# **Data Sheet**

# **LQH3NPN\_J0 Series** 1212/3030 (inch/mm)



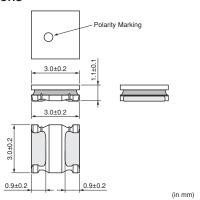








### Dimensions



## Packaging

Code	Packaging	Minimum Quantity
L	ø180mm Embossed Taping	1000
K	ø330mm Embossed Taping	5000

# ■ Rated Value (□: packaging code)

Part Number	Inductance	Inductance Test Frequency	Rated Current (Based on Inductance Change)	Rated Current (Based on Temperature Rise)	DC Resistance	Self-Resonance Frequency (min.)
LQH3NPN1R0NJ0□	1.0µH ±30%	1MHz	1650mA	1620mA	0.040 Ω ±20%	140MHz
LQH3NPN1R5NJ0□	1.5µH ±30%	1MHz	1200mA	1500mA	$0.055 \Omega \pm 20\%$	90MHz
LQH3NPN2R2MJ0□	2.2µH ±20%	1MHz	1150mA	1460mA	0.069Ω±20%	90MHz
LQH3NPN2R2NJ0□	2.2µH ±30%	1MHz	1150mA	1460mA	$0.069 \Omega \pm 20\%$	90MHz
LQH3NPN3R3MJ0□	3.3µH ±20%	1MHz	950mA	1270mA	0.105Ω±20%	70MHz
LQH3NPN3R3NJ0□	3.3µH ±30%	1MHz	950mA	1270mA	$0.105\Omega \pm 20\%$	70MHz
LQH3NPN4R7MJ0□	4.7µH ±20%	1MHz	780mA	1120mA	$0.130\Omega\pm20\%$	65MHz
LQH3NPN4R7NJ0□	4.7µH ±30%	1MHz	780mA	1120mA	$0.130\Omega\pm20\%$	65MHz
LQH3NPN6R8MJ0□	6.8µH ±20%	1MHz	700mA	850mA	$0.210\Omega\pm20\%$	45MHz
LQH3NPN6R8NJ0□	6.8µH ±30%	1MHz	700mA	850mA	$0.210\Omega\pm20\%$	45MHz
LQH3NPN100MJ0□	10µH ±20%	1MHz	560mA	710mA	$0.300\Omega\pm20\%$	35MHz
LQH3NPN100NJ0□	10µH ±30%	1MHz	560mA	710mA	$0.300\Omega\pm20\%$	35MHz
LQH3NPN150MJ0□	15µH ±20%	1MHz	440mA	590mA	$0.440\Omega \pm 20\%$	30MHz
LQH3NPN150NJ0□	15µH ±30%	1MHz	440mA	590mA	$0.440\Omega \pm 20\%$	30MHz
LQH3NPN220MJ0□	22µH ±20%	1MHz	350mA	510mA	$0.600\Omega \pm 20\%$	25MHz
LQH3NPN220NJ0□	22µH ±30%	1MHz	350mA	510mA	0.600Ω±20%	25MHz
LQH3NPN330MJ0□	33µH ±20%	1MHz	280mA	410mA	0.900Ω±20%	20MHz
LQH3NPN330NJ0□	33µH ±30%	1MHz	280mA	410mA	0.900Ω±20%	20MHz
LQH3NPN470MJ0□	47µH ±20%	1MHz	200mA	350mA	1.30Ω±20%	15MHz
LQH3NPN470NJ0□	47µH ±30%	1MHz	200mA	350mA	1.30Ω±20%	15MHz

Class of Magnetic Shield: Magnetic shield of magnetic powder in resin Operating Temperature Range (Self-temperature rise is included): -40  $\sim$  125  $^{\circ}$ C Operating Temperature Range (Self-temperature rise is not included): -40~85°C For reflow soldering only.

Continued on the following page.



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

- 1. This datasheet is downloaded from the website of Murata Manufacturing co., Itd. 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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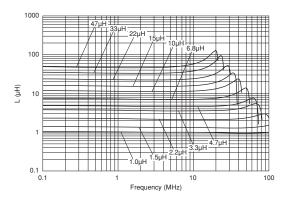
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# ■ Notice (Rating)

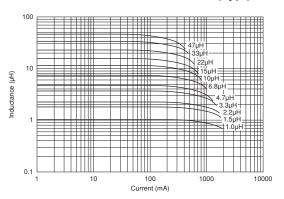
When applied rated current to the products, inductance will be within ±30% of nomonal inductance value.

When applied rated current to the products, temperature rise caused by self-generated heat shall be limited to 40°C max. Keep the temperature (ambient temperature plus self-generation of heat) under 125°C.

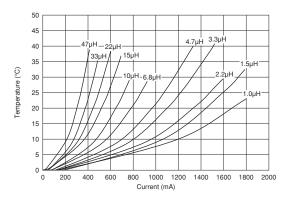
# ■ Inductance-Frequency Characteristics (Typ.)



## ■ Inductance-Current Characteristics (Typ.)



## ■ Temperature Rise Characteristics (Typ.)



# ■ ⚠ Caution/Notice

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

**Data Sheet** 

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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