

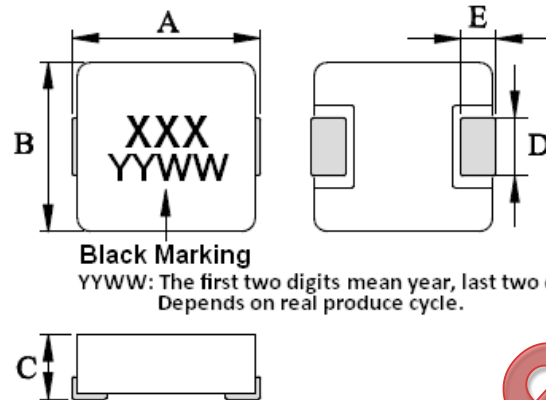
# TMPC0503HG Series Specification

## 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



Unit: mm

Type	A	B	C	D	E
TMPC0503HG	6.5 Max.	5.2±0.2	2.8±0.2	1.5±0.2	1.1 Ref.

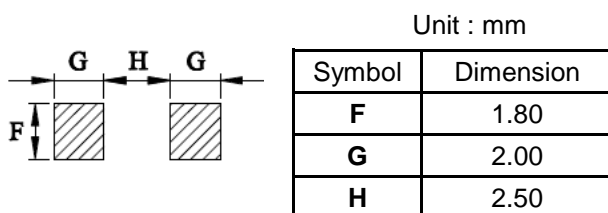
### 2. Ordering / Part Number Information

TMPC 0503 HG - R33 M  
(1) (2) (3) (4) (5)

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

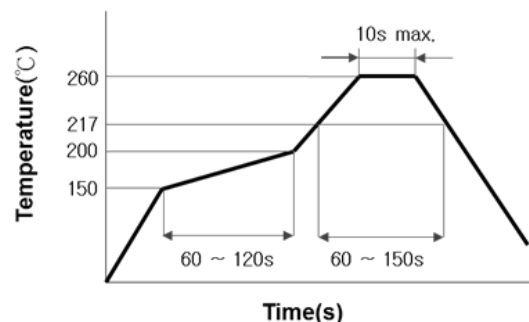
### 3. Recommended Soldering Condition

#### 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.	Temperature Rise Current (I <sub>RMS</sub> ) Typ.	Marking
TMPC0503HG-R10N	0.10μH±30%	3.0mΩ	27.0A	23.00A	R10
TMPC0503HG-R20N	0.20μH±30%	3.2mΩ	25.0A	16.00A	R20
TMPC0503HG-R22M	0.22μH±20%	4.4mΩ	21.0A	15.50A	R22
TMPC0503HG-R33M	0.33μH±20%	5.0mΩ	18.0A	14.00A	R33
TMPC0503HG-R47M	0.47μH±20%	7.4mΩ	16.0A	12.00A	R47
TMPC0503HG-R56M	0.56μH±20%	10.0mΩ	15.0A	10.00A	R56
TMPC0503HG-R68M	0.68μH±20%	12.0mΩ	14.0A	8.50A	R68
TMPC0503HG-1R0M	1.00μH±20%	14.0mΩ	11.0A	7.00A	1R0
TMPC0503HG-1R2M	1.20μH±20%	16.0mΩ	11.0A	6.50A	1R2
TMPC0503HG-1R5M	1.50μH±20%	25.0mΩ	10.0A	6.00A	1R5
TMPC0503HG-2R2M	2.20μH±20%	35.0mΩ	9.0A	5.50A	2R2
TMPC0503HG-3R3M	3.30μH±20%	38.0mΩ	8.0A	5.00A	3R3
TMPC0503HG-4R7M	4.70μH±20%	53.0mΩ	6.0A	4.60A	4R7
TMPC0503HG-5R6M	5.60μH±20%	63.0mΩ	4.5A	4.25A	5R6
TMPC0503HG-6R8M	6.80μH±20%	76.2mΩ	4.3A	4.00A	6R8
TMPC0503HG-100M	10.00μH±20%	128.0mΩ	3.5A	2.70A	100
TMPC0503HG-150M	15.00μH±20%	190.0mΩ	2.6A	2.10A	150
TMPC0503HG-180M	18.00μH±20%	230.0mΩ	2.3A	2.00A	180
TMPC0503HG-220M	22.00μH±20%	250.0mΩ	1.7A	1.90A	220
TMPC0503HG-330M	33.00μH±20%	440.0mΩ	1.6A	1.60A	330

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 70%RH and use within 6 months

## 5. Package Quantity

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)

Reference