

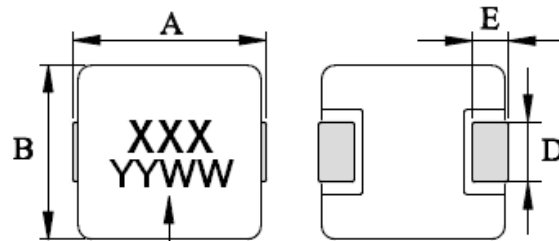
# TMPD0503HG-Series-G4 Specification

## SMD Molding Type Power Inductor

### APPLICATION

Tablet terminals, HDDs, SSDs, DVCs, DSCs, mobile display panels, portable game devices, Telecommunications, Consumer electronics, Compact power supply modules, other

### 1. Shapes and Dimensions



Black Marking

YYWW: The first two digits mean year, last two digits mean cycle.  
Depends on real produce cycle.



Unit: mm

Type	A	B	C	D	E
TMPD0503HG	5.7±0.5	5.2±0.3	2.8±0.2	2.0±0.2	1.0 Ref.

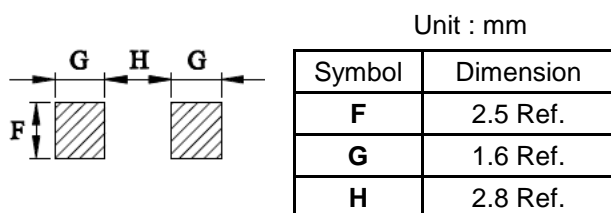
### 2. Ordering / Part Number Information

**TMPD 0503 HG - 1R0 M - G4**  
 (1) (2) (3) (4) (5) (6)

- (1) Product Group
- (2) Dimension Code
- (3) Type Code
- (4) Inductance Code
- (5) Inductance Tolerance
- (6) Control Code

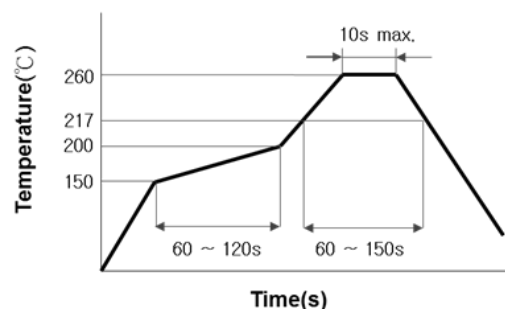
### 3. Recommended Soldering Condition

#### 3-1. Recommended Land Pattern



The Recommended Land pattern is for reference only.  
Please consult your manufacturing partners to ensure your company's PCB design guidelines are met

#### 3-2. Recommended Soldering Profile



## 4. Electrical Characteristics

### 4-1. Electrical Specification

Part Number	Inductance (L) @100kHz, 1V	DC Resistance (R <sub>DC</sub> ) Max.	Saturation Current (I <sub>SAT</sub> ) Typ. / Max.	Temperature Rise Current (I <sub>RMS</sub> ) Typ. / Max.	Marking
TMPD0503HG-R10N-G4	0.10μH±30%	2.2mΩ	33.0A / 29.0A	26.0A / 23.0A	R10
TMPD0503HG-R33M-G4	0.33μH±20%	5.4mΩ	12.0A / 10.0A	16.0A / 14.0A	R33
TMPD0503HG-R47M-G4	0.47μH±20%	6.0mΩ	10.0A / 9.0A	13.5A / 12.0A	R47
TMPD0503HG-R56M-G4	0.56μH±20%	7.2mΩ	9.5A / 8.5A	13.0A / 11.5A	R56
TMPD0503HG-R68M-G4	0.68μH±20%	8.5mΩ	9.0A / 8.0A	12.5A / 11.0A	R68
TMPD0503HG-R82M-G4	0.82μH±20%	9.2mΩ	8.8A / 7.7A	10.0A / 9.0A	R82
TMPD0503HG-1R0M-G4	1.00μH±20%	12.0mΩ	8.5A / 7.5A	9.0A / 8.0A	1R0
TMPD0503HG-1R5M-G4	1.50μH±20%	15.7mΩ	7.5A / 6.5A	8.0A / 7.0A	1R5
TMPD0503HG-2R2M-G4	2.20μH±20%	25.0mΩ	6.5A / 5.8A	7.0A / 6.5A	2R2
TMPD0503HG-3R3M-G4	3.30μH±20%	33.0mΩ	6.0A / 5.3A	6.3A / 5.8A	3R3
TMPD0503HG-4R7M-G4	4.70μH±20%	44.0mΩ	5.3A / 4.6A	5.5A / 4.8A	4R7
TMPD0503HG-5R6M-G4	5.60μH±20%	58.0mΩ	4.6A / 4.0A	5.0A / 4.3A	5R6
TMPD0503HG-6R8M-G4	6.80μH±20%	66.0mΩ	3.5A / 3.1A	4.3A / 3.7A	6R8
TMPD0503HG-100M-G4	10.0μH±20%	103.0mΩ	2.5A / 2.1A	3.8A / 3.4A	100
TMPD0503HG-150M-G4	15.0μH±20%	170.0mΩ	2.2A / 1.7A	2.9A / 2.5A	150
TMPD0503HG-220M-G4	22.0μH±20%	228.0mΩ	2.0A / 1.7A	2.4A / 2.0A	220

Note1. The saturation current is DC current value Inductance decrease down to 30%.

(Test by a short period of time to minimize the self-heating effect of the component.)

Note2. The temperature rise current value is the DC current value having temperature increase up to 40°C.

### 4-3. Operating Temperature Range

-40°C to +125°C (Including self - temperature rise)

### 4-4. Storage Temperature Range

Store this product under the condition of 5°C to 40°C, 20% to 60%RH and use within 6 months

## 5. Packaging Information

Standard Quantity for Packaging: 2,000 pcs/Reel

### Note

1. Please make sure that your product is has been evaluated and confirmed against your specifications when our product is mounted to your product.
2. Do not knock nor drop.
3. All the items and parameters in this product specification have been prescribed on the premise that our product is used for the purpose, under the condition and in the environment agreed upon between you and us. You are requested not to use our product deviating from such agreement.
4. Please keep the distance between transformer/coil and other components (refer to the standard IEC 950)