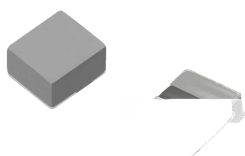


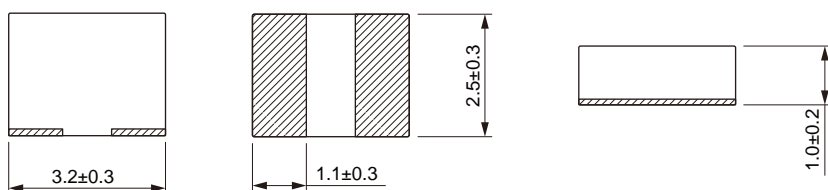
# SMD Low Profile High Current Molded Inductor Size 32251B



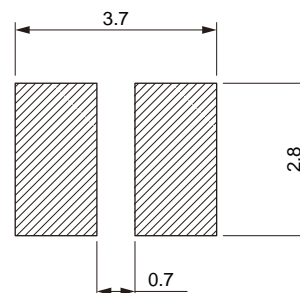
- High efficiency.
- Very low acoustic noise and very low leakage flux noise.
- AEC-Q200 qualified
- 100% Lead(Pb)-Free and RoHS compliant.
- Operating temperature: -55 to +155 °C (including self-temperature rise)
- Quantity: 3000PCS

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

## Dimensions: [mm]



## Land Pattern: [mm]



## Electrical Properties:

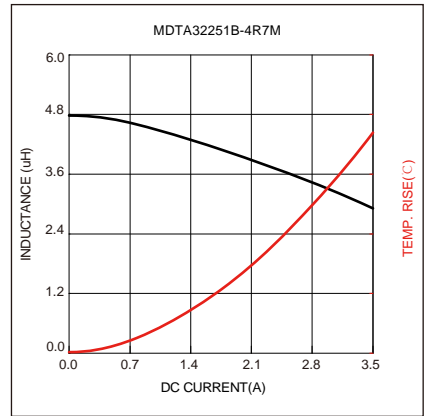
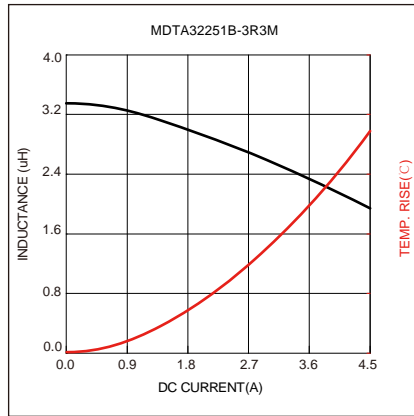
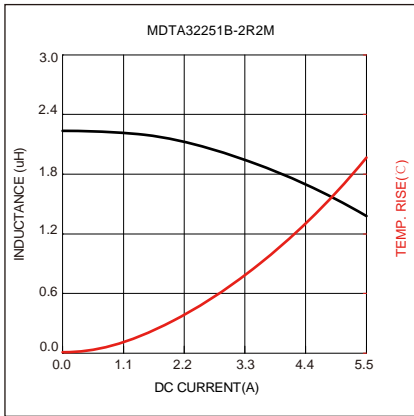
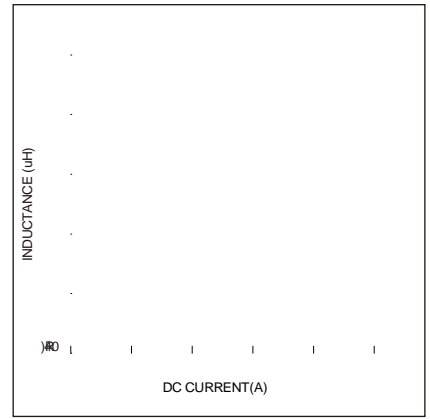
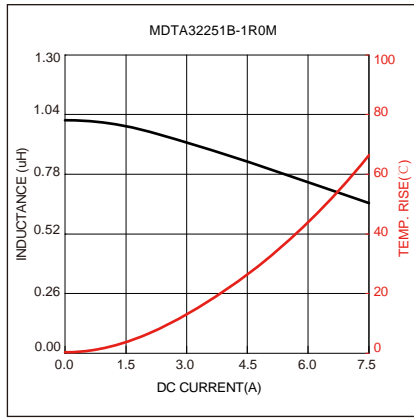
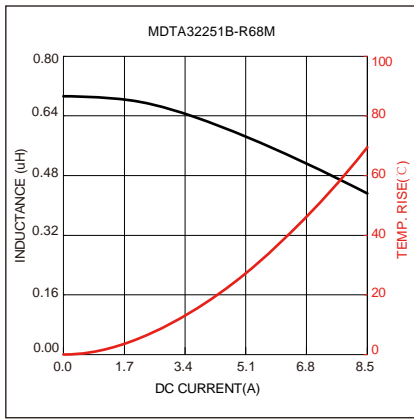
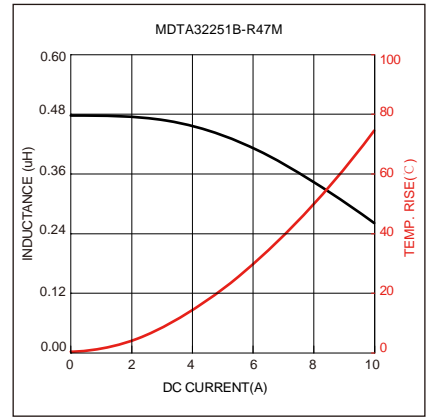
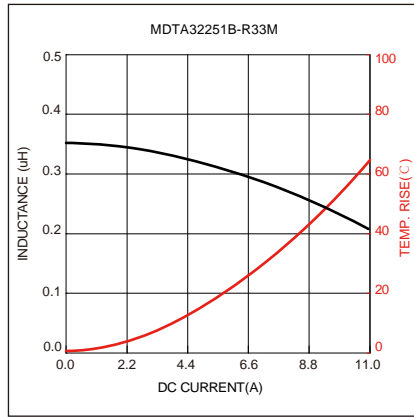
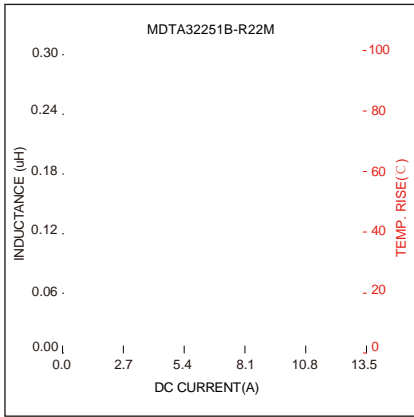
| Part No         | Inductance @ 100KHz/1V (μH) | Tolerance | Temperature Rise Current Typ. (A) | Temperature Rise Current Max. (A) | Saturation Current Typ. (A) | Saturation Current Max. (A) | DC Resistance Typ. (mΩ) | DC Resistance Max. (mΩ) |
|-----------------|-----------------------------|-----------|-----------------------------------|-----------------------------------|-----------------------------|-----------------------------|-------------------------|-------------------------|
| MDTA32251B-R22M | 0.22                        |           | 9.5                               | 9.0                               | 9.3                         | 8.7                         | 7.4                     | 8.5                     |
| MDTA32251B-R33M | 0.33                        |           | 8.5                               | 8.0                               | 9.2                         | 8.6                         | 9.0                     |                         |
| MDTA32251B-R47M | 0.47                        |           | 7.1                               | 6.6                               | 8.3                         | 7.5                         | 17                      |                         |
| MDTA32251B-R68M | 0.68                        |           | 6.3                               | 5.8                               | 7.4                         | 6.9                         |                         | 24                      |
| MDTA32251B-1R0M | 1.0                         |           | 5.7                               | 5.2                               | 6.6                         | 5.8                         | 26                      | 30                      |
| MDTA32251B-1R5M | 1.5                         |           | 4.6                               | 4.0                               | 5.3                         | 5.0                         | 40                      | 50                      |
| MDTA32251B-2R2M | 2.2                         |           | 4.2                               | 3.7                               | 4.9                         | 4.4                         | 58                      | 70                      |
| MDTA32251B-3R3M | 3.3                         |           | 3.2                               | 2.8                               | 3.5                         | 3.1                         | 75                      | 95                      |
| MDTA32251B-4R7M | 4.7                         |           | 2.5                               | 2.0                               | 2.9                         | 2.5                         | 115                     | 135                     |
| MDTA32251B-6R8M | 6.8                         |           | 2.1                               | 1.8                               | 2.7                         | 2.3                         | 177                     |                         |
| MDTA32251B-100M |                             |           | 1.9                               | 1.6                               | 2.3                         | 2.0                         | 230                     | 264                     |

Saturation Current will cause L to drop approximately 30%

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

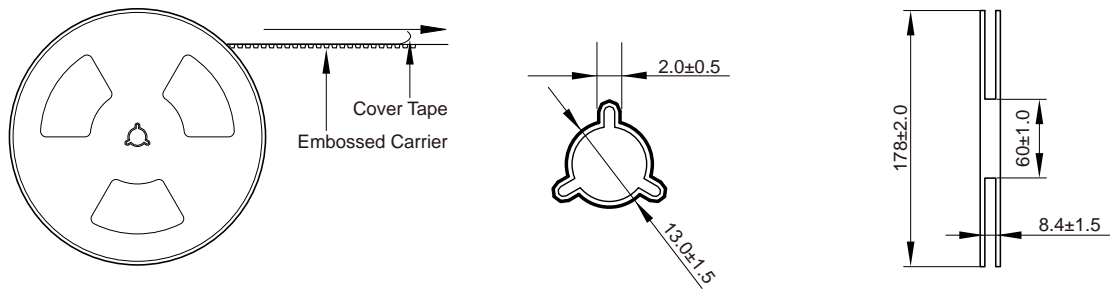


# Typical Electrical Characteristics:

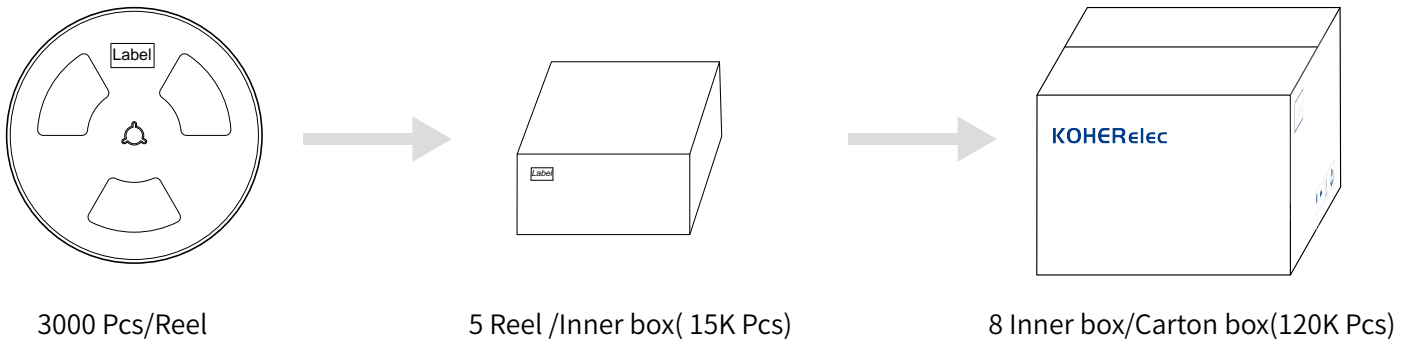


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## Reel Dimension: [mm]



## 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.