

MDCA Series

SMD Power Inductor

Size 1365

FEATURES

- Shielded construction.
- Capable of corresponding high frequency.
- Low loss realized with low DCR.
- High performance (Isat) realized by Carbonyl Powder.
- Ultra low buzz noise, due to composite construction.
- 100% Lead(Pb)-Free and RoHS compliant.
- AEC-Q200 qualified
- Operating temperature: -55 to +125 °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
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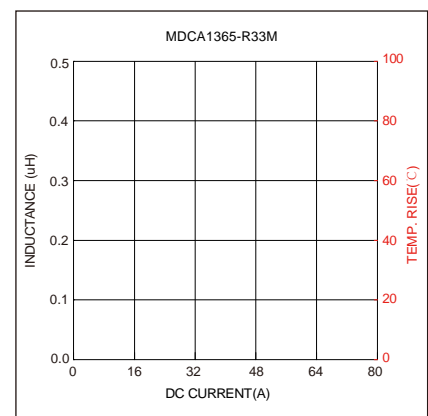
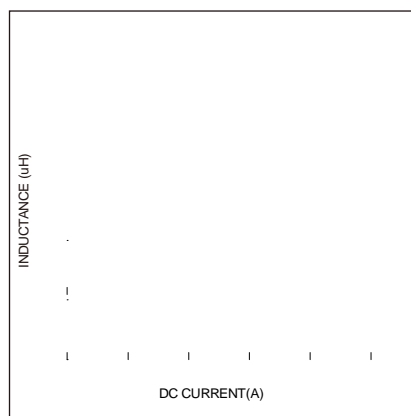
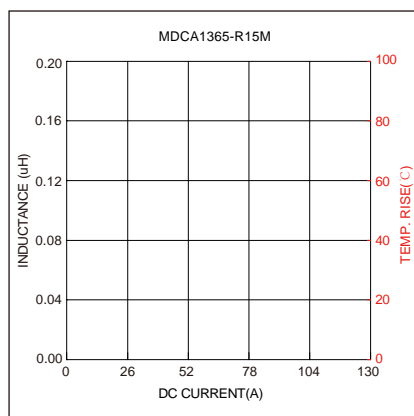
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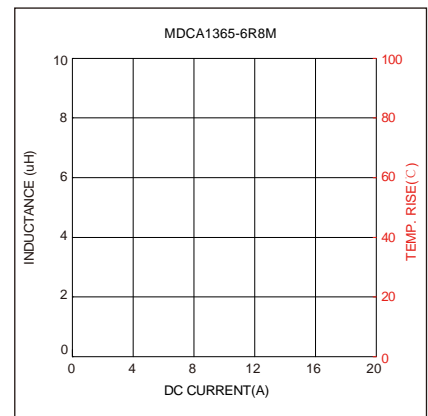
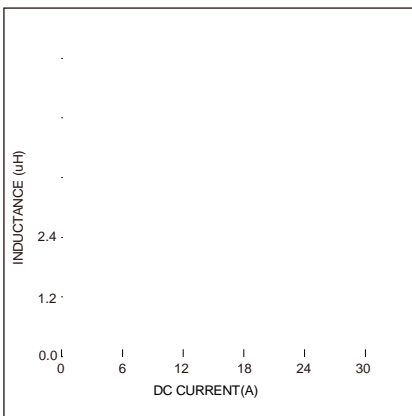
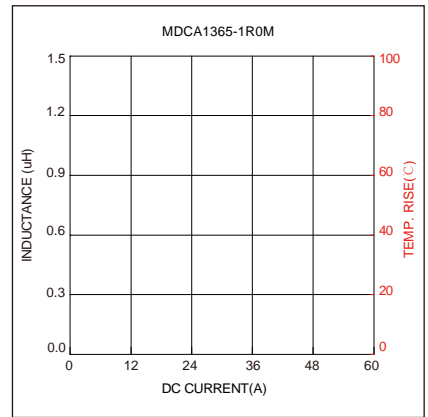
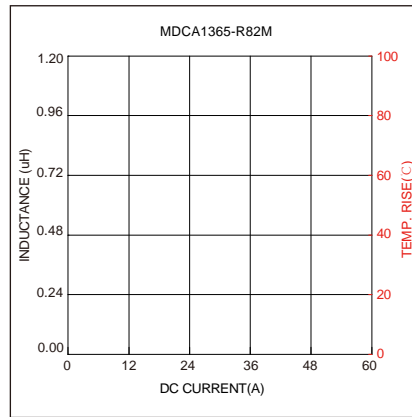
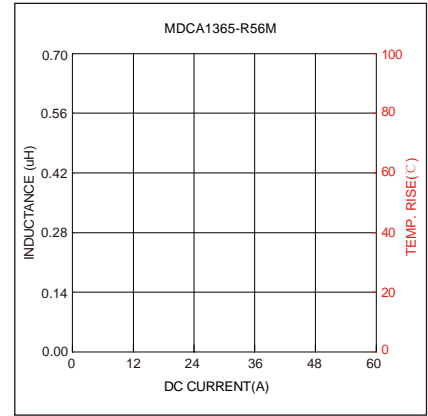
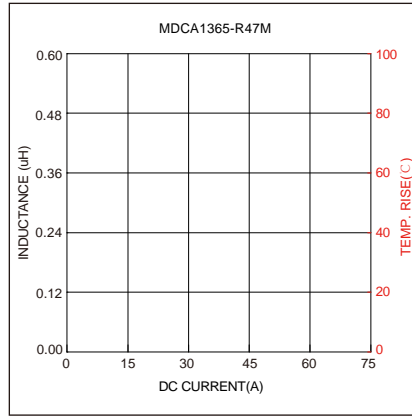
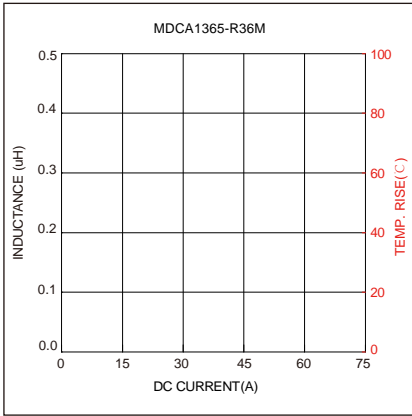
Land Pattern: [mm]

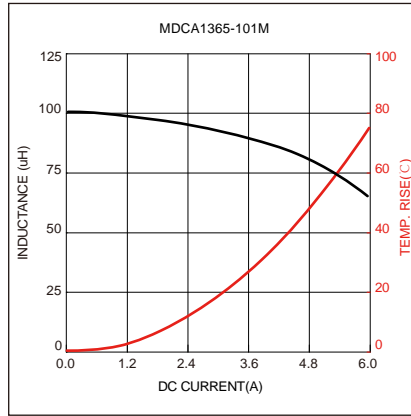
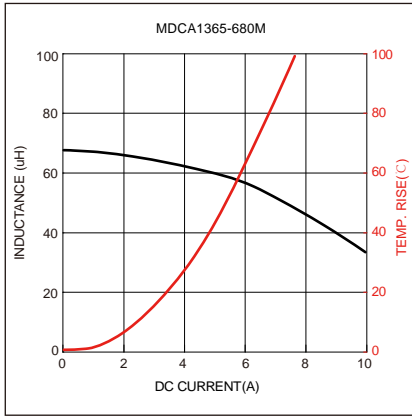
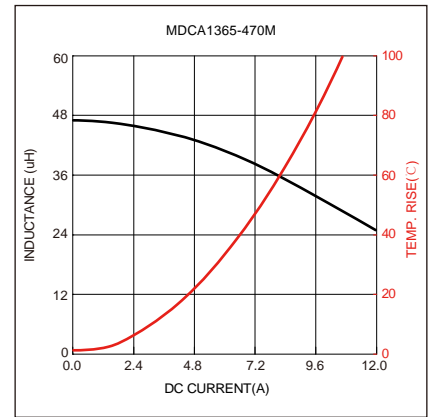
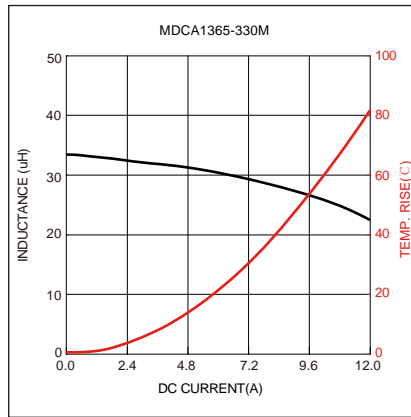
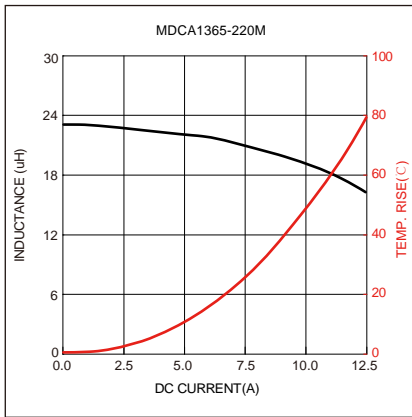
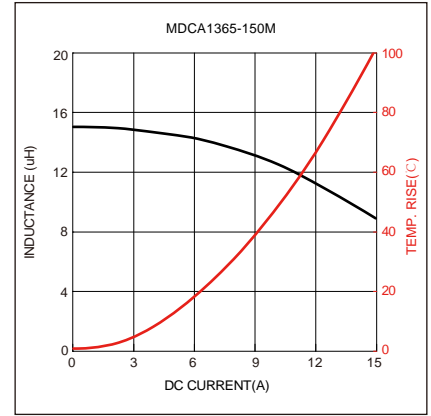
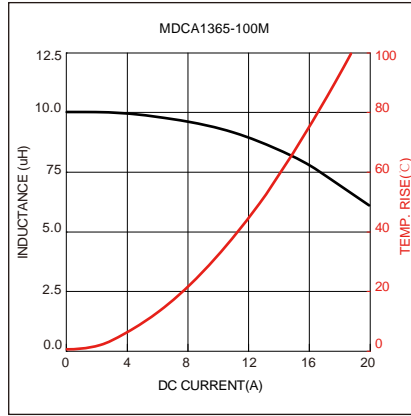
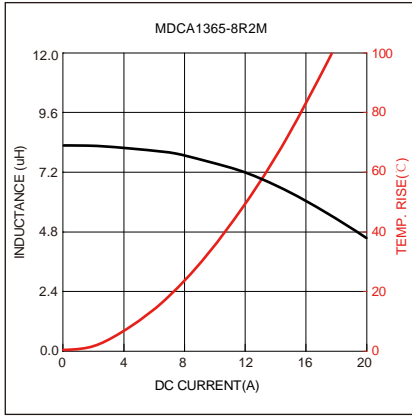
Electrical Properties:

| Part No | Inductance @ 100KHz/1V | Tolerance | | | DC Resistance Typ. | DC Resistance Max. |
|---------------|------------------------|-----------|------|-------|--------------------|--------------------|
| MDCA1365-R15M | 0.15 | ±20% | 55.0 | 118.0 | 0.49 | 0.60 |
| MDCA1365-R22M | 0.22 | ±20% | 53.0 | 112.0 | 0.47 | 0.60 |
| MDCA1365-R33M | 0.33 | ±20% | 46.0 | 68.0 | 0.65 | 0.80 |
| MDCA1365-R36M | 0.36 | ±20% | 45.0 | 66.0 | 0.70 | 0.90 |
| MDCA1365-R47M | 0.47 | ±20% | 41.0 | 63.0 | 0.90 | 1.20 |
| MDCA1365-R56M | 0.56 | ±20% | 37.0 | 58.0 | 1.05 | 1.20 |
| MDCA1365-R68M | 0.68 | ±20% | 35.0 | 55.0 | 1.25 | 1.50 |
| MDCA1365-R82M | 0.82 | ±20% | 33.0 | 50.0 | 1.50 | 1.90 |
| MDCA1365-1R0M | 1.00 | ±20% | 30.0 | 48.0 | 1.70 | 2.30 |
| MDCA1365-1R5M | 1.50 | ±20% | 27.0 | 45.0 | 2.50 | 3.00 |
| MDCA1365-2R2M | 2.20 | ±20% | 22.0 | 37.0 | 3.80 | 4.20 |
| MDCA1365-3R3M | 3.30 | ±20% | 18.0 | 30.0 | 5.70 | 6.80 |
| MDCA1365-4R7M | 4.70 | ±20% | 13.5 | 28.0 | 7.00 | 8.40 |
| MDCA1365-5R6M | 5.60 | ±20% | 12.5 | 23.0 | 8.50 | 10.0 |
| MDCA1365-6R8M | 6.80 | ±20% | 11.5 | 18.0 | 9.50 | 11.5 |
| MDCA1365-8R2M | 8.20 | ±20% | 10.5 | 16.0 | 12.0 | 15.5 |
| MDCA1365-100M | 10.0 | ±20% | 10.0 | 15.5 | 13.2 | 16.5 |
| MDCA1365-150M | 15.0 | ±20% | 9.0 | 13.0 | 23.2 | 28.0 |
| MDCA1365-220M | 22.0 | ±20% | 9.0 | 12.0 | 32.5 | 37.0 |
| MDCA1365-330M | 33.0 | ±20% | 8.0 | 11.0 | 48.0 | 58.0 |
| MDCA1365-470M | 47.0 | ±20% | 6.5 | 9.5 | 76.0 | 90.0 |
| MDCA1365-680M | 68.0 | ±20% | 4.8 | 7.8 | 110 | 130 |
| MDCA1365-101M | 100 | ±20% | 4.2 | 5.5 | 145 | 165 |

Typical Electrical Characteristics:

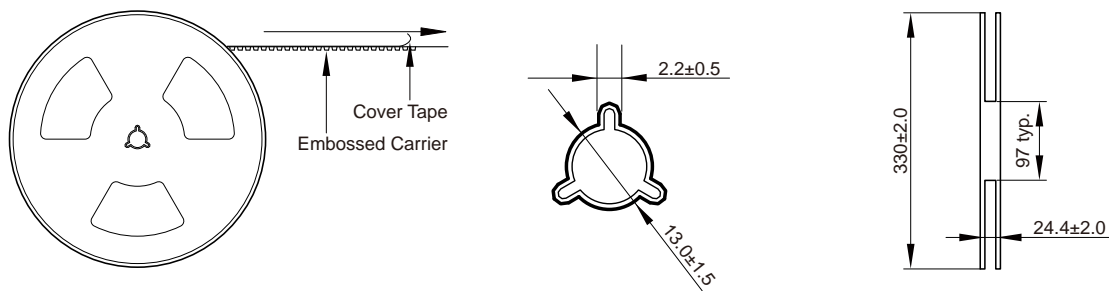




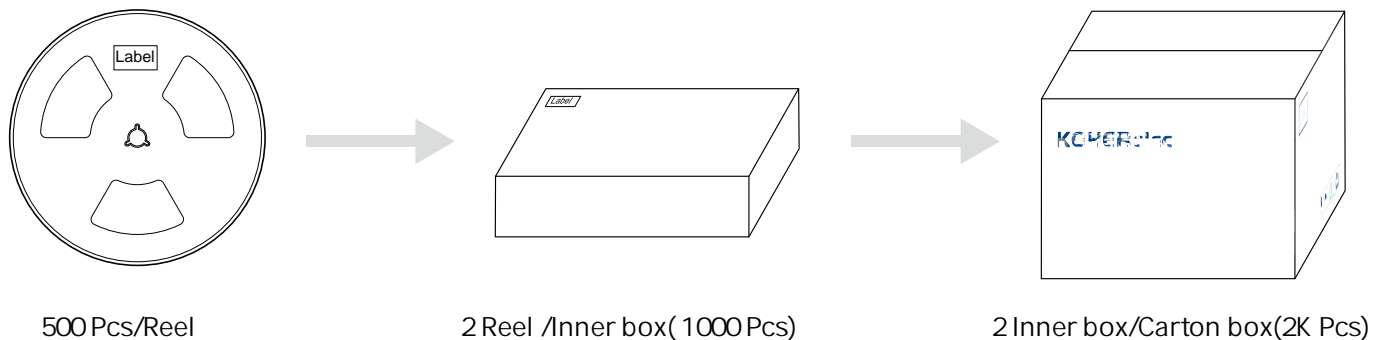


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Reel Dimension: [mm]



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.