

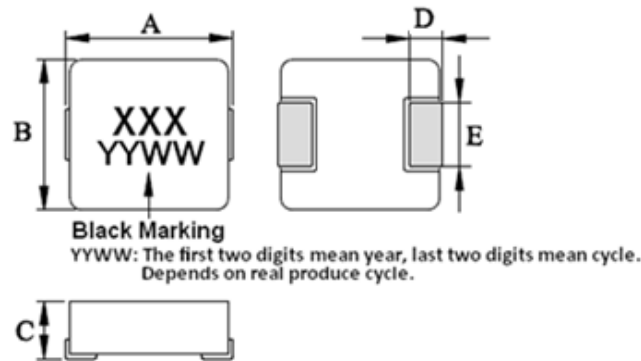
# TMPD1005S-Series-G4 Specification

## 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



Unit: mm

Type	A	B	C	D	E
TMPD1005S	12.0 Max.	10.0±0.3	4.8±0.2	2.3 Ref.	2.5±0.3
					3.0±0.3
					0.68~1.50uH among 0.47uH and below 2.20uH and above

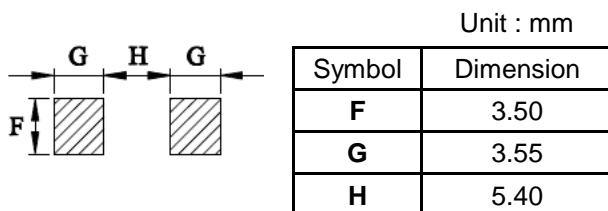
### 2. Ordering / Part Number Information

**TMPD 1005 S - 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

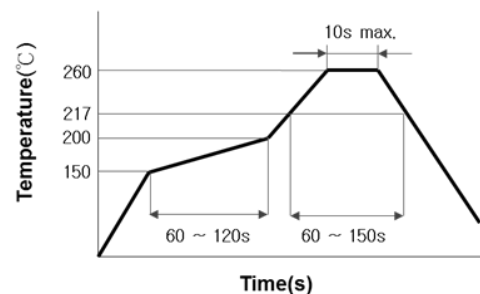
### 3. Recommended Soldering Condition

#### 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 (RDC) Max.	Saturation current ( $I_{SAT}$ ) Typ. / Max.	Temperature rise current ( $I_{RMS}$ ) Typ. / Max.	Marking
TMPD1005S-R36M-G4	0.36 $\mu$ H $\pm$ 20%	0.92m $\Omega$	52.0A / 46.0A	34.0A / 30.0A	R36
TMPD1005S-R47M-G4	0.47 $\mu$ H $\pm$ 20%	1.32m $\Omega$	46.0A / 40.0A	33.0A / 29.0A	R47
TMPD1005S-R68M-G4	0.68 $\mu$ H $\pm$ 20%	1.90m $\Omega$	35.0A / 32.0A	28.0A / 25.0A	R68
TMPD1005S-1R0M-G4	1.00 $\mu$ H $\pm$ 20%	3.00m $\Omega$	33.0A / 30.0A	25.0A / 23.0A	1R0
TMPD1005S-1R5M-G4	1.50 $\mu$ H $\pm$ 20%	3.80m $\Omega$	27.0A / 24.0A	23.0A / 21.0A	1R5
TMPD1005S-2R2M-G4	2.20 $\mu$ H $\pm$ 20%	5.60m $\Omega$	20.0A / 18.0A	19.5A / 17.5A	2R2
TMPD1005S-3R3M-G4	3.30 $\mu$ H $\pm$ 20%	9.10m $\Omega$	17.5A / 15.5A	17.0A / 15.0A	3R3
TMPD1005S-4R7M-G4	4.70 $\mu$ H $\pm$ 20%	10.50m $\Omega$	16.0A / 14.0A	15.0A / 13.0A	4R7
TMPD1005S-5R6M-G4	5.60 $\mu$ H $\pm$ 20%	14.40m $\Omega$	15.0A / 12.5A	13.0A / 11.0A	5R6
TMPD1005S-6R8M-G4	6.80 $\mu$ H $\pm$ 20%	17.30m $\Omega$	14.0A / 12.0A	12.0A / 10.0A	6R8
TMPD1005S-8R2M-G4	8.20 $\mu$ H $\pm$ 20%	18.80m $\Omega$	13.5A / 11.5A	10.0A / 8.5A	8R2
TMPD1005S-100M-G4	10.0 $\mu$ H $\pm$ 20%	21.80m $\Omega$	13.0A / 11.0A	7.6A / 7.2A	100
TMPD1005S-150M-G4	15.0 $\mu$ H $\pm$ 20%	39.00m $\Omega$	8.5A / 7.5A	6.5A / 6.0A	150
TMPD1005S-220M-G4	22.0 $\mu$ H $\pm$ 20%	54.00m $\Omega$	6.0A / 5.5A	6.0A / 5.5A	220
TMPD1005S-330M-G4	33.0 $\mu$ H $\pm$ 20%	86.00m $\Omega$	5.8A / 5.2A	5.5A / 5.0A	330
TMPD1005S-470M-G4	47.0 $\mu$ H $\pm$ 20%	127.00m $\Omega$	4.0A / 3.5A	4.5A / 4.0A	470
TMPD1005S-680M-G4	68.0 $\mu$ H $\pm$ 20%	177.00m $\Omega$	3.5A / 3.0A	3.5A / 3.0A	680
TMPD1005S-101M-G4	100.0 $\mu$ H $\pm$ 20%	290.0m $\Omega$	2.8A / 2.4A	2.2A / 2.0A	101

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

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. 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