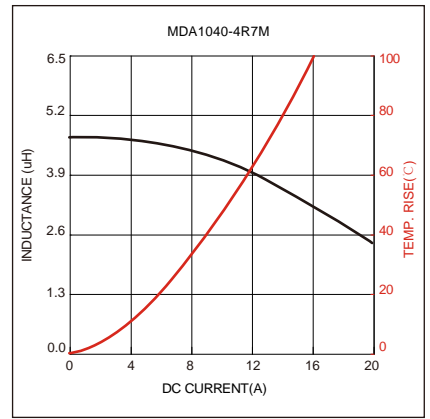
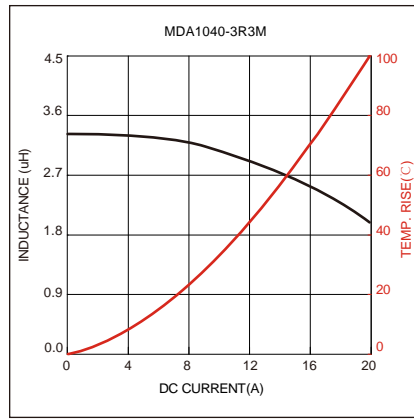
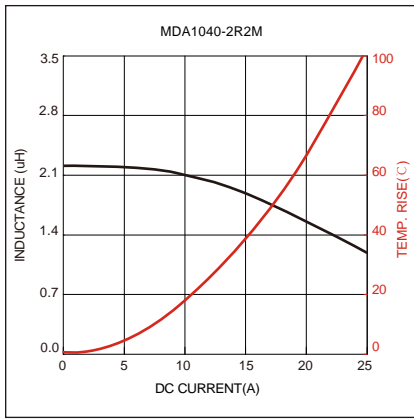
	( $\mu\text{H}$ )				Saturation	Saturation	( $\text{m}\Omega$ )	( $\text{m}\Omega$ )	
MDA1040-R15N	0.15	$\pm 30\%$	44.0	38.0	82.0	75.0	0.50	0.60	3.0 $\pm$ 0.3
MDA1040-R22M	0.22	$\pm 20\%$	36.0	33.0	70.0	60.0	0.72	0.83	3.0 $\pm$ 0.3
MDA1040-R36M	0.36	$\pm 20\%$	33.0	29.0	51.0	45.0	1.05	1.18	3.0 $\pm$ 0.3
MDA1040-R47M	0.47	$\pm 20\%$	32.0	28.0	46.0	40.0	1.30	1.50	3.0 $\pm$ 0.3
MDA1040-R56M	0.56	$\pm 20\%$	25.0	23.0	34.0	29.0	1.60	1.80	2.5 $\pm$ 0.3
MDA1040-R68M	0.68	$\pm 20\%$	23.0	20.0	31.0	28.0	1.90	2.20	2.5 $\pm$ 0.3
MDA1040-1R0M	1.00	$\pm 20\%$	20.0	18.0	29.0	26.0	2.90	3.25	2.5 $\pm$ 0.3
MDA1040-1R5M	1.50	$\pm 20\%$	17.5	16.0	26.0	22.0	3.70	4.20	2.5 $\pm$ 0.3
MDA1040-1R8M	1.80	$\pm 20\%$	16.5	15.0	23.0	20.0	5.10	5.70	3.0 $\pm$ 0.3
MDA1040-2R2M	2.20	$\pm 20\%$	15.0	13.0	20.0	16.0	5.80	6.70	3.0 $\pm$ 0.3
MDA1040-3R3M	3.30	$\pm 20\%$	11.0	10.0	17.5	14.0	10.5	11.8	3.0 $\pm$ 0.3
MDA1040-4R7M	4.70	$\pm 20\%$	8.80	8.0	15.2	13.0	15.8	19.0	3.0 $\pm$ 0.3
MDA1040-5R6M	5.60	$\pm 20\%$	8.00	7.2	14.1	11.5	19.0	22.8	3.0 $\pm$ 0.3
MDA1040-6R8M	6.80	$\pm 20\%$	7.80	6.8	12.2	11.0	22.0	24.5	3.0 $\pm$ 0.3

	( $\mu\text{H}$ )			Saturation	( $\text{m}\Omega$ )	( $\text{m}\Omega$ )	
MDA1040-8R2M	8.20	$\pm 20\%$	7.60	9.50	25.0	28.0	$3.0 \pm 0.3$
MDA1040-100M	10.0	$\pm 20\%$	7.50	8.60	27.0	30.0	$3.0 \pm 0.3$
MDA1040-150M	15.0	$\pm 20\%$	6.25	7.00	41.0	45.0	$3.0 \pm 0.3$
MDA1040-220M	22.0	$\pm 20\%$	5.00	6.20	58.0	66.0	$3.0 \pm 0.3$
MDA1040-330M	33.0	$\pm 20\%$	4.40	5.50	84.0	91.0	$3.0 \pm 0.3$
MDA1040-470M	47.0	$\pm 20\%$	3.50	4.00	125	143	$3.0 \pm 0.3$
MDA1040-680M	68.0	$\pm 20\%$	2.60	3.20	192	210	$3.0 \pm 0.3$

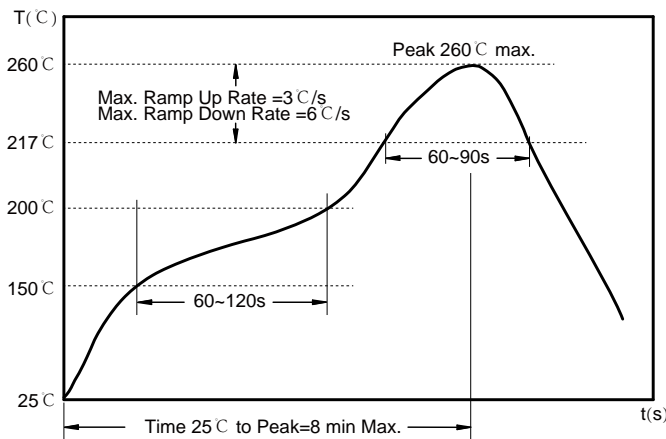
Saturation Current will cause L to drop approximately 30%

Temperature Rise Current: The actual value of DC current when the temperature rise is  $\Delta$

### Typical Electrical Characteristics:



## Soldering Reflow:



Preheat condition: 150 ~200°C / 60~120 sec.

Allowed time above 217°C : 60~90 sec.

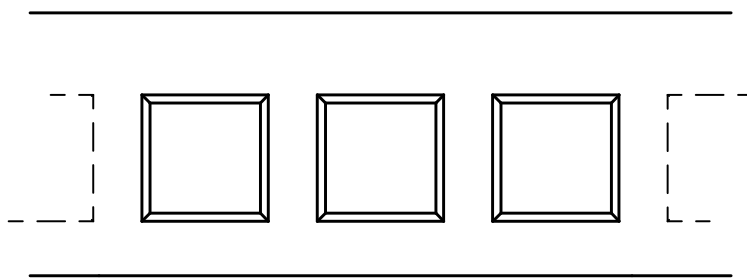
Max temperature: 260°C .

Max time at max temperature: 10 sec.

Allowed Reflow time: 2x max.

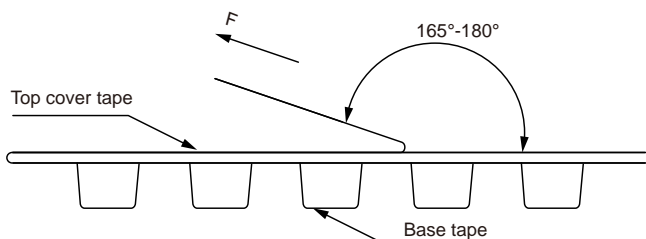
## Packaging Information:

### 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:

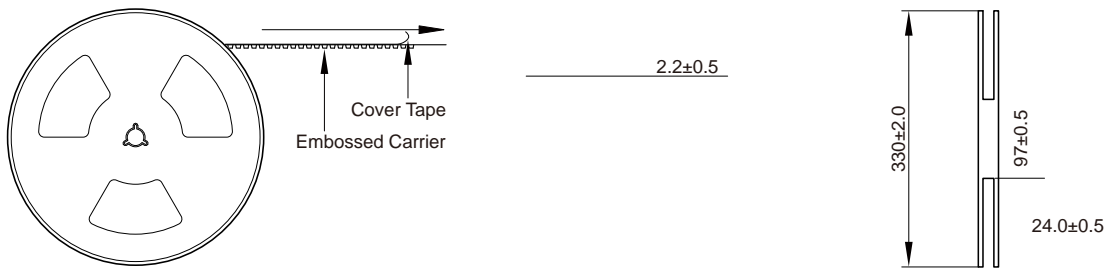


The peel force of top cover tape shall be between 0.1 to 1.3 N

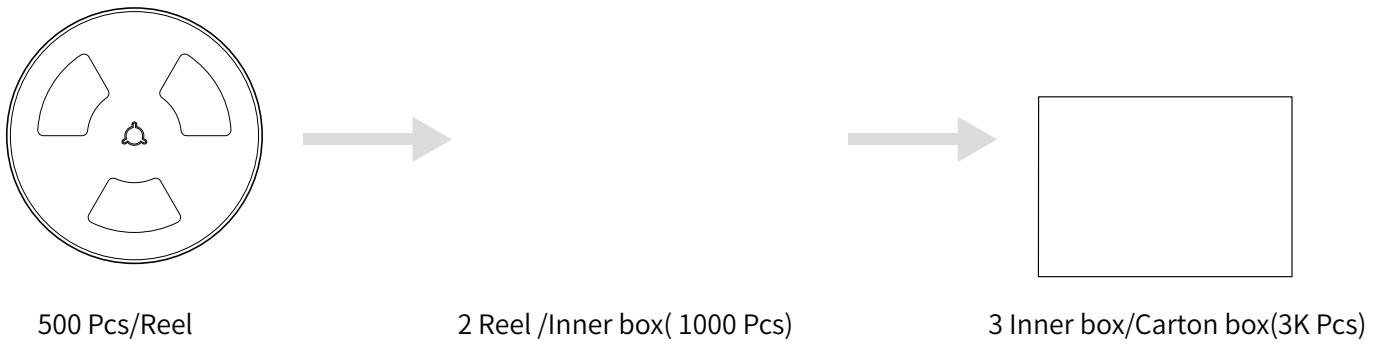
### Product Marking:

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



Packaging Quantity:



Cautions and Warnings:

Storage Conditions:

Operation Instructions: