

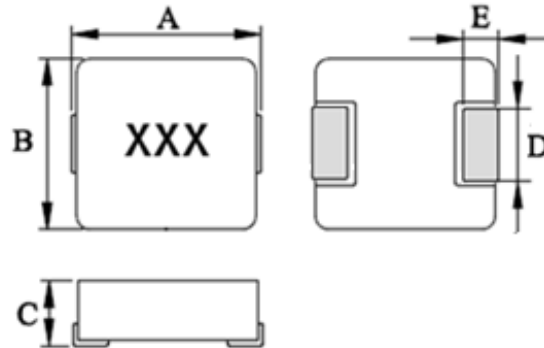
# TMPD0402SP-Series-G4 Specification

## 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
TMPD0402SP	4.45±0.3	4.1±0.2	1.8±0.2	2.0±0.3	0.8 Ref.

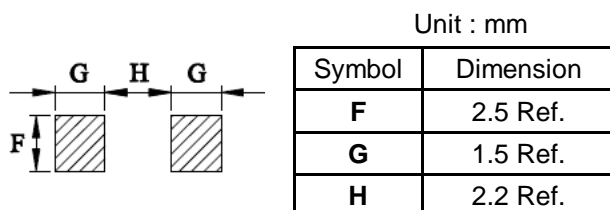
### 2. Ordering / Part Number Information

TMPD 0402 SP - 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

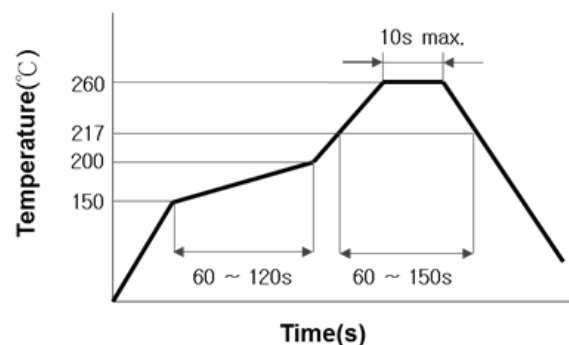
### 3. Recommended Soldering Condition

#### 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
TMPD0402SP-R10M-G4	0.10μH±20%	3.2mΩ	26.0A / 22.0A	16.0A / 14.0A	R10
TMPD0402SP-R22M-G4	0.22μH±20%	5.5mΩ	15.0A / 13.0A	14.0A / 12.5A	R22
TMPD0402SP-R33M-G4	0.33μH±20%	8.3mΩ	10.5A / 9.5A	12.0A / 11.0A	R33
TMPD0402SP-R47M-G4	0.47μH±20%	11.0mΩ	9.0A / 8.0A	10.0A / 9.0A	R47
TMPD0402SP-R68M-G4	0.68μH±20%	13.5mΩ	7.6A / 6.6A	9.0A / 8.0A	R68
TMPD0402SP-R82M-G4	0.82μH±20%	18.8mΩ	6.0A / 5.5A	8.0A / 7.0A	R82
TMPD0402SP-1R0M-G4	1.00μH±20%	22.0mΩ	5.5A / 5.0A	7.5A / 6.5A	1R0
TMPD0402SP-1R5M-G4	1.50μH±20%	31.0mΩ	5.2A / 4.8A	6.7A / 5.8A	1R5
TMPD0402SP-2R2M-G4	2.20μH±20%	48.0mΩ	4.5A / 4.0A	5.5A / 5.0A	2R2
TMPD0402SP-3R3M-G4	3.30μH±20%	75.0mΩ	3.1A / 2.7A	4.5A / 3.5A	3R3
TMPD0402SP-4R7M-G4	4.70μH±20%	95.0mΩ	2.8A / 2.5A	3.8A / 3.2A	4R7
TMPD0402SP-5R6M-G4	5.60μH±20%	115.0mΩ	2.6A / 2.3A	3.2A / 2.8A	5R6
TMPD0402SP-6R8M-G4	6.80μH±20%	157.0mΩ	2.4A / 2.1A	2.9A / 2.5A	6R8
TMPD0402SP-8R2M-G4	8.20μH±20%	168.0mΩ	2.2A / 2.0A	2.6A / 2.3A	8R2
TMPD0402SP-100M-G4	10.0μH±20%	215.0mΩ	2.1A / 1.9A	2.4A / 2.2A	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 60%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)