

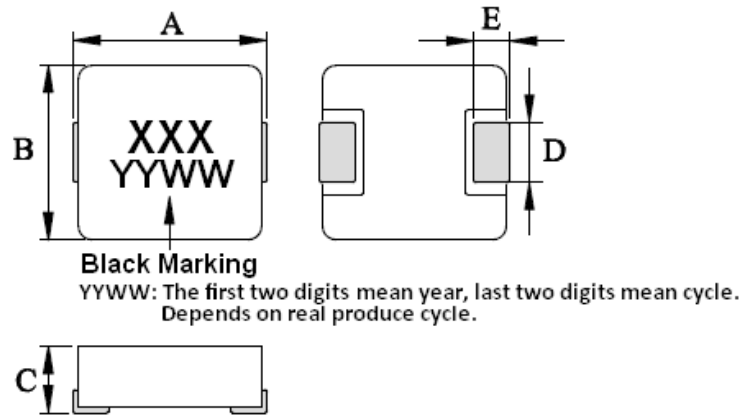
TMPD0502SP-Series-G4 Specification

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



Type	A	B	C	D	E
TMPD0502SP	5.7±0.5	5.2±0.3	1.8±0.2	2.5±0.3	1.0 Ref.

Unit: mm

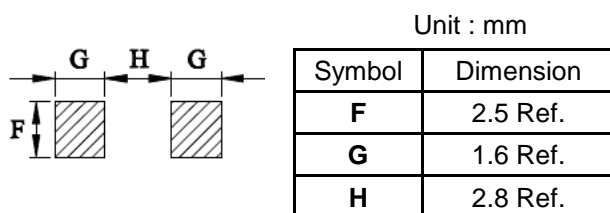
2. Ordering / Part Number Information

TMPD 0502 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

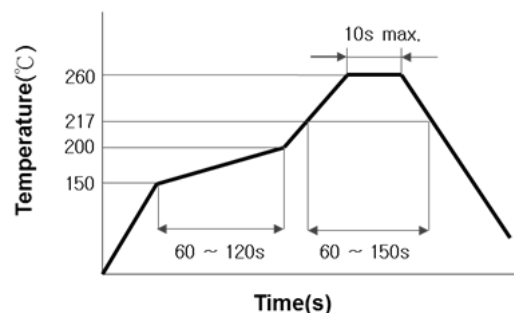
3. Recommended Soldering Condition

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 _{DC}) Max.	Saturation Current (I _{SAT}) Typ. / Max.	Temperature Rise Current (I _{RMS}) Typ. / Max.	Marking
TMPD0502SP-R10N-G4	0.10μH±30%	2.53mΩ	29.0A / 26.0A	25.0A / 22.0A	R10
TMPD0502SP-R15N-G4	0.15μH±30%	3.20mΩ	27.0A / 24.0A	22.0A / 19.0A	R15
TMPD0502SP-R22M-G4	0.22μH±20%	4.40mΩ	20.0A / 17.0A	16.0A / 14.0A	R22
TMPD0502SP-R33M-G4	0.33μH±20%	6.00mΩ	11.0A / 9.0A	14.0A / 13.0A	R33
TMPD0502SP-R47M-G4	0.47μH±20%	7.20mΩ	9.0A / 8.0A	13.0A / 11.0A	R47
TMPD0502SP-R68M-G4	0.68μH±20%	9.20mΩ	8.0A / 7.0A	12.0A / 10.0A	R68
TMPD0502SP-1R0M-G4	1.00μH±20%	16.2mΩ	7.5A / 6.5A	8.6A / 7.5A	1R0
TMPD0502SP-1R5M-G4	1.50μH±20%	26.4mΩ	7.0A / 6.0A	7.5A / 6.5A	1R5
TMPD0502SP-2R2M-G4	2.20μH±20%	34.0mΩ	5.8A / 5.0A	6.5A / 6.0A	2R2
TMPD0502SP-3R3M-G4	3.30μH±20%	60.0mΩ	5.0A / 4.7A	6.0A / 5.0A	3R3
TMPD0502SP-4R7M-G4	4.70μH±20%	97.0mΩ	4.7A / 4.4A	4.0A / 3.0A	4R7
TMPD0502SP-5R6M-G4	5.60μH±20%	109.0mΩ	4.4A / 4.0A	3.5A / 2.8A	5R6
TMPD0502SP-6R8M-G4	6.80μH±20%	127.0mΩ	4.2A / 3.8A	3.1A / 2.6A	6R8
TMPD0502SP-8R2M-G4	8.20μH±20%	142.0mΩ	3.9A / 3.4A	2.9A / 2.5A	8R2
TMPD0502SP-100M-G4	10.0μH±20%	180.0mΩ	3.5A / 3.0A	2.7A / 2.4A	100
TMPD0502SP-150M-G4	15.0μH±20%	252.0mΩ	2.6A / 2.3A	2.2A / 1.9A	150
TMPD0502SP-220M-G4	22.0μH±20%	325.0mΩ	2.2A / 1.9A	1.9A / 1.6A	220

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)