

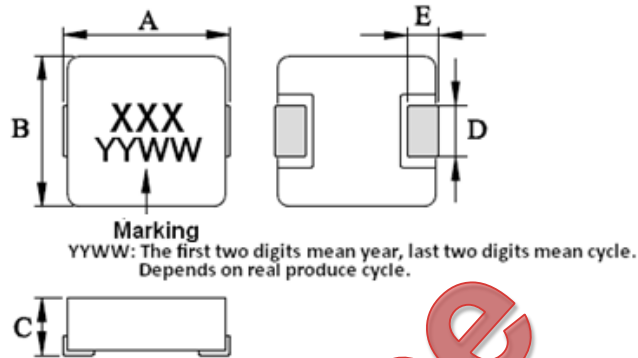
TMPC0512HG-Series-T Specification

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
TMPC0512HG	6.5 Max.	5.2±0.2	1.0±0.2	2.5±0.3	1.1 Ref.

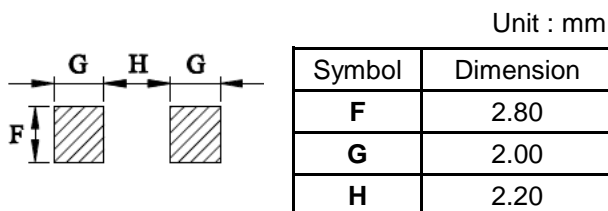
2. Ordering / Part Number Information

TMPC 0512 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
- (6) Control Code

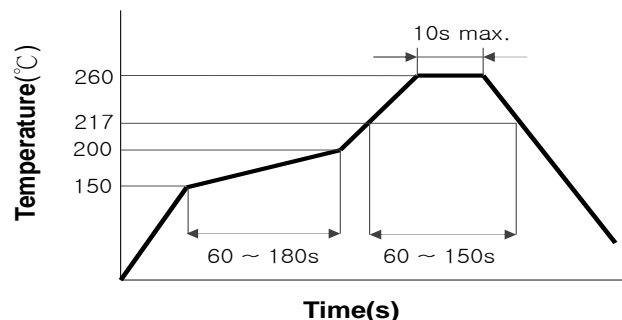
3. Recommended Soldering Condition

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.	Temperature Rise Current (I _{RMS}) Typ.	Marking
TMPC0512HG-R10N-T	0.10μH±30%	5.2mΩ	14.5A	14.0A	R10
TMPC0512HG-R22N-T	0.22μH±30%	6.7mΩ	14.0A	10.7A	R22
TMPC0512HG-R33M-T	0.33μH±20%	9.4mΩ	13.5A	8.5A	R33
TMPC0512HG-R36M-T	0.36μH±20%	11.5mΩ	13.0A	8.0A	R36
TMPC0512HG-R47M-T	0.47μH±20%	15.8mΩ	11.0A	7.0A	R47
TMPC0512HG-R68M-T	0.68μH±20%	24.5mΩ	9.0A	6.0A	R68
TMPC0512HG-1R0M-T	1.00μH±20%	30.0mΩ	6.0A	5.0A	1R0
TMPC0512HG-1R2M-T	1.20μH±20%	40.0mΩ	5.5A	4.5A	1R2
TMPC0512HG-1R5M-T	1.50μH±20%	44.0mΩ	5.0A	4.0A	1R5
TMPC0512HG-2R2M-T	2.20μH±20%	75.0mΩ	4.0A	3.5A	2R2
TMPC0512HG-3R3M-T	3.30μH±20%	86.0mΩ	3.8A	3.0A	3R3
TMPC0512HG-4R7M-T	4.70μH±20%	115.0mΩ	3.2A	2.5A	4R7
TMPC0512HG-5R6M-T	5.60μH±20%	201.0mΩ	3.2A	2.4A	5R6
TMPC0512HG-6R8M-T	6.80μH±20%	222.0mΩ	3.0A	2.0A	6R8
TMPC0512HG-8R2M-T	8.20μH±20%	378.0mΩ	2.8A	1.7A	8R2
TMPC0512HG-100M-T	10.0μH±20%	385.0mΩ	1.8A	1.5A	100
TMPC0512HG-150M-T	15.0μH±20%	470.0mΩ	1.5A	1.3A	150

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: 4000 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)