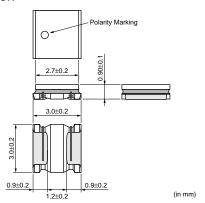
#### **Data Sheet**

# Chip Inductors (Chip Coils) for DC-DC Converter Wire Wound Type

## LQH3NP\_G0 Series (1212 Size)

#### ■ Dimension



#### Packaging

Code	Packaging	Minimum Quantity		
L	180mm Embossed Tape	1500		
K	330mm Embossed Tape	6000		

#### ■ 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
LQH3NPN1R0NG0□	1.0μH±30%	1MHz	1525mA	1650mA	0.08ohm±20%	160MHz	Magnetic shield of magnetic powder in resin
LQH3NPN1R5NG0□	1.5μH±30%	1MHz	1470mA	1300mA	0.10ohm±20%	130MHz	Magnetic shield of magnetic powder in resin
LQH3NPN2R2NG0□	2.2μH±30%	1MHz	1270mA	1250mA	0.14ohm±20%	100MHz	Magnetic shield of magnetic powder in resin
LQH3NPN3R3NG0□	3.3μH±30%	1MHz	1130mA	850mA	0.18ohm±20%	75MHz	Magnetic shield of magnetic powder in resin
LQH3NPN4R7NG0□	4.7μH±30%	1MHz	925mA	800mA	0.26ohm±20%	60MHz	Magnetic shield of magnetic powder in resin
LQH3NPN6R8NG0□	6.8μH±30%	1MHz	710mA	650mA	0.45ohm±20%	48MHz	Magnetic shield of magnetic powder in resin
LQH3NPN100NG0□	10μH±30%	1MHz	630mA	500mA	0.57ohm±20%	45MHz	Magnetic shield of magnetic powder in resin
LQH3NPN150NG0□	15μH±30%	1MHz	475mA	370mA	0.91ohm±20%	35MHz	Magnetic shield of magnetic powder in resin
LQH3NPN220MG0□	22μH±20%	1MHz	430mA	340mA	1.1ohm±20%	25MHz	Magnetic shield of magnetic powder in resin
LQH3NPN220NG0□	22μH±30%	1MHz	430mA	340mA	1.1ohm±20%	25MHz	Magnetic shield of magnetic powder in resin
LQH3NPN330MG0□	33μH±20%	1MHz	345mA	250mA	2.1ohm±20%	24MHz	Magnetic shield of magnetic powder in resin
LQH3NPN330NG0□	33μH±30%	1MHz	345mA	250mA	2.1ohm±20%	24MHz	Magnetic shield of magnetic powder in resin
LQH3NPN470MG0□	47μH±20%	1MHz	270mA	170mA	3.0ohm±20%	19MHz	Magnetic shield of magnetic powder in resin
LQH3NPN470NG0□	47μH±30%	1MHz	270mA	170mA	3.0ohm±20%	19MHz	Magnetic shield of magnetic powder in resin
LQH3NPN680MG0□	68μH±20%	1MHz	235mA	150mA	4.2ohm±20%	16MHz	Magnetic shield of magnetic powder in resin
LQH3NPN680NG0□	68μH±30%	1MHz	235mA	150mA	4.2ohm±20%	16MHz	Magnetic shield of magnetic powder in resin
LQH3NPN101MG0□	100μH±20%	1MHz	165mA	140mA	8.0ohm±20%	10MHz	Magnetic shield of magnetic powder in resin
LQH3NPN101NG0□	100μH±30%	1MHz	165mA	140mA	8.0ohm±20%	10MHz	Magnetic shield of magnetic powder in resin
LQH3NPN151MG0□	150μH±20%	1MHz	145mA	110mA	11.0ohm±20%	10MHz	Magnetic shield of magnetic powder in resin
LQH3NPN151NG0□	150μH±30%	1MHz	145mA	110mA	11.0ohm±20%	10MHz	Magnetic shield of magnetic powder in resin
LQH3NPN221MG0□	220μH±20%	1MHz	130mA	100mA	14.0ohm±20%	8.5MHz	Magnetic shield of magnetic powder in resin
LQH3NPN221NG0□	220μH±30%	1MHz	130mA	100mA	14.0ohm±20%	8.5MHz	Magnetic shield of magnetic powder in resin
LQH3NPN251MG0□	250μH±20%	1MHz	130mA	80mA	15.0ohm±20%	8.0MHz	Magnetic shield of magnetic powder in resin

Operating Temperature Range: -40°C to +85°C Only for reflow soldering

Continued on the following page.

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

- 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.

### **Data Sheet**

Continued from the preceding page.

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
LQH3NPN251NG0□	250μH±30%	1MHz	130mA	80mA	15.0ohm±20%	8.0MHz	Magnetic shield of magnetic powder in resin

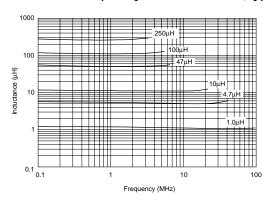
Operating Temperature Range: -40°C to +85°C Only for reflow soldering.

#### ■ Notice (Allowable DC Current)

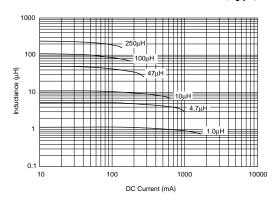
<Allowable DC Current>
When Allowable DC Current is applied to the Products, self-generation of heat will rise to 40°C or less.

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

### ■ Inductance - Frequency Characteristics (Typ.)



#### ■ Inductance - Current Characteristics (Typ.)



#### ■ ①Caution/Notice

#### 

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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