

# Molding Power Inductors -MTH Series



欣腾辉电子  
XINTENGHUI ELECTRONICS

## MTH Series



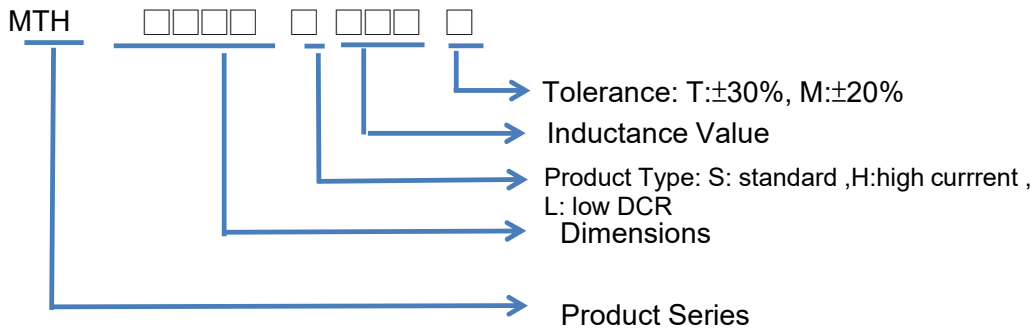
### Description:

- RoHS,Halogen Free and REACH Compliance
- High current carrying capacity,Low core losses
- Powder iron core material
- Frequency range up to 5MHZ.
- Magnetically shielded, low EMI

### Applications:

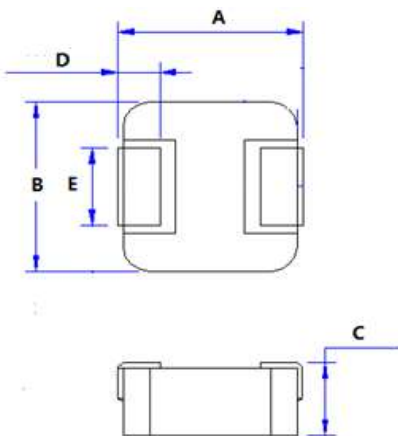
- Switches and servers
- SSD modules
- Notebook regulators
- Battery power systems
- DC/DC converters

### Product Identification

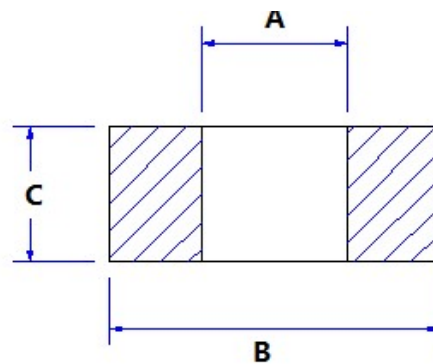


### Dimensions-mm

Shape and Dimensions



Recommended Pad Layout



### Dimensions-mm

| TYPE | A       | B       | C       | D       | E       |
|------|---------|---------|---------|---------|---------|
| 0612 | 7.0±0.3 | 6.6±0.2 | 1.0±0.2 | 1.6±0.3 | 3.0±0.3 |

### Dimensions-mm

| TYPE | A   | B   | C   |
|------|-----|-----|-----|
| 0612 | 3.7 | 8.4 | 3.5 |

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### Electrical Characteristics

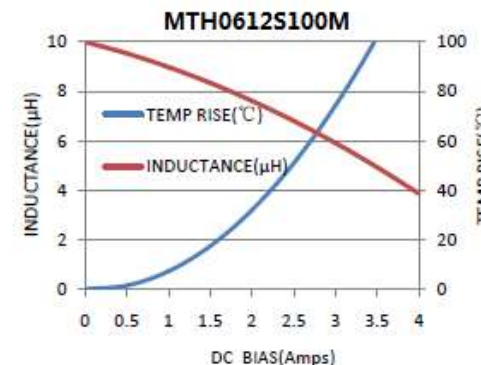
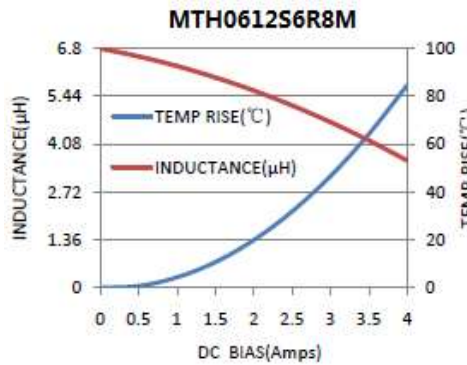
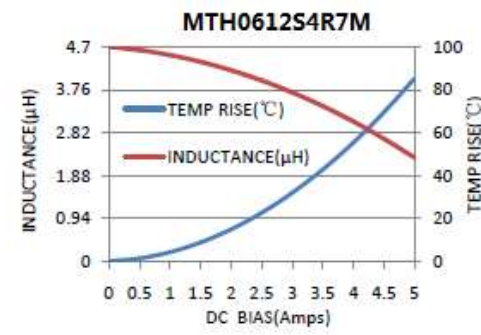
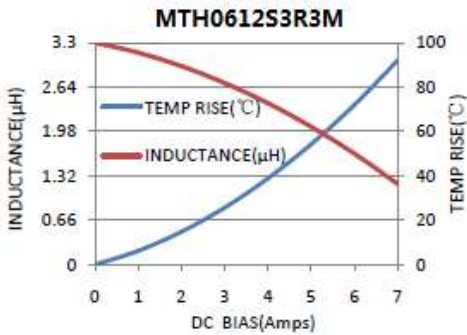
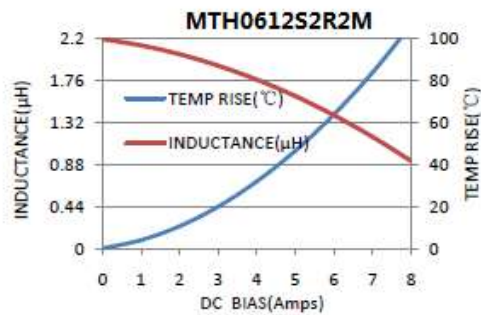
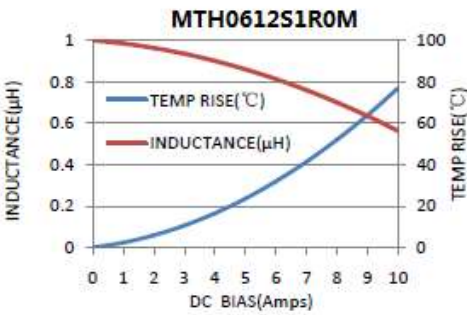
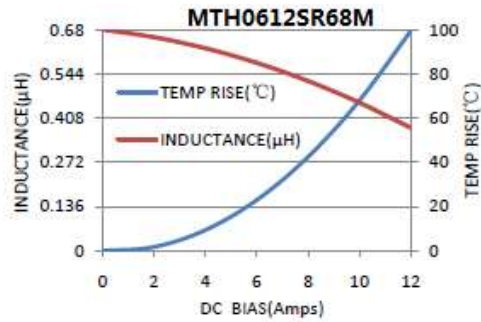
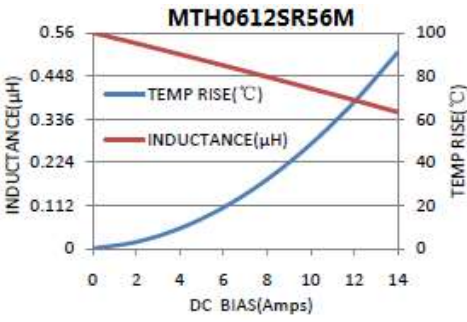
| Part No.     | Inductance<br>(uH) | Toleranc<br>e<br>(±%) | Test Freq. | RDC(mΩ)<br>Max.(Typ) | Irms(A)<br>Typ. | Isat(A)<br>Typ. |
|--------------|--------------------|-----------------------|------------|----------------------|-----------------|-----------------|
| MTH0612SR56M | 0.56               | 20                    | 100KHZ,1V  | 15.5(13.5)           | 8.0             | 11.0            |
| MTH0612SR68M | 0.68               | 20                    | 100KHZ,1V  | 17.5(15.0)           | 7.0             | 9.0             |
| MTH0612S1R0M | 1.0                | 20                    | 100KHZ,1V  | 29.0(25.0)           | 6.0             | 7.5             |
| MTH0612S2R2M | 2.2                | 20                    | 100KHZ,1V  | 58.0(51.0)           | 4.0             | 5.0             |
| MTH0612S3R3M | 3.3                | 20                    | 100KHZ,1V  | 92.0(80.0)           | 3.5             | 4.0             |
| MTH0612S4R7M | 4.7                | 20                    | 100KHZ,1V  | 122.0(106.0)         | 3.0             | 3.5             |
| MTH0612S6R8M | 6.8                | 20                    | 100KHZ,1V  | 210.0(185.0)         | 2.5             | 2.8             |
| MTH0612S100M | 10.0               | 20                    | 100KHZ,1V  | 280.0(250.0)         | 2.0             | 2.2             |

#### Notes:

- All test data is referenced to 25°C ambient.
- Operating temperature range -55°C to +125°C (Including self - temperature rise)
- Irms(A):DC current(A) that will cause an approximate  $\Delta T$  of 40°C (reference ambient temperature is 25°C)
- Isat(A):DC current(A) that will cause L0 to drop approximately 30%.
- Measure Equipment :  
L : Wayne kerr 3260B/G LCR Meter (or equivalent), 100KHz 1.0V  
RDC : CHEN HWA502BC/HP4338B (or equivalent)  
Isat : Wayne kerr 3265B Bias Current Source (or equivalent)  
Irms : Wayne kerr 3265B Bias Current Source (or equivalent)
- Test Condition:  
Temperature:26±3°C  
Humidity:<70% RH  
Frequency:100KHz 1.0V
- Absolute maximum voltage 50VDC

# Molding Power Inductors -MTH Series

Curve:



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### Packaging:

Packaging -Cover Tape

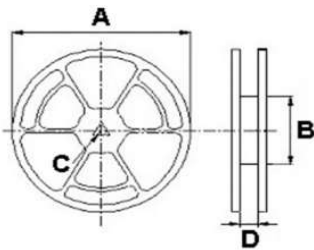
The force for tearing off cover tape is 10 to 130 grams in the arrow direction.



### Packaging Quantity

| TYPE    | PCS/REEL |
|---------|----------|
| MTH0612 | 2000     |

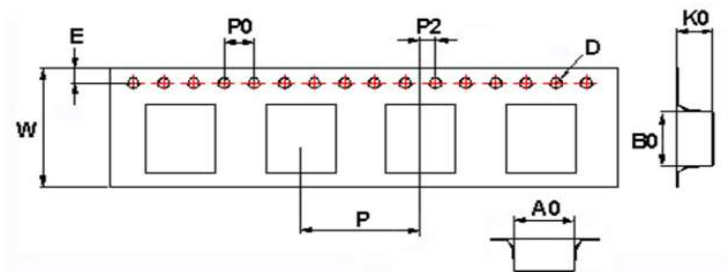
### Reel Dimensions



### Reel Dimensions:mm

| TYPE    | A   | B   | C  | D  |
|---------|-----|-----|----|----|
| MTH0612 | 330 | 100 | 13 | 16 |

### Tape Dimensions in mm



| TYPE    | A0  | B0  | K0  | D    | E    | W  | P  | P0 | P2 |
|---------|-----|-----|-----|------|------|----|----|----|----|
| MTH0612 | 6.9 | 7.6 | 1.7 | 1.55 | 1.75 | 16 | 12 | 4  | 2  |