

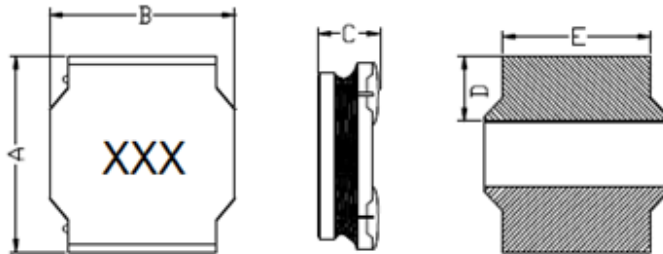
LQH8040NC-Series-T Specification

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
LQH8040NC	8.0±0.3	8.0±0.3	<10uH	4.2Max	2.4±0.3
			≥10uH	3.7±0.3	

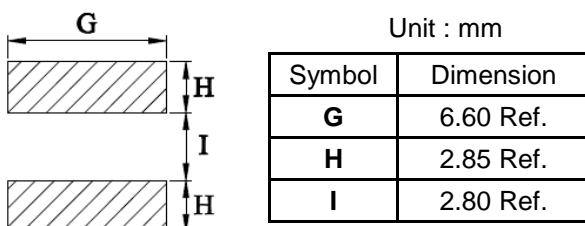
2. Ordering / Part Number Information

LQH 8040 NC - 2R2 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

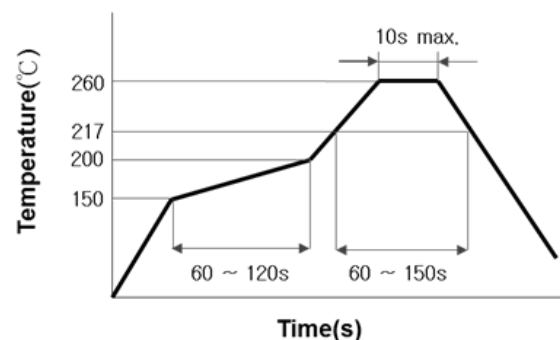
3. Recommended Soldering Condition

3-1. Recommended Land Pattern



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)	DC Resistance (R_{DC}) $\pm 20\%$	Saturation Current (I_{SAT}) Max. / Typ.	Temperature Rise Current (I_{RMS}) Max. / Typ.
LQH8040NC-1R0M-T	1.0 μ H $\pm 20\%$	8.2m Ω	13.00A / 13.80A	8.00A / 8.50A
LQH8040NC-1R4M-T	1.4 μ H $\pm 20\%$	10.0m Ω	11.20A / 11.80A	7.80A / 8.20A
LQH8040NC-1R5M-T	1.5 μ H $\pm 20\%$	10.0m Ω	11.00A / 11.50A	7.70A / 8.00A
LQH8040NC-2R2M-T	2.2 μ H $\pm 20\%$	11.5m Ω	9.20A / 9.80A	6.90A / 7.40A
LQH8040NC-3R3M-T	3.3 μ H $\pm 20\%$	15.0m Ω	7.50A / 8.00A	6.20A / 6.60A
LQH8040NC-4R7M-T	4.7 μ H $\pm 20\%$	19.5m Ω	6.00A / 6.70A	5.30A / 5.80A
LQH8040NC-5R6M-T	5.6 μ H $\pm 20\%$	22.0m Ω	5.80A / 6.20A	5.20A / 5.40A
LQH8040NC-6R8M-T	6.8 μ H $\pm 20\%$	25.0m Ω	5.10A / 5.60A	5.00A / 5.10A
LQH8040NC-100M-T	10.0 μ H $\pm 20\%$	33.0m Ω	4.30A / 5.00A	4.20A / 4.60A
LQH8040NC-150M-T	15.0 μ H $\pm 20\%$	50.0m Ω	3.60A / 4.00A	3.20A / 3.60A
LQH8040NC-220M-T	22.0 μ H $\pm 20\%$	73.0m Ω	2.80A / 3.10A	2.45A / 2.90A
LQH8040NC-330M-T	33.0 μ H $\pm 20\%$	100m Ω	2.10A / 2.60A	2.10A / 2.30A
LQH8040NC-470M-T	47.0 μ H $\pm 20\%$	135m Ω	1.90A / 2.20A	1.70A / 2.00A
LQH8040NC-560M-T	56.0 μ H $\pm 20\%$	160m Ω	1.60A / 1.90A	1.60A / 1.75A
LQH8040NC-680M-T	68.0 μ H $\pm 20\%$	205m Ω	1.50A / 1.75A	1.50A / 1.65A
LQH8040NC-820M-T	82.0 μ H $\pm 20\%$	230m Ω	1.40A / 1.60A	1.30A / 1.40A
LQH8040NC-101M-T	100 μ H $\pm 20\%$	300m Ω	1.20A / 1.45A	1.10A / 1.20A
LQH8040NC-121M-T	120 μ H $\pm 20\%$	350m Ω	1.10A / 1.30A	1.00A / 1.10A
LQH8040NC-151M-T	150 μ H $\pm 20\%$	410m Ω	1.03A / 1.20A	0.90A / 0.98A
LQH8040NC-181M-T	180 μ H $\pm 20\%$	490m Ω	0.94A / 1.04A	0.83A / 0.91A
LQH8040NC-221M-T	220 μ H $\pm 20\%$	610m Ω	0.90A / 0.99A	0.76A / 0.85A

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 $^{\circ}$ C rise above 25 $^{\circ}$ C ambient

Note3. Ls:1MHz/1V. (221 後頻率為 100KHz/1V)

4-2. Operating Temperature Range

-40 $^{\circ}$ C to +125 $^{\circ}$ C (Including self - temperature rise)

4-3. Storage Temperature Range

Store this product under the condition of 5 $^{\circ}$ C to 40 $^{\circ}$ C, 20% to 60%RH and use within 6 months

5. Package Quantity

Standard Quantity for Packaging: 1,000 pcs/Reel

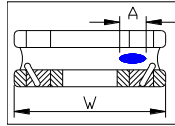
Note

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.

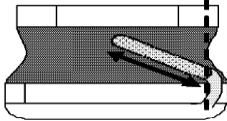
$A \leq W/2$ GOOD

$A > W/2$ 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