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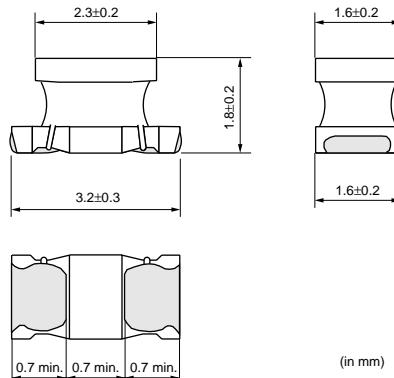
For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

# Chip Inductor (Chip Coil) for General Use Wire Wound Type

## LQH31M Series (1206 Size)

### ■ Dimensions



### ■ Packaging

Code	Packaging	Minimum Quantity
L	180mm Embossed Tape	2000
K	330mm Embossed Tape	7500

### ■ Rated Value (□: packaging code)

Part Number	Inductance	Test Frequency	Rated Current	DC Resistance	Q (min.)	Test Frequency	Self Resonance Frequency (min.)
LQH31MNR15K03□	0.15 $\mu$ H±10%	1MHz	250mA	0.39ohm±40%	20	25MHz	250MHz
LQH31MNR22K03□	0.22 $\mu$ H±10%	1MHz	240mA	0.43ohm±40%	20	25MHz	250MHz
LQH31MNR33K03□	0.33 $\mu$ H±10%	1MHz	230mA	0.45ohm±40%	30	25MHz	250MHz
LQH31MNR47K03□	0.47 $\mu$ H±10%	1MHz	215mA	0.83ohm±40%	30	25MHz	200MHz
LQH31MNR56K03□	0.56 $\mu$ H±10%	1MHz	200mA	0.61ohm±40%	30	25MHz	180MHz
LQH31MNR68K03□	0.68 $\mu$ H±10%	1MHz	190mA	0.67ohm±40%	30	25MHz	160MHz
LQH31MNR82K03□	0.82 $\mu$ H±10%	1MHz	185mA	0.73ohm±40%	30	25MHz	120MHz
LQH31MN1R0K03□	1.0 $\mu$ H±10%	1MHz	175mA	0.49ohm±30%	35	10MHz	100MHz
LQH31MN1R2J03□	1.2 $\mu$ H±5%	1MHz	165mA	0.37ohm±30%	35	10MHz	90MHz
LQH31MN1R2K03□	1.2 $\mu$ H±10%	1MHz	165mA	0.9ohm±30%	35	10MHz	90MHz
LQH31MN1R5J03□	1.5 $\mu$ H±5%	1MHz	155mA	1.0ohm±30%	35	10MHz	75MHz
LQH31MN1R5K03□	1.5 $\mu$ H±10%	1MHz	155mA	1.0ohm±30%	35	10MHz	75MHz
LQH31MN1R8J03□	1.8 $\mu$ H±5%	1MHz	150mA	1.6ohm±30%	35	10MHz	60MHz
LQH31MN1R8K03□	1.8 $\mu$ H±10%	1MHz	150mA	1.6ohm±30%	35	10MHz	60MHz
LQH31MN2R2J03□	2.2 $\mu$ H±5%	1MHz	140mA	0.7ohm±30%	35	10MHz	50MHz
LQH31MN2R2K03□	2.2 $\mu$ H±10%	1MHz	140mA	0.7ohm±30%	35	10MHz	50MHz
LQH31MN2R7J03□	2.7 $\mu$ H±5%	1MHz	135mA	0.55ohm±30%	35	10MHz	43MHz
LQH31MN2R7K03□	2.7 $\mu$ H±10%	1MHz	135mA	0.55ohm±30%	35	10MHz	43MHz
LQH31MN3R3J03□	3.3 $\mu$ H±5%	1MHz	130mA	0.61ohm±30%	35	8MHz	38MHz
LQH31MN3R3K03□	3.3 $\mu$ H±10%	1MHz	130mA	0.61ohm±30%	35	8MHz	38MHz
LQH31MN3R9J03□	3.9 $\mu$ H±5%	1MHz	125mA	1.5ohm±30%	35	8MHz	35MHz
LQH31MN3R9K03□	3.9 $\mu$ H±10%	1MHz	125mA	1.5ohm±30%	35	8MHz	35MHz
LQH31MN4R7J03□	4.7 $\mu$ H±5%	1MHz	120mA	1.7ohm±30%	35	8MHz	31MHz
LQH31MN4R7K03□	4.7 $\mu$ H±10%	1MHz	120mA	1.7ohm±30%	35	8MHz	31MHz

Class of Magnetic Shield: No magnetic shield

Operating Temperature Range: -40°C to +85°C

Continued on the following page.

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

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Part Number	Inductance	Test Frequency	Rated Current	DC Resistance	Q (min.)	Test Frequency	Self Resonance Frequency (min.)
LQH31MN5R6J03□	5.6 $\mu$ H $\pm$ 5%	1MHz	115mA	1.8ohm $\pm$ 30%	35	8MHz	28MHz
LQH31MN5R6K03□	5.6 $\mu$ H $\pm$ 10%	1MHz	115mA	1.8ohm $\pm$ 30%	35	8MHz	28MHz
LQH31MN6R8J03□	6.8 $\mu$ H $\pm$ 5%	1MHz	110mA	2.0ohm $\pm$ 30%	35	8MHz	25MHz
LQH31MN6R8K03□	6.8 $\mu$ H $\pm$ 10%	1MHz	110mA	2.0ohm $\pm$ 30%	35	8MHz	25MHz
LQH31MN8R2J03□	8.2 $\mu$ H $\pm$ 5%	1MHz	105mA	2.2ohm $\pm$ 30%	35	8MHz	23MHz
LQH31MN8R2K03□	8.2 $\mu$ H $\pm$ 10%	1MHz	105mA	2.2ohm $\pm$ 30%	35	8MHz	23MHz
LQH31MN100J03□	10 $\mu$ H $\pm$ 5%	1MHz	100mA	2.5ohm $\pm$ 30%	35	5MHz	20MHz
LQH31MN100K03□	10 $\mu$ H $\pm$ 10%	1MHz	100mA	2.5ohm $\pm$ 30%	35	5MHz	20MHz
LQH31MN120J03□	12 $\mu$ H $\pm$ 5%	1MHz	95mA	2.7ohm $\pm$ 30%	35	5MHz	18MHz
LQH31MN120K03□	12 $\mu$ H $\pm$ 10%	1MHz	95mA	2.7ohm $\pm$ 30%	35	5MHz	18MHz
LQH31MN150J03□	15 $\mu$ H $\pm$ 5%	1MHz	90mA	3.0ohm $\pm$ 30%	35	5MHz	16MHz
LQH31MN150K03□	15 $\mu$ H $\pm$ 10%	1MHz	90mA	3.0ohm $\pm$ 30%	35	5MHz	16MHz
LQH31MN180J03□	18 $\mu$ H $\pm$ 5%	1MHz	85mA	3.4ohm $\pm$ 30%	35	5MHz	15MHz
LQH31MN180K03□	18 $\mu$ H $\pm$ 10%	1MHz	85mA	3.4ohm $\pm$ 30%	35	5MHz	15MHz
LQH31MN220J03□	22 $\mu$ H $\pm$ 5%	1MHz	85mA	3.1ohm $\pm$ 30%	40	2.5MHz	14MHz
LQH31MN220K03□	22 $\mu$ H $\pm$ 10%	1MHz	85mA	3.1ohm $\pm$ 30%	40	2.5MHz	14MHz
LQH31MN270J03□	27 $\mu$ H $\pm$ 5%	1MHz	85mA	3.4ohm $\pm$ 30%	40	2.5MHz	13MHz
LQH31MN270K03□	27 $\mu$ H $\pm$ 10%	1MHz	85mA	3.4ohm $\pm$ 30%	40	2.5MHz	13MHz
LQH31MN330J03□	33 $\mu$ H $\pm$ 5%	1MHz	80mA	3.8ohm $\pm$ 30%	40	2.5MHz	12MHz
LQH31MN330K03□	33 $\mu$ H $\pm$ 10%	1MHz	80mA	3.8ohm $\pm$ 30%	40	2.5MHz	12MHz
LQH31MN390J03□	39 $\mu$ H $\pm$ 5%	1MHz	55mA	7.2ohm $\pm$ 30%	40	2.5MHz	11MHz
LQH31MN390K03□	39 $\mu$ H $\pm$ 10%	1MHz	55mA	7.2ohm $\pm$ 30%	40	2.5MHz	11MHz
LQH31MN470J03□	47 $\mu$ H $\pm$ 5%	1MHz	55mA	8.0ohm $\pm$ 30%	40	2.5MHz	10MHz
LQH31MN470K03□	47 $\mu$ H $\pm$ 10%	1MHz	55mA	8.0ohm $\pm$ 30%	40	2.5MHz	10MHz
LQH31MN560J03□	56 $\mu$ H $\pm$ 5%	1MHz	50mA	8.9ohm $\pm$ 30%	40	2.5MHz	9MHz
LQH31MN560K03□	56 $\mu$ H $\pm$ 10%	1MHz	50mA	8.9ohm $\pm$ 30%	40	2.5MHz	9MHz
LQH31MN680J03□	68 $\mu$ H $\pm$ 5%	1MHz	50mA	9.9ohm $\pm$ 30%	40	2.5MHz	8.5MHz
LQH31MN680K03□	68 $\mu$ H $\pm$ 10%	1MHz	50mA	9.9ohm $\pm$ 30%	40	2.5MHz	8.5MHz
LQH31MN820J03□	82 $\mu$ H $\pm$ 5%	1MHz	45mA	11ohm $\pm$ 30%	40	2.5MHz	7.5MHz
LQH31MN820K03□	82 $\mu$ H $\pm$ 10%	1MHz	45mA	11ohm $\pm$ 30%	40	2.5MHz	7.5MHz
LQH31MN101J03□	100 $\mu$ H $\pm$ 5%	1MHz	45mA	12ohm $\pm$ 30%	40	2.5MHz	7MHz
LQH31MN101K03□	100 $\mu$ H $\pm$ 10%	1MHz	45mA	12ohm $\pm$ 30%	40	2.5MHz	7MHz

Class of Magnetic Shield: No magnetic shield      Operating Temperature Range: -40°C to +85°C

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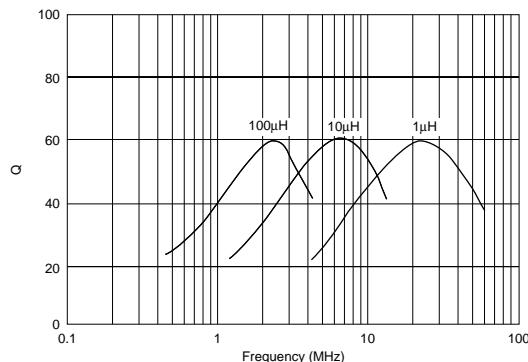
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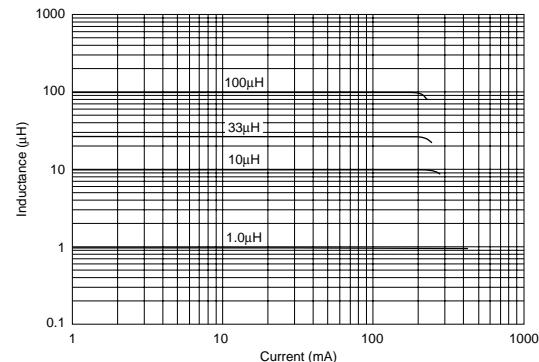
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**■ Q-Frequency Characteristics (Typ.)**



**■ Inductance-Current 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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