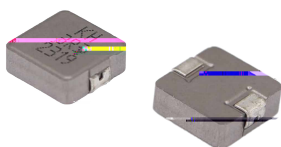


## MDSA Series

## SMD Low Profile High Current Molded Inductor

## Size 1040



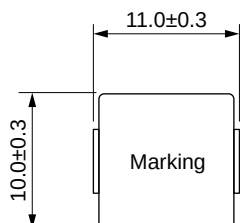
## FEATURES

- 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

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

Dimensions: [mm]



Land Pattern: [mm]



### Electrical Properties:

[illegible]

36.5

72.0

 $3.0 \pm 0.3$ 

31.7

57.6

 $3.0 \pm 0.3$ 

27.9

43.2

 $3.0 \pm 0.3$ 

**. 4688**

strictly

 $3.0 \pm 0.3$ 

22.1

27.9

 $2.5 \pm 0.3$

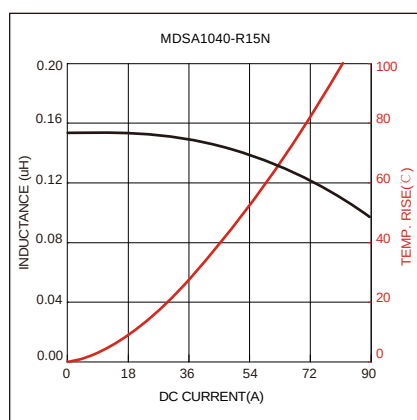
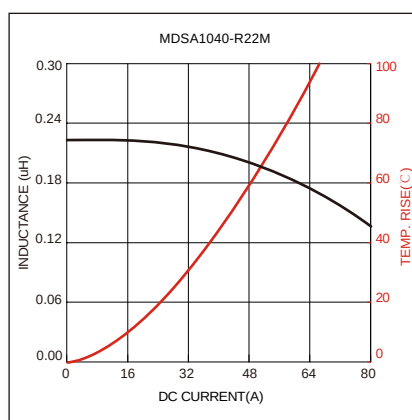
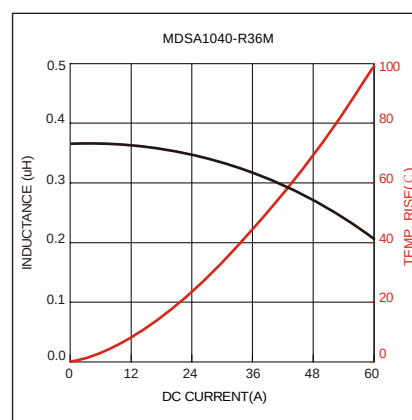
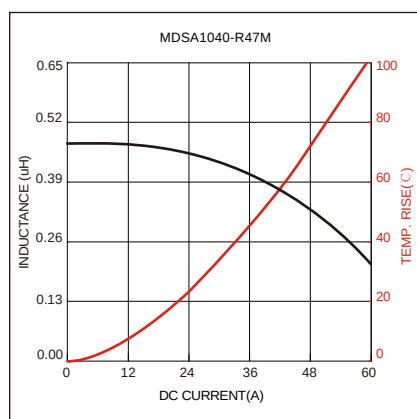
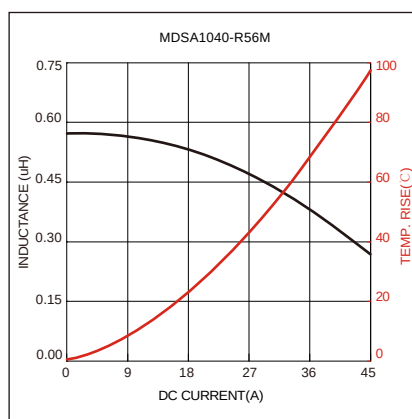
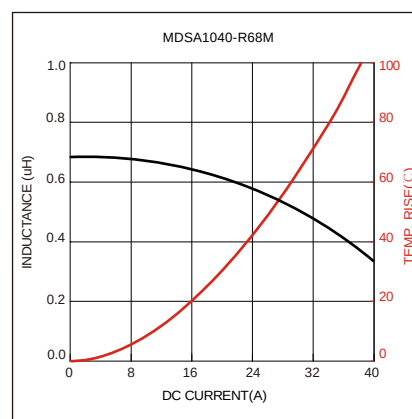
## Tolerance

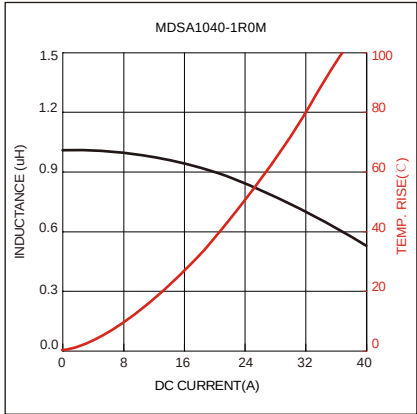
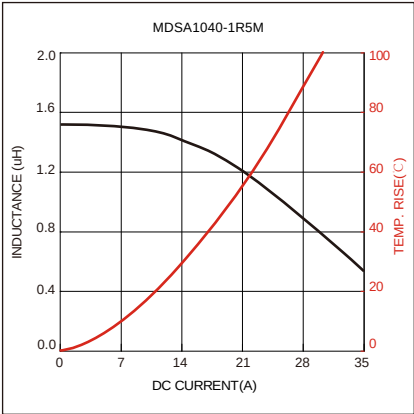
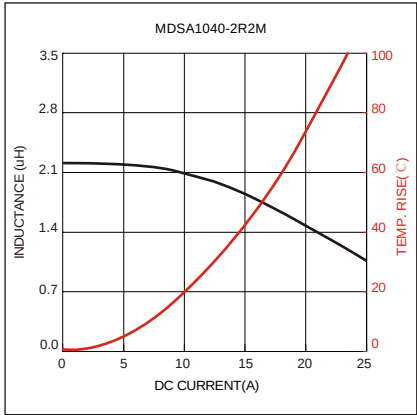
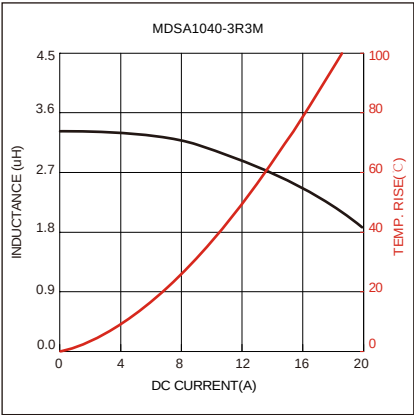
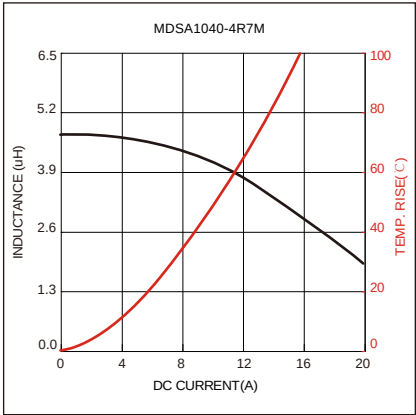
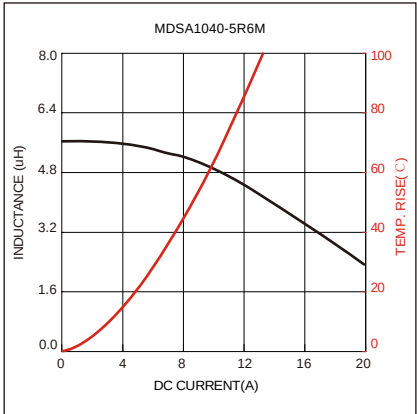
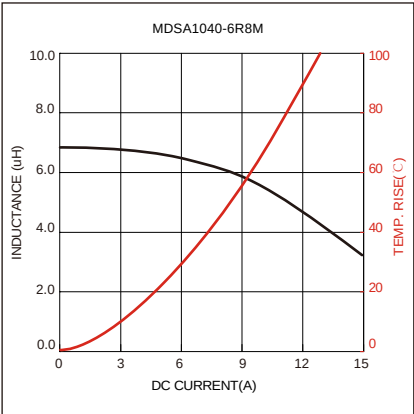
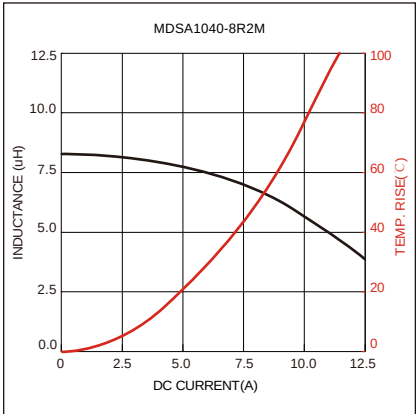
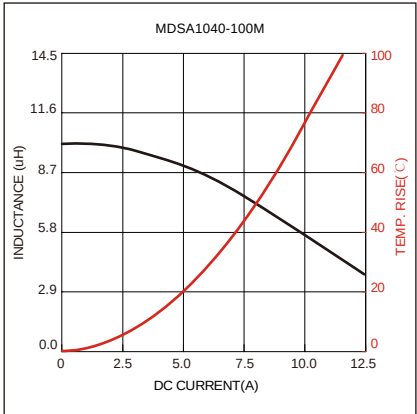
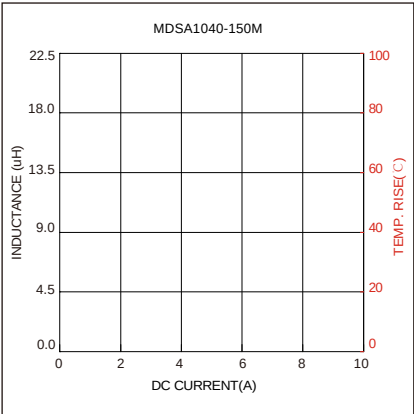
|      |      |
|------|------|
| ±20% | 5.85 |
| ±20% | 10.6 |
| ±20% | 16.0 |
| ±20% | 19.2 |
| ±20% | 22.2 |
| ±20% |      |
| ±20% |      |
| ±20% |      |
| ±20% |      |
| ±20% |      |
| ±20% |      |
| ±20% |      |

Saturation Current will cause L to drop approximately 30%

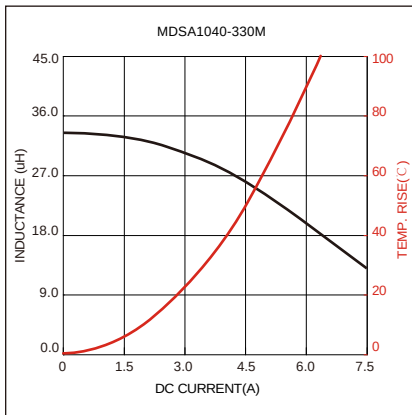
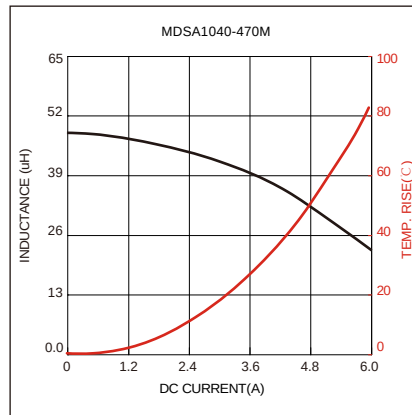
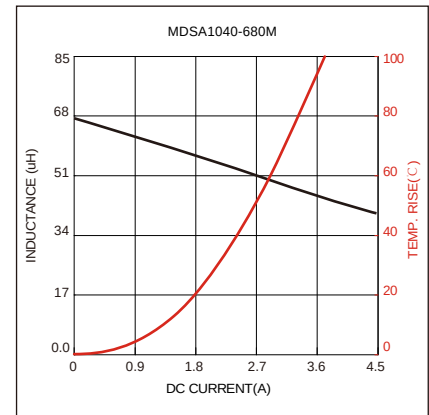
Temperature Rise Current: The actual value of DC current when the temperature rise is  $\Delta T=40^{\circ}\text{C}$

## Typical Electrical Characteristics:



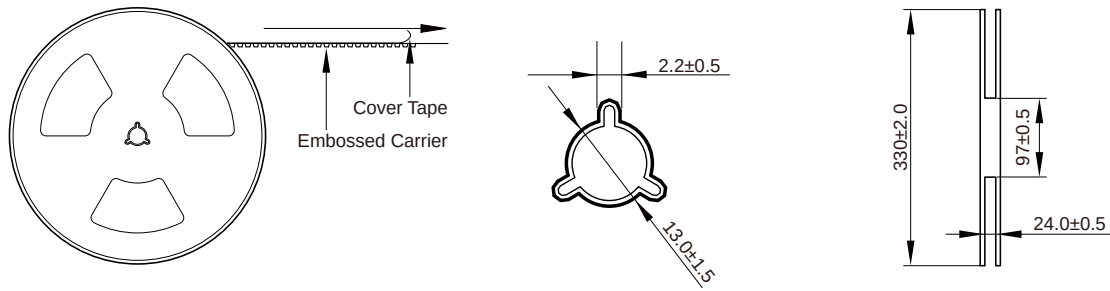


## Typical Electrical Characteristics:

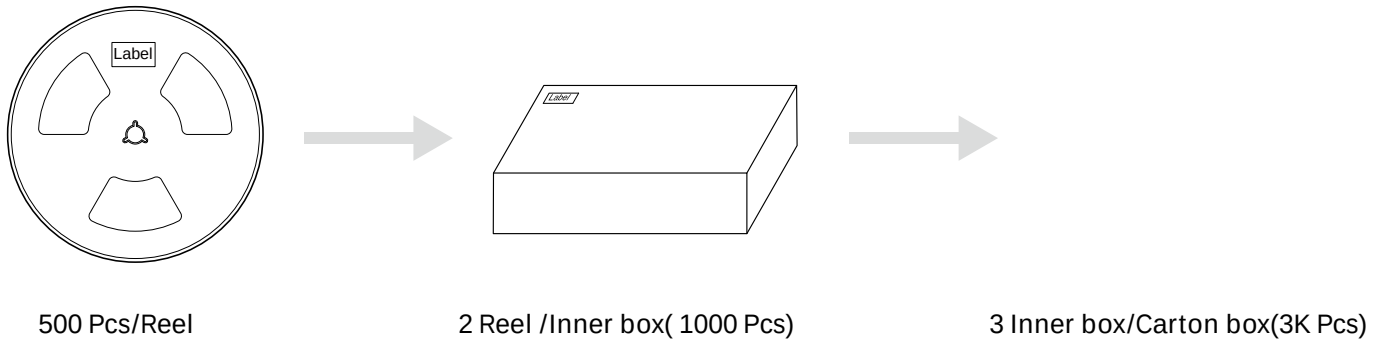




## Reel Dimension: [mm]



## 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  $35^{\circ}\text{C}$ , 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  $150^{\circ}\text{C}$ .
- 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.