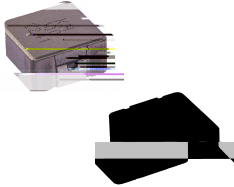


## MDA Series

### SMD Low Profile High Current Molded Inductor

#### Size 1360



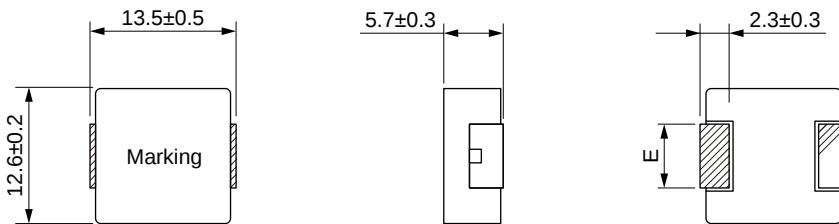
#### FEATURES

- 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.

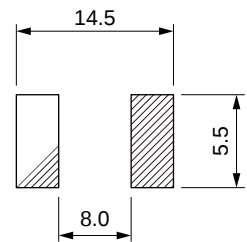
#### APPLICATION

- HVAC
- Audio subsystem
- Digital instrument cluster

Dimensions: [mm]



Land Pattern: [mm]



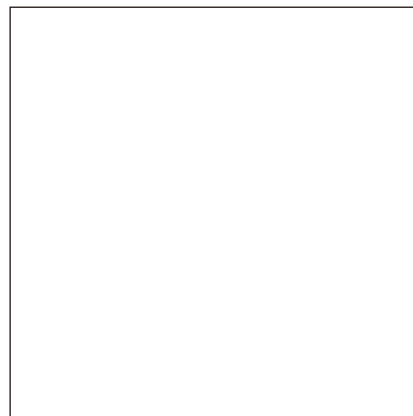
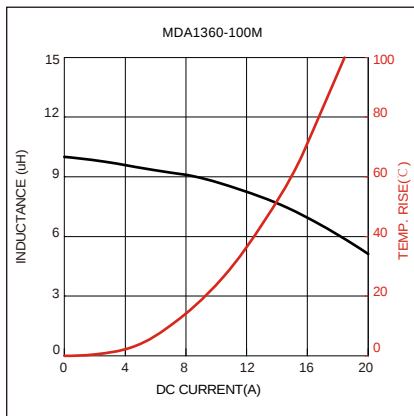
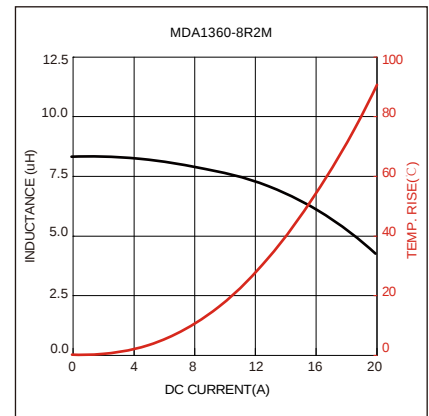
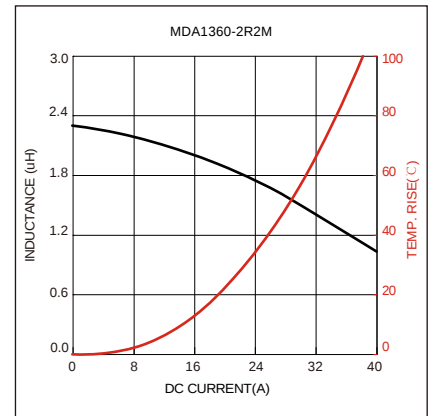
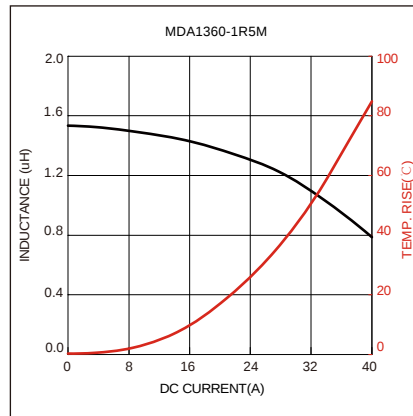
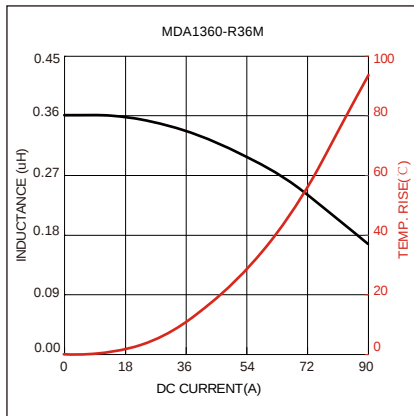
Electrical Properties:

| Part No      | Inductance<br>@ 100KHz/1V<br>( $\mu$ H) | Tolerance | Temperature<br>Rise Current<br>Typ.<br>(A) | Temperature<br>Rise Current<br>Max.<br>(A) | Satura on<br>Current<br>Typ.<br>(A) | Satura on<br>Current<br>Max.<br>(A) | DC<br>Resistance<br>Typ.<br>(m $\Omega$ ) | DC<br>Resistance<br>Max.<br>(m $\Omega$ ) | 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 |

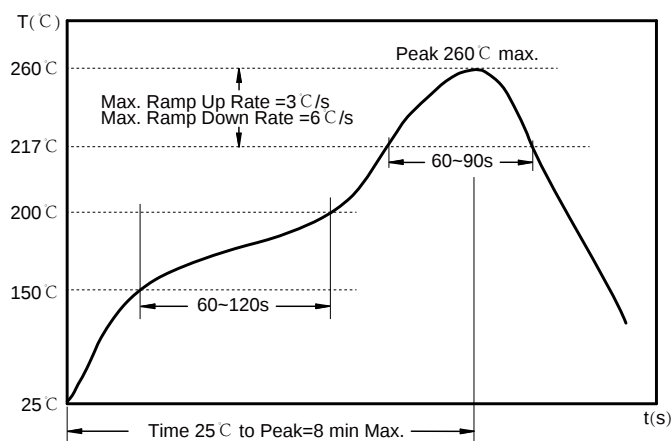
Saturation Current will cause L to drop approximately 30%

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

## Typical Electrical Characteristics:



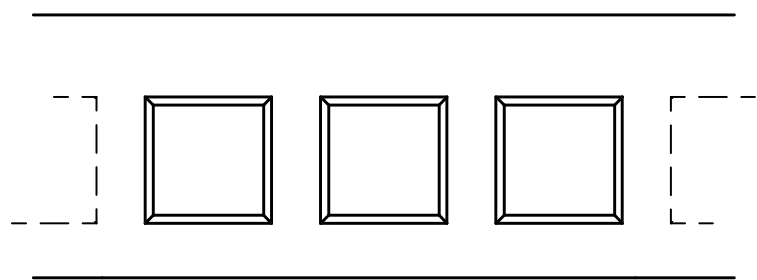
Soldering Reflow:



Preheat condition:  $150 \sim 200^{\circ}\text{C} / 60 \sim 120 \text{ sec.}$   
Allowed time above  $217^{\circ}\text{C}$ : 60~90 sec.  
Max temperature:  $260^{\circ}\text{C}$ .  
Max time at max temperature: 10 sec.  
Allowed Reflow time: 2x max.

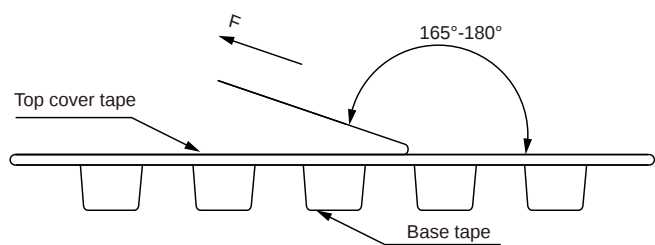
Packaging Information:

Tape Dimension:



| Series  | A0<br>(mm)     | B0<br>(mm)     | D<br>(mm)     | P0<br>(mm)    | P1<br>(mm)     | W<br>(mm)      | K0<br>(mm)    | E<br>(mm)      | T<br>(mm)       |
|---------|----------------|----------------|---------------|---------------|----------------|----------------|---------------|----------------|-----------------|
| MDA1360 | $13.1 \pm 0.1$ | $14.0 \pm 0.1$ | $1.5 \pm 0.1$ | $4.0 \pm 0.1$ | $16.0 \pm 0.1$ | $24.0 \pm 0.3$ | $6.3 \pm 0.1$ | $1.75 \pm 0.1$ | $0.50 \pm 0.05$ |

Peel force of top cover tape:



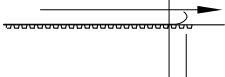
The peel force of top cover tape shall be between 0.1 to 1.3 N

Product Marking:

|         |                                 |
|---------|---------------------------------|
| Marking | KH+Printing (Inductance+period) |
|---------|---------------------------------|



Reel Dimension: [mm]



Packaging Quantity: