

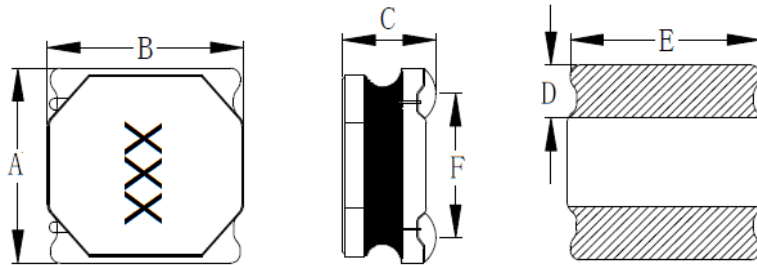
LQH5020NF-xxxx-T Series Specification

SMD Sealed 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	F
LQH5020NF	5.0±0.2	5.0±0.2	1.8±0.2	1.3±0.3	4.7±0.3	3.7 Ref.

*Dimensions are not including the termination. For maximum overall dimensions with termination, add 0.1mm.

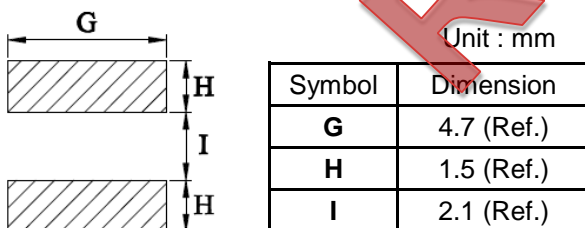
2. Ordering / Part Number Information

LQH 5020 NF - 1R0 N - T
 (1) (2) (3) (4) (5) (6)

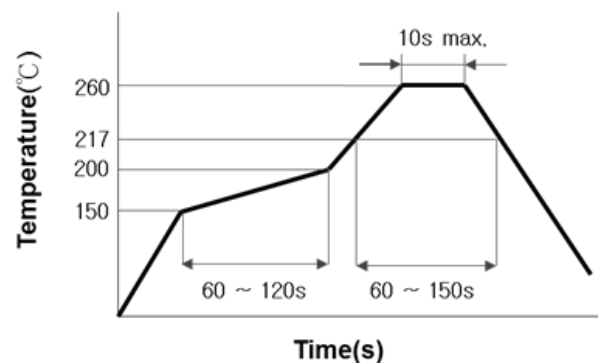
- (1) Product Group
- (2) Dimension Code
- (3) Type Code
- (4) Inductance Code
- (5) Inductance Tolerance
- (6) Control Code

3. Recommended Soldering Condition

3-1. Recommended Land Pattern



3-2. Recommended Soldering Profile



The Recommended Land pattern is for reference only.
 Please consult your manufacturing partners to ensure your company's PCB design guidelines are met

4. Electrical Characteristics

4-1. Electrical Specification

Part Number	Inductance (L) @100kHz, 1V	DC Resistance (R _{DC}) ±20%	Saturation Current (I _{SAT})	Temperature Rise Current (I _{RMS})	Marking
LQH5020NF-1R0N-T	1.0μH±30%	0.020Ω	5.00A	4.10A	1R0
LQH5020NF-1R2N-T	1.2μH±30%	0.020Ω	4.80A	3.80A	1R2
LQH5020NF-1R5N-T	1.5μH±30%	0.025Ω	4.50A	3.50A	1R5
LQH5020NF-2R7M-T	2.7μH±20%	0.038Ω	3.80A	3.00A	2R7
LQH5020NF-3R3M-T	3.3μH±20%	0.043Ω	3.50A	2.80A	3R3
LQH5020NF-4R7M-T	4.7μH±20%	0.060Ω	2.70A	2.40A	4R7
LQH5020NF-5R6M-T	5.6μH±20%	0.069Ω	2.40A	2.10A	5R6
LQH5020NF-6R8M-T	6.8μH±20%	0.090Ω	2.10A	1.90A	6R8
LQH5020NF-8R2M-T	8.2μH±20%	0.098Ω	1.90A	1.75A	8R2
LQH5020NF-100M-T	10.0μH±20%	0.110Ω	1.70A	1.60A	100
LQH5020NF-120M-T	12.0μH±20%	0.135Ω	1.40A	1.40A	120
LQH5020NF-150M-T	15.0μH±20%	0.165Ω	1.30A	1.25A	150
LQH5020NF-180M-T	18.0μH±20%	0.190Ω	1.20A	1.17A	180
LQH5020NF-220M-T	22.0μH±20%	0.225Ω	1.10A	1.10A	220
LQH5020NF-330M-T	33.0μH±20%	0.335Ω	0.80A	0.80A	330
LQH5020NF-470M-T	47.0μH±20%	0.460Ω	0.70A	0.70A	470

Note1. Saturation Current for Inductance becomes 30% lower than its initial value
(Test by a short period of time to minimize the self-heating effect of the component.)

Note2. Temperature Rise Current for a 40°C rise above 25°C ambient

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. Package Quantity

Standard Quantity for Packaging: 2,500pcs/Reel

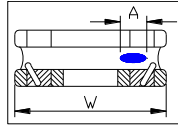
Note

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. 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.
3. Please keep the distance between transformer/coil and other components (refer to the standard IEC 950)
4. Void Appearance tolerance Limit

The unilateral should be no more than two holes.

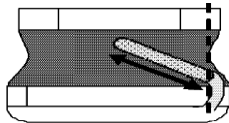
$A \leq W/2$ GOOD

$A > W/2$ NG



5. External appearance criterion for exposed wire

Exposed end of the winding wire at the side should be acceptable.



6. Storage and handling Condition

- (1) Products should be storage in the warehouse on the following conditions.

Temperature : 5°C to +40°C; Humidity: 20% to 60% relative humidity

- (2) Don't store products in corrosive gases such as sulfur. Chlorine gas or acid or it may cause oxidization of electrode, resulting in poor solder-ability.
- (3) Products should be storage in the warehouse without heat shock, vibration and direct sunlight and so on.
- (4) Handling Condition. Care should be taken when transporting or handling product to avoid excessive vibration or mechanical shock.

Reference