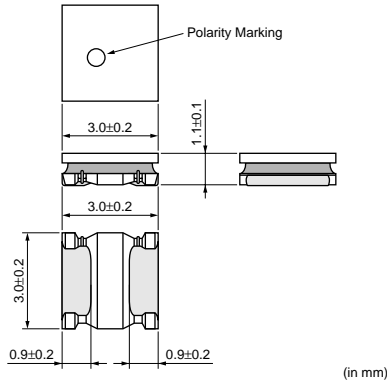


# Chip Inductor (Chip Coil) Power Inductor (Wire Wound Type)

## LQH3NP\_J0 Series (1212 Size)

### ■ Dimensions



### ■ Packaging

Code	Packaging	Minimum Quantity
<b>L</b>	180mm Embossed Tape	1000
<b>K</b>	330mm Embossed Tape	5000

### ■ Rated Value (□: packaging code)

Part Number	Inductance	Rated Current (Based on Inductance Change)	Rated Current (Based on Temperature Rise)	DC Resistance	Self Resonance Frequency (min.)
LQH3NPN1R0NJ0□	1.0μH±30%	1650mA	1620mA	0.040ohm ±20%	140MHz
LQH3NPN1R5NJ0□	1.5μH±30%	1200mA	1500mA	0.055ohm ±20%	90MHz
LQH3NPN2R2MJ0□	2.2μH±20%	1150mA	1460mA	0.069ohm ±20%	90MHz
LQH3NPN2R2NJ0□	2.2μH±30%	1150mA	1460mA	0.069ohm ±20%	90MHz
LQH3NPN3R3MJ0□	3.3μH±20%	950mA	1270mA	0.105ohm ±20%	70MHz
LQH3NPN3R3NJ0□	3.3μH±30%	950mA	1270mA	0.105ohm ±20%	70MHz
LQH3NPN4R7MJ0□	4.7μH±20%	780mA	1120mA	0.130ohm ±20%	65MHz
LQH3NPN4R7NJ0□	4.7μH±30%	780mA	1120mA	0.130ohm ±20%	65MHz
LQH3NPN6R8MJ0□	6.8μH±20%	700mA	850mA	0.210ohm ±20%	45MHz
LQH3NPN6R8NJ0□	6.8μH±30%	700mA	850mA	0.210ohm ±20%	45MHz
LQH3NPN100MJ0□	10μH±20%	560mA	710mA	0.300ohm ±20%	35MHz
LQH3NPN100NJ0□	10μH±30%	560mA	710mA	0.300ohm ±20%	35MHz
LQH3NPN150MJ0□	15μH±20%	440mA	590mA	0.440ohm ±20%	30MHz
LQH3NPN150NJ0□	15μH±30%	440mA	590mA	0.440ohm ±20%	30MHz
LQH3NPN220MJ0□	22μH±20%	350mA	510mA	0.600ohm ±20%	25MHz
LQH3NPN220NJ0□	22μH±30%	350mA	510mA	0.600ohm ±20%	25MHz
LQH3NPN330MJ0□	33μH±20%	280mA	410mA	0.900ohm ±20%	20MHz
LQH3NPN330NJ0□	33μH±30%	280mA	410mA	0.900ohm ±20%	20MHz
LQH3NPN470MJ0□	47μH±20%	200mA	350mA	1.30ohm ±20%	15MHz
LQH3NPN470NJ0□	47μH±30%	200mA	350mA	1.30ohm ±20%	15MHz

Test Frequency: 1MHz Class of Magnetic Shield: Magnetic shield of magnetic powder in resin

Operating Temperature Range (Self-temperature rise is included): -40 to +125°C

Operating Temperature Range (Self-temperature rise is not included): -40 to +85°C

Only for reflow soldering.

\*1 When Rated Current is applied to the Products, Inductance will be within ±30% of nominal Inductance value.


\*2 When Rated Current is applied to the Products, self-generation of heat will rise to 40°C or less.

Continued on the following page.

● 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.

 Continued from the preceding page.

## ■ Notice (Rated Current)

<Rated Current>

(Based on Inductance Change)

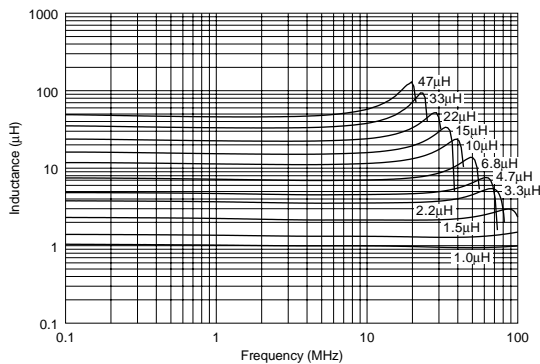
When Rated Current is applied to the Products,  
Inductance will be within  $\pm 30\%$  of nominal  
Inductance value.

<Rated Current>

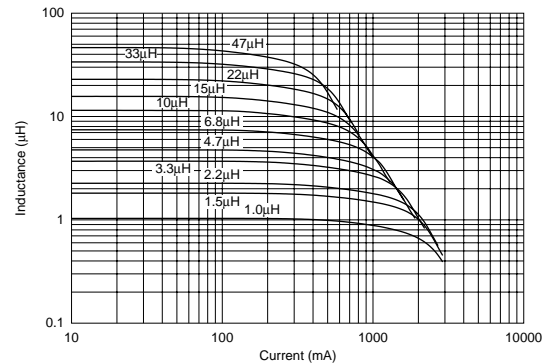
(Based on Temperature Rise)

When Rated Current is applied to the Products,  
self-generation of heat will rise to  $40^{\circ}\text{C}$  or less.

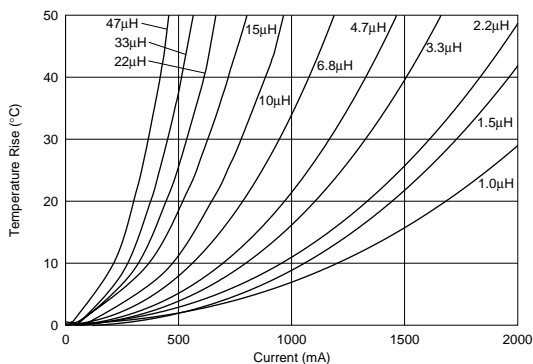
## ■ Inductance-Frequency Characteristics (Typ.)



## ■ 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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