

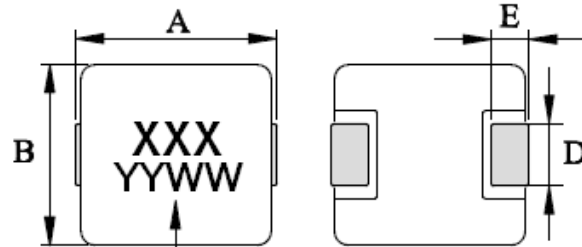
# TMPC1205HG Series Specification

## 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



**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
TMPC1205HG	13.5±0.5	12.5±0.3	4.8±0.2	4.7±0.3	2.3 Ref.

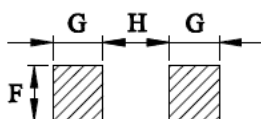
### 2. Ordering / Part Number Information

TMPC 1205 HG - R47 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

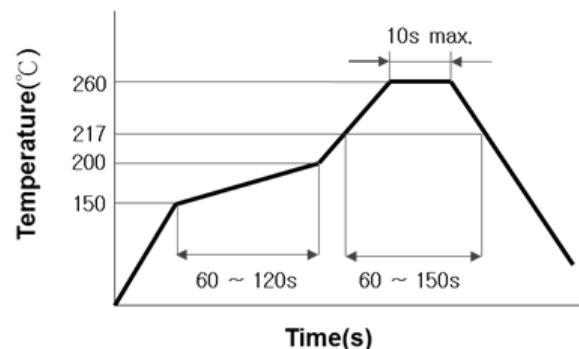


Unit : mm

Symbol	Dimension
F	5.00
G	3.10
H	8.00

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
TMPC1205HG-R47M	0.47μH±20%	1.1mΩ	65.0A	38.0A	R47
TMPC1205HG-R68M	0.68μH±20%	1.7mΩ	54.0A	34.0A	R68
TMPC1205HG-R82M	0.82μH±20%	2.1mΩ	52.0A	31.0A	R82
TMPC1205HG-1R0M	1.00μH±20%	2.5mΩ	50.0A	29.0A	1R0
TMPC1205HG-1R2M	1.20μH±20%	3.0mΩ	49.0A	28.0A	1R2
TMPC1205HG-1R5M	1.50μH±20%	3.3mΩ	48.0A	27.0A	1R5
TMPC1205HG-1R8M	1.80μH±20%	4.9mΩ	40.0A	21.0A	1R8
TMPC1205HG-2R2M	2.20μH±20%	5.5mΩ	32.0A	20.0A	2R2
TMPC1205HG-3R3M	3.30μH±20%	9.2mΩ	32.0A	15.0A	3R3
TMPC1205HG-4R7M	4.70μH±20%	15.0mΩ	27.0A	12.0A	4R7
TMPC1205HG-5R6M	5.60μH±20%	16.5mΩ	22.0A	11.5A	5R6
TMPC1205HG-6R0M	6.00μH±20%	16.5mΩ	21.5A	11.5A	6R0
TMPC1205HG-6R8M	6.80μH±20%	18.5mΩ	21.0A	11.0A	6R8
TMPC1205HG-8R2M	8.20μH±20%	22.5mΩ	18.0A	9.5A	8R2
TMPC1205HG-100M	10.00μH±20%	25.5mΩ	16.0A	9.0A	100
TMPC1205HG-120M	12.00μH±20%	34.0mΩ	15.0A	8.6A	120
TMPC1205HG-150M	15.00μH±20%	38.0mΩ	13.0A	8.2A	150
TMPC1205HG-180M	18.00μH±20%	45.0mΩ	11.0A	7.5A	180
TMPC1205HG-220M	22.00μH±20%	58.0mΩ	10.0A	6.5A	220
TMPC1205HG-270M	27.00μH±20%	76.0mΩ	8.5A	5.2A	270
TMPC1205HG-330M	33.00μH±20%	88.0mΩ	8.0A	5.0A	330
TMPC1205HG-680M	68.00μH±20%	162.0mΩ	5.5A	3.5A	680
TMPC1205HG-820M	82.00μH±20%	238.0mΩ	4.8A	3.0A	820

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: 500 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