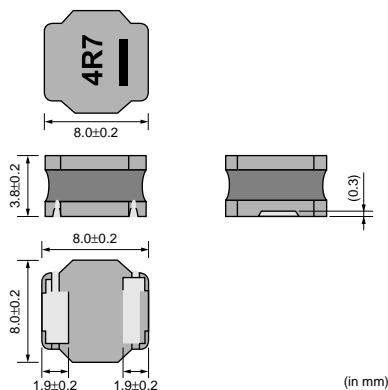


# Chip Inductor (Chip Coil) Power Inductor (Wire Wound Type)

## LQH88P Series (3131 Size)

### ■ Dimensions



### ■ Packaging

| Code | Packaging           | Minimum Quantity |
|------|---------------------|------------------|
| L    | 180mm Embossed Tape | 250              |
| K    | 330mm Embossed Tape | 1000             |

### ■ Rated Value (□: packaging code)

| Part Number    | Inductance | Inductance Test Frequency | Allowable DC Current (Based on Temperature Rise) | Allowable DC Current (Based on Inductance Change) | DC Resistance | Self Resonance Frequency (min.) | Class of Magnetic Shield                    |
|----------------|------------|---------------------------|--|---|---------------|---------------------------------|---|
| LQH88PN1R0N38□ | 1.0μH±30%  | 100kHz                    | 8.00A  | 11.20A  | 0.006ohm±30%  | 100MHz                          | Magnetic shield of magnetic powder in resin |
| LQH88PN1R5N38□ | 1.5μH±30%  | 100kHz                    | 7.10A  | 8.50A   | 0.008ohm±30%  | 60MHz                           | Magnetic shield of magnetic powder in resin |
| LQH88PN2R2N38□ | 2.2μH±30%  | 100kHz                    | 6.40A  | 8.00A   | 0.009ohm±30%  | 50MHz                           | Magnetic shield of magnetic powder in resin |
| LQH88PN3R3N38□ | 3.3μH±30%  | 100kHz                    | 5.00A  | 7.00A   | 0.013ohm±30%  | 35MHz                           | Magnetic shield of magnetic powder in resin |
| LQH88PN4R7N38□ | 4.7μH±30%  | 100kHz                    | 4.20A  | 6.00A   | 0.017ohm±30%  | 30MHz                           | Magnetic shield of magnetic powder in resin |
| LQH88PN6R8N38□ | 6.8μH±30%  | 100kHz                    | 3.80A  | 4.50A   | 0.022ohm±30%  | 20MHz                           | Magnetic shield of magnetic powder in resin |
| LQH88PN100M38□ | 10μH±20%   | 100kHz                    | 3.15A  | 3.60A   | 0.029ohm±30%  | 18MHz                           | Magnetic shield of magnetic powder in resin |
| LQH88PN150M38□ | 15μH±20%   | 100kHz                    | 2.45A  | 3.00A   | 0.041ohm±30%  | 13MHz                           | Magnetic shield of magnetic powder in resin |
| LQH88PN220M38□ | 22μH±20%   | 100kHz                    | 2.25A  | 2.70A   | 0.066ohm±30%  | 10MHz                           | Magnetic shield of magnetic powder in resin |
| LQH88PN330M38□ | 33μH±20%   | 100kHz                    | 1.75A  | 1.90A   | 0.095ohm±30%  | 9MHz                            | Magnetic shield of magnetic powder in resin |
| LQH88PN470M38□ | 47μH±20%   | 100kHz                    | 1.45A  | 1.50A   | 0.157ohm±30%  | 7MHz                            | Magnetic shield of magnetic powder in resin |
| LQH88PN680M38□ | 68μH±20%   | 100kHz                    | 1.10A  | 1.25A   | 0.190ohm±30%  | 7MHz                            | Magnetic shield of magnetic powder in resin |
| LQH88PN101M38□ | 100μH±20%  | 100kHz                    | 1.00A  | 1.00A   | 0.265ohm±30%  | 4MHz                            | Magnetic shield of magnetic powder in resin |

Operating Temperature Range: -40 to +85°C

Only for reflow soldering.

### ■ Notice (Allowable DC Current)

<Allowable DC Current>

When Allowable DC Current is applied to the Products, self-generation of heat will rise to 40°C or less.

When Allowable DC Current is applied to the Products, Inductance will be within +-30% of nominal Inductance value.

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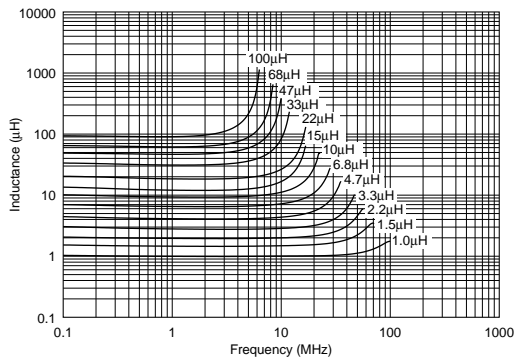
● This data sheet is applied for CHIP INDUCTORS (CHIP COILS) used for General Electronics equipment for your design.

### ⚠ Note:

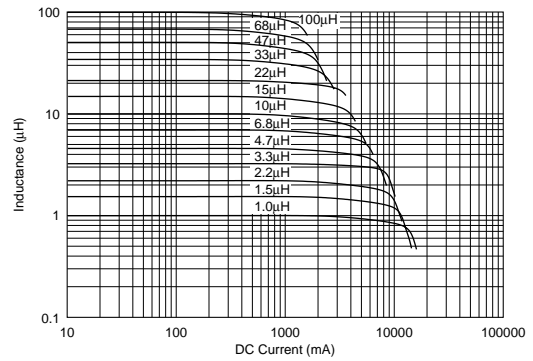
1. This datasheet is downloaded from the website of Murata Manufacturing co., Ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
2. This datasheet has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

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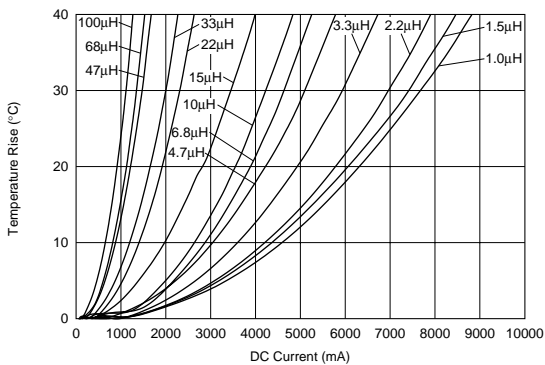
### Inductance-Frequency Characteristics (Typ.)



### Inductance-Current Characteristics (Typ.)



### Temperature Rise Characteristics (Typ.)



### Caution/Notice

#### Caution (Rating)

Do not use products beyond the rated current as this may create excessive heat.

#### Notice

Solderability of Tin plating termination chip might be deteriorated when low temperature soldering profile where peak solder temperature is below the Tin melting point is used. Please confirm the solderability of Tin plating termination chip before use.

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