

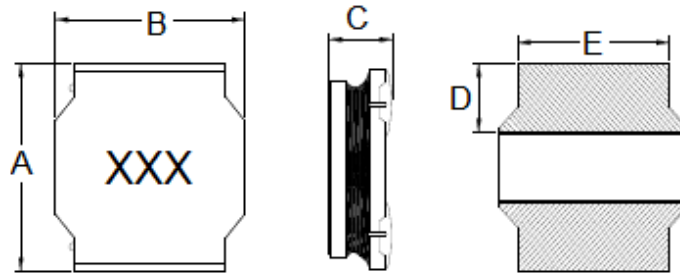
LQH6045NC-Series-T Specification

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
LQH6045NC	6.0±0.3	6.0±0.3	4.2±0.3	1.9±0.3	4.8±0.3

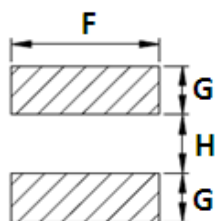
2. Ordering / Part Number Information

LQH 6045 NC - 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

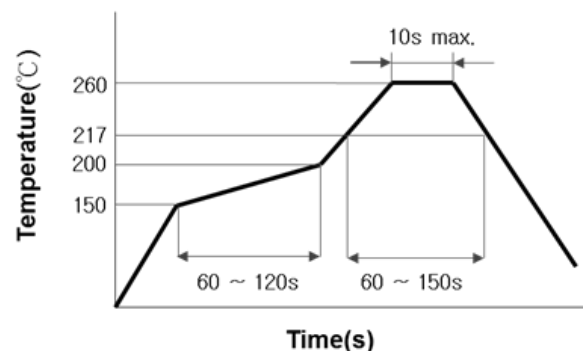


Unit : mm

Symbol	Dimension
F	6.50
G	2.15
H	2.20

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) @1MHz, 1V	DC Resistance (R _{DC}) ±20%	Saturation Current (I _{SAT}) Typ. / Max.	Temperature Rise Current (I _{RMS}) Typ. / Max.	Marking
LQH6045NC-1R0M-T	1.0μH±20%	10.0mΩ	13.50A / 12.50A	8.00A / 7.30A	1R0
LQH6045NC-1R2M-T	1.2μH±20%	10.5mΩ	12.50A / 11.50A	7.50A / 7.00A	1R2
LQH6045NC-1R5M-T	1.5μH±20%	11.7mΩ	12.00A / 11.00A	7.00A / 6.60A	1R5
LQH6045NC-1R8M-T	1.8μH±20%	12.0mΩ	11.00A / 10.00A	6.80A / 6.20A	1R8
LQH6045NC-2R0M-T	2.0μH±20%	13.5mΩ	10.50A / 9.50A	6.50A / 5.80A	2R0
LQH6045NC-2R2M-T	2.2μH±20%	15.0mΩ	9.50A / 8.55A	6.00A / 5.30A	2R2
LQH6045NC-2R3M-T	2.3μH±20%	16.0mΩ	9.30A / 8.20A	5.80A / 5.00A	2R3
LQH6045NC-3R3M-T	3.3μH±20%	21.0mΩ	7.80A / 7.30A	5.00A / 4.50A	3R3
LQH6045NC-3R6M-T	3.6μH±20%	22.5mΩ	7.40A / 6.90A	4.90A / 4.30A	3R6
LQH6045NC-4R7M-T	4.7μH±20%	26.0mΩ	6.80A / 6.20A	4.50A / 4.00A	4R7
LQH6045NC-5R6M-T	5.6μH±20%	31.0mΩ	6.40A / 5.70A	4.10A / 3.70A	5R6
LQH6045NC-6R3M-T	6.3μH±20%	33.0mΩ	5.90A / 5.30A	3.80A / 3.50A	6R3
LQH6045NC-6R8M-T	6.8μH±20%	34.0mΩ	5.70A / 5.15A	3.60A / 3.30A	6R8
LQH6045NC-100M-T	10.0μH±20%	52.0mΩ	4.60A / 4.20A	3.20A / 2.60A	100
LQH6045NC-150M-T	15.0μH±20%	71.0mΩ	3.80A / 3.30A	2.80A / 2.20A	150
LQH6045NC-220M-T	22.0μH±20%	96.0mΩ	3.30A / 2.70A	2.30A / 1.90A	220
LQH6045NC-330M-T	33.0μH±20%	145.0mΩ	2.50A / 2.10A	1.80A / 1.50A	330
LQH6045NC-470M-T	47.0μH±20%	200.0mΩ	2.00A / 1.75A	1.60A / 1.20A	470
LQH6045NC-680M-T	68.0μH±20%	305.0mΩ	1.60A / 1.52A	1.10A / 0.92A	680
LQH6045NC-101M-T	100.0μH±20%	456.0mΩ	1.33A / 1.25A	0.92A / 0.82A	101
LQH6045NC-151M-T	150.0μH±20%	626.0mΩ	1.10A / 1.00A	0.75A / 0.70A	151
LQH6045NC-331M-T	330.0μH±20%	1400.0mΩ	0.60A / 0.55A	0.55A / 0.45A	331
LQH6045NC-471M-T	470.0μH±20%	2050.0mΩ	0.50A / 0.45A	0.40A / 0.35A	471

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: 1,000 pcs/Reel

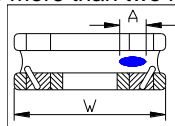
Note

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. 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.

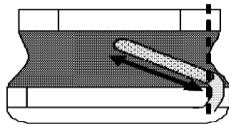
$A \leq W/2$ GOOD

$A > W/2$ 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