

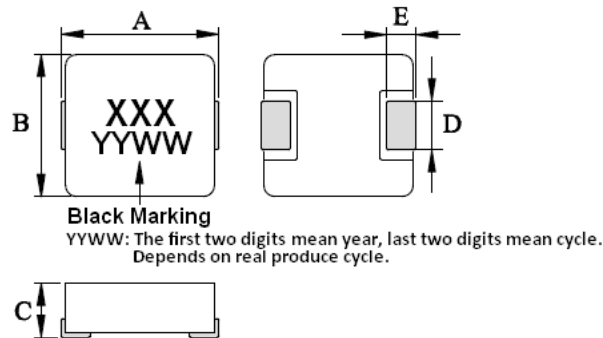
# TMPC0502HG-xxxx-T Series Specification

## 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
TMPC0502HG	6.5 Max.	5.2±0.2	1.80±0.2	2.5±0.3	1.1 Ref.

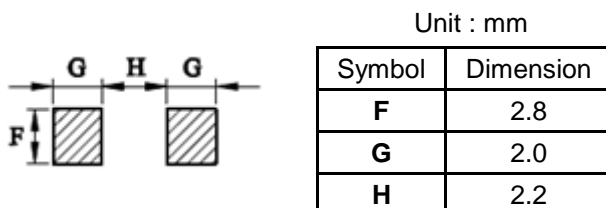
### 2. Ordering / Part Number Information

**TMPC**    **0502**    **HG**    -    **1R0**    **M**    -    **T**  
 (1)        (2)        (3)        (4)        (5)        (6)

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

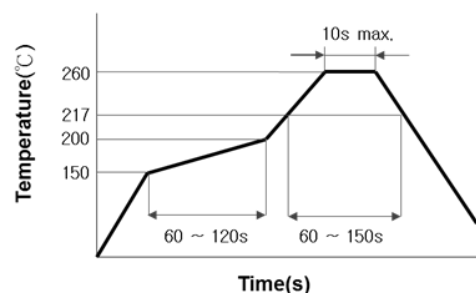
### 3. Recommended Soldering Condition

#### 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.	Temperature Rise Current (I <sub>RMS</sub> ) Typ.	Marking
TMPC0502HG-R10N-T	0.10μH ±30%	4.0mΩ	45.0A	18.0A	R10
TMPC0502HG-R22M-T	0.22μH ±20%	5.5mΩ	25.0A	15.0A	R22
TMPC0502HG-R33M-T	0.33μH ±20%	7.3mΩ	21.3A	12.0A	R33
TMPC0502HG-R47M-T	0.47μH ±20%	8.6mΩ	18.0A	11.5A	R47
TMPC0502HG-R68M-T	0.68μH ±20%	12.4mΩ	12.8A	10.0A	R68
TMPC0502HG-1R0M-T	1.00μH ±20%	20.0mΩ	13.7A	7.0A	1R0
TMPC0502HG-1R2M-T	1.20μH ±20%	28.0mΩ	11.0A	6.2A	1R2
TMPC0502HG-1R5M-T	1.50μH ±20%	30.5mΩ	9.8A	5.5A	1R5
TMPC0502HG-2R2M-T	2.20μH ±20%	50.0mΩ	9.0A	4.2A	2R2
TMPC0502HG-3R3M-T	3.30μH ±20%	76.0mΩ	7.3A	3.3A	3R3
TMPC0502HG-4R7M-T	4.70μH ±20%	116.0mΩ	5.0A	2.8A	4R7
TMPC0502HG-5R6M-T	5.60μH ±20%	122.0mΩ	4.0A	2.5A	5R6
TMPC0502HG-6R8M-T	6.80μH ±20%	150.0mΩ	3.8A	2.4A	6R8
TMPC0502HG-8R2M-T	8.20μH ±20%	171.0mΩ	3.5A	2.3A	8R2
TMPC0502HG-100M-T	10.00μH ±20%	199.0mΩ	3.4A	2.3A	100

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.

### 4-2. Operating Temperature Range

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

### 4-3. 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. Packaging Information

Standard Quantity for Packaging: 3,000 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)