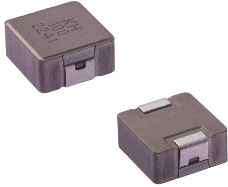


## MDA Series

### SMD Low Profile High Current Molded Inductor

#### Size 1360



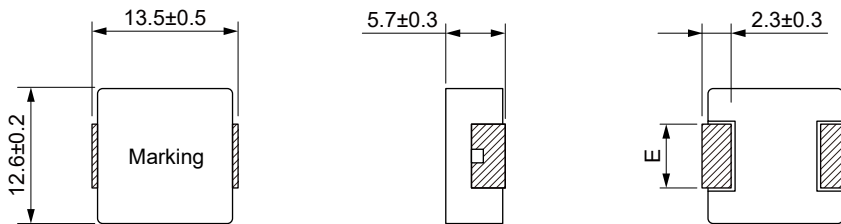
#### FEATURES

- 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

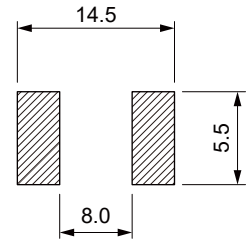
#### APPLICATION

- 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]



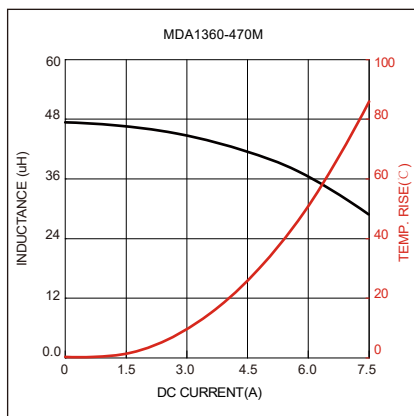
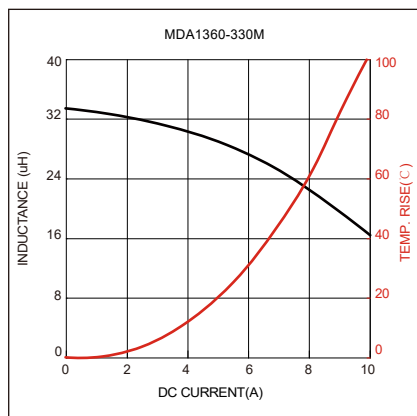
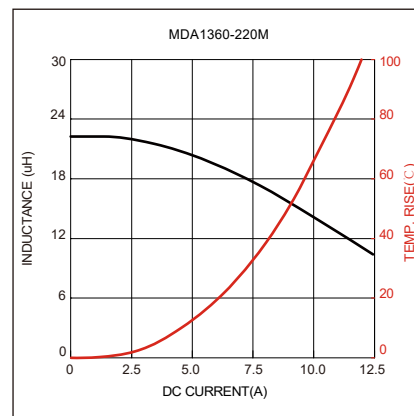
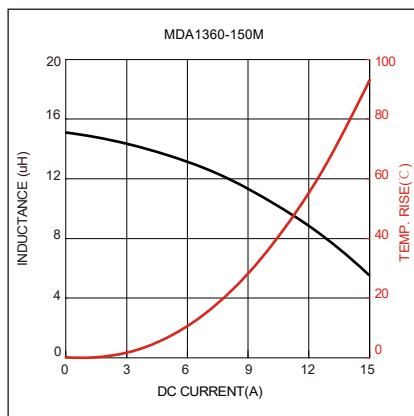
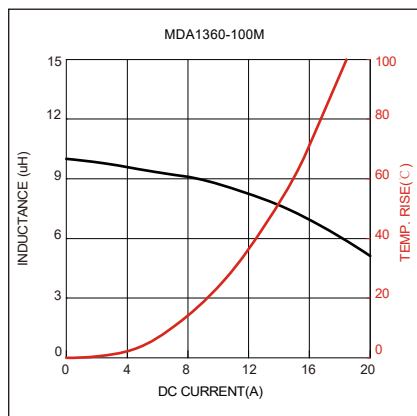
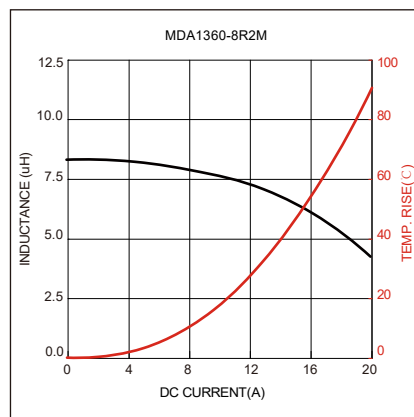
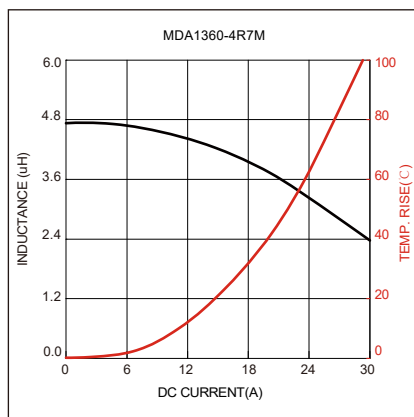
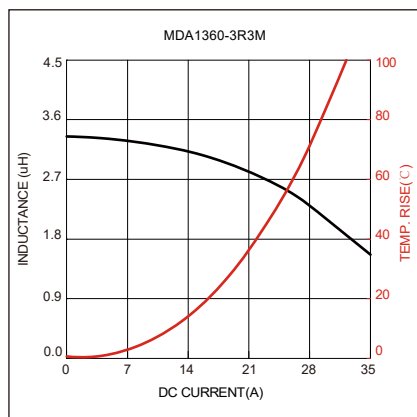
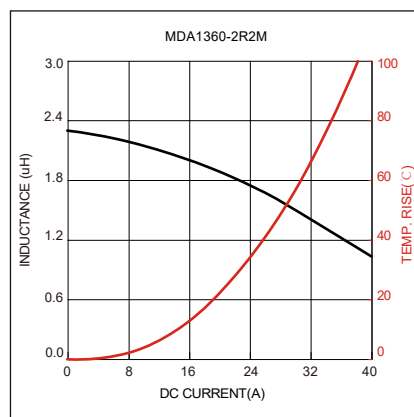
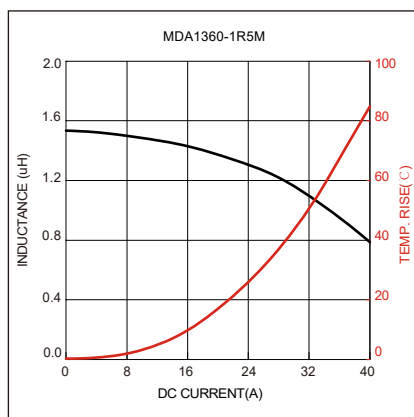
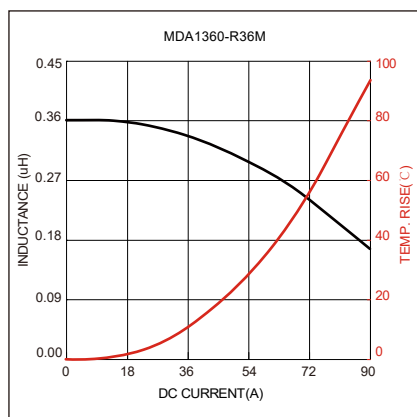
#### Electrical Properties:

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
MDA1360-R36M	0.36	±20%	60.0	50.0	70.0	60.0	0.65	0.80	4.7±0.3
MDA1360-1R5M	1.50	±20%	28.0	24.0	32.0	27.0	2.40	3.00	4.0±0.3
MDA1360-2R2M	2.20	±20%	25.0	21.0	28.0	24.0	3.70	4.30	4.7±0.3
MDA1360-3R3M	3.30	±20%	21.0	18.0	28.0	24.0	5.30	6.50	4.7±0.3
MDA1360-4R7M	4.70	±20%	19.0	16.0	23.0	19.5	7.00	8.40	4.7±0.3
MDA1360-8R2M	8.20	±20%	13.5	12.0	17.0	15.5	13.5	16.0	4.7±0.3
MDA1360-100M	10.0	±20%	12.0	10.5	16.0	14.5	15.5	18.6	4.7±0.3
MDA1360-150M	15.0	±20%	10.0	8.5	10.0	9.0	24.0	29.0	4.7±0.3
MDA1360-220M	22.0	±20%	8.0	7.0	9.0	8.0	31.2	37.5	4.7±0.3
MDA1360-330M	33.0	±20%	6.5	5.5	7.8	6.7	56.0	68.0	4.7±0.3
MDA1360-470M	47.0	±20%	5.2	4.5	6.7	5.5	76.0	88.0	4.7±0.3

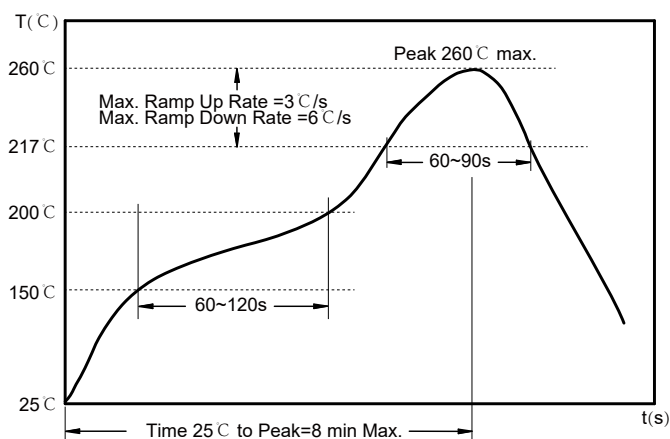
Saturation Current will cause L to drop approximately 30%

Temperature Rise Current: The actual value of DC current when the temperature rise is  $\Delta T=40^{\circ}\text{C}$

## Typical Electrical Characteristics:



## Soldering Reflow:



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

Allowed time above 217°C : 60~90 sec.

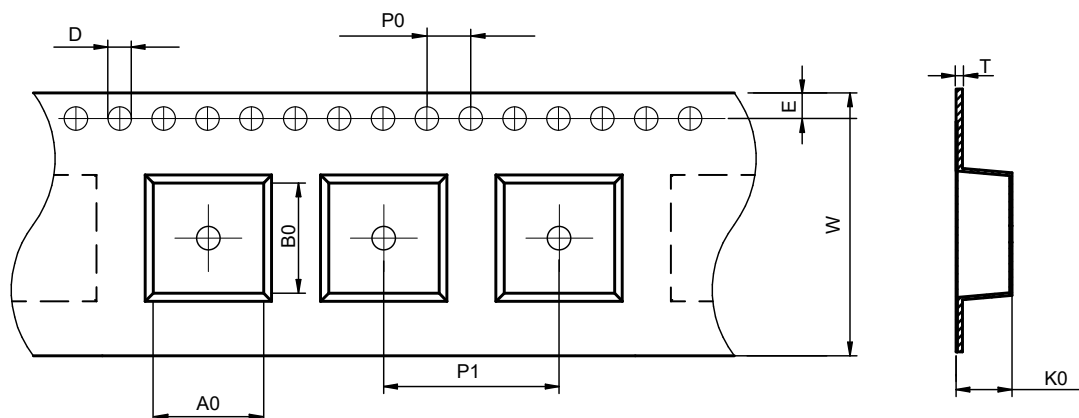
Max temperature: 260°C.

Max time at max temperature: 10 sec.

Allowed Reflow time: 2x max.

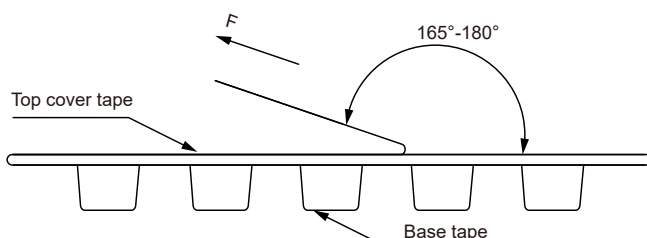
## Packaging Information:

### Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDA1360	13.1±0.1	14.0±0.1	1.5±0.1	4.0±0.1	16.0±0.1	24.0±0.3	6.3±0.1	1.75±0.1	0.50±0.05

### Peel force of top cover tape:

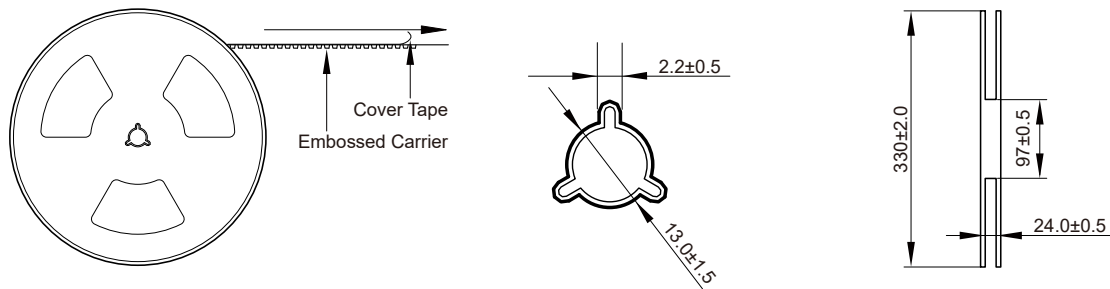


The peel force of top cover tape shall be between 0.1 to 1.3 N

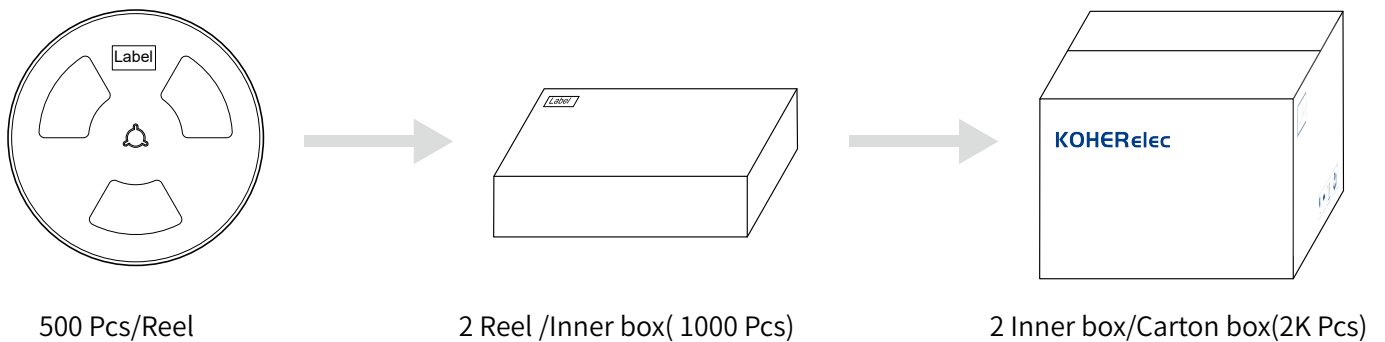
### Product Marking:

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



## Packaging Quantity:



## Cautions and Warnings:

### Storage Conditions :

- The storage period is within 12 months after the completion of production. Be sure to follow the storage conditions (temperature: -5 to 35°C, humidity: 75% RH Max).If the storage period elapses, the soldering of the terminal electrodes may deteriorate.The warranty period is one year.
- Product should not be exposed to environment with high temperature, high humidity, dust, corrosive gas and etc.
- Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- Please always handle products carefully to prevent any damage caused by dropping down or inappropriate removing.

### Operation Instructions:

- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Before soldering, be sure to preheat components.The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications.If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- Generally, Koher might not be familiar with either customer's specific application or actual requests as customer does.As a result customer shall be responsible for checking and confirming whether Koher product with the performance described in the product specification is suitable for using in customer's particular application or not.