

Chip Coils

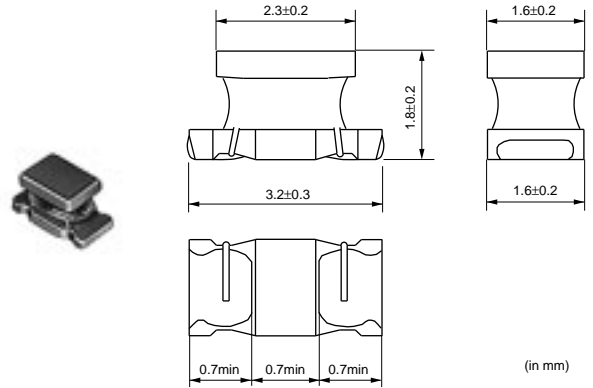


for Choke Winding Type LQH31C/LQH32C/LQH43C Series

LQH31C Series

■ Features

The LQH31C series consists of miniature chip inductors with low DC resistance, high current capacity, and high impedance characteristics. It is suitable for use as choke coils in DC power supply circuits. High rated current up to 970mA is available.

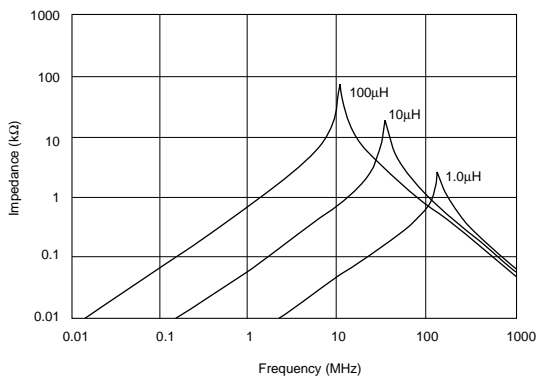


Part Number	Inductance (μH)	Test Frequency (MHz)	Rated Current (mA)	DC Resistance (ohm)	Self Resonance Frequency (MHz)	EIA
LQH31CNR12M01	0.12 ±20%	1	970	0.08 ±40%	250 min.	1206
LQH31CNR22M01	0.22 ±20%	1	850	0.1 ±40%	250 min.	1206
LQH31CNR47M01	0.47 ±20%	1	700	0.15 ±40%	180 min.	1206
LQH31CN1R0M01	1 ±20%	1	510	0.28 ±30%	100 min.	1206
LQH31CN2R2M01	2.2 ±20%	1	430	0.41 ±30%	50 min.	1206
LQH31CN4R7M01	4.7 ±20%	1	340	0.65 ±30%	31 min.	1206
LQH31CN100K01	10 ±10%	1	230	1.3 ±30%	20 min.	1206
LQH31CN220K01	22 ±10%	1	160	3.0 ±30%	14 min.	1206
LQH31CN470K01	47 ±10%	1	100	8.0 ±30%	10 min.	1206
LQH31CN101K01	100 ±10%	1	80	12 ±30%	7 min.	1206

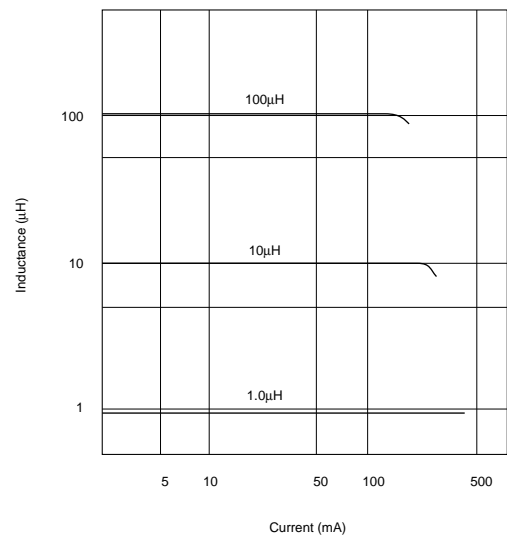
Operating Temp. Range : -25°C to 85°C

10

■ Impedance-Frequency Characteristics



■ Inductance-Current Characteristics



LQH32C_11/_21

The LQH32C series consists of miniature chip coils with low DC resistance, high current capacity, and high impedance characteristics.

These features are made possible by the development of Murata's innovative automatic winding techniques.

They are excellent for use as choke coils in DC power supply circuits.

■ Features (LQH32C_11/_21)

1. The low DC resistance means high current and high inductance.

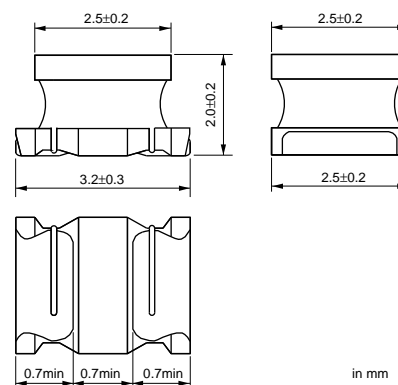
For inductance ranging from 0.15 micro H to 560 micro H, LQH32C coils have very low DC resistance.

2. The series exhibit low voltage drops and small variations in inductance with respect to temperature rise and DC current level. This makes them excellent for use as power supply line choke coils.

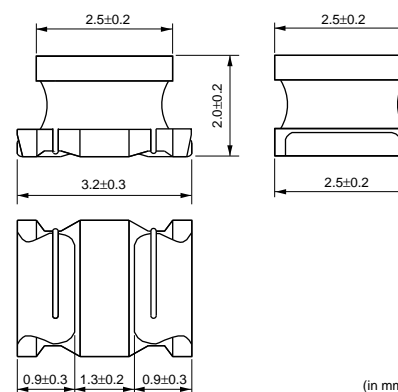
3. The series has excellent solder heat resistance. Both flow and reflow soldering methods can be employed.



LQH32C_11



LQH32C_21

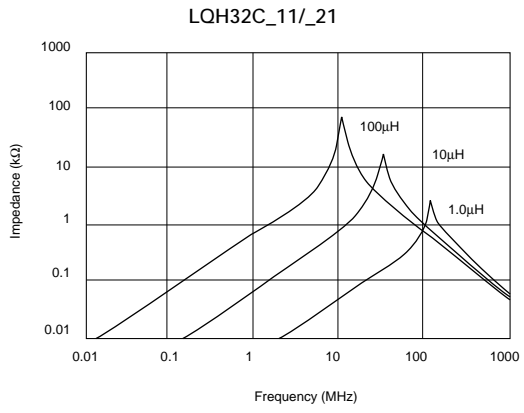


Part Number	Inductance (μH)	Test Frequency	Rated Current (mA)	DC Resistance (ohm)	Self Resonance Frequency (MHz)	EIA
LQH32CNR15M11	0.15 ±20%	1MHz	1450	0.028 ±30%	400 min.	1210
LQH32CNR27M11	0.27 ±20%	1MHz	1250	0.034 ±30%	250 min.	1210
LQH32CNR47M11	0.47 ±20%	1MHz	1100	0.042 ±30%	150 min.	1210
LQH32CN1R0M11	1 ±20%	1MHz	1000	0.06 ±30%	100 min.	1210
LQH32CN2R2M11	2.2 ±20%	1MHz	790	0.097 ±30%	64 min.	1210
LQH32CN4R7M11	4.7 ±20%	1MHz	650	0.15 ±30%	43 min.	1210
LQH32CN100K11	10 ±10%	1MHz	450	0.3 ±30%	26 min.	1210
LQH32CN1R0M21	1.0 ±20%	1MHz	800	0.06 ±30%	96 min.	1210
LQH32CN2R2M21	2.2 ±20%	1MHz	600	0.13 ±30%	64 min.	1210
LQH32CN4R7M21	4.7 ±20%	1MHz	450	0.2 ±30%	43 min.	1210
LQH32CN100K21	10 ±10%	1MHz	300	0.44 ±30%	26 min.	1210
LQH32CN220K21	22 ±10%	1MHz	250	0.71 ±30%	19 min.	1210
LQH32CN470K21	47 ±10%	1MHz	170	1.3 ±30%	15 min.	1210
LQH32CN101K21	100 ±10%	1MHz	100	3.5 ±30%	10 min.	1210
LQH32CN221K21	220 ±10%	1MHz	70	8.4 ±30%	6.8 min.	1210
LQH32CN331K21	330 ±10%	1MHz	60	10 ±30%	5.6 min.	1210
LQH32CN391K21	390 ±10%	1MHz	60	17 ±30%	5 min.	1210
LQH32CN471K21	470 ±10%	1kHz	60	19 ±30%	5 min.	1210
LQH32CN561K21	560 ±10%	1kHz	60	22 ±30%	5 min.	1210

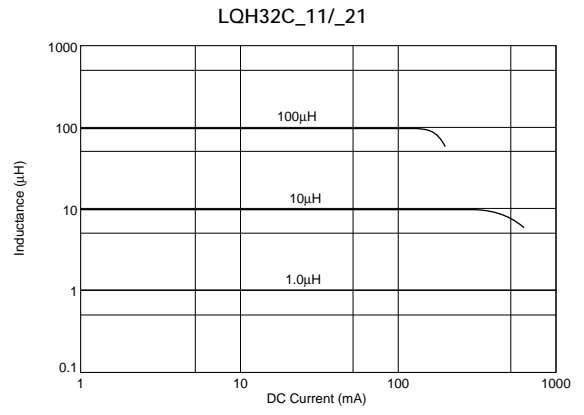
Operating Temp. Range : -25°C to 85°C

10

■ Impedance-Frequency Characteristics



■ Inductance-Current Characteristics



LQH32C_51 (Low Profile Type)

The LQH32C_51 series consists of miniature chip coils with low DC resistance, high current capacity, and high impedance characteristics.

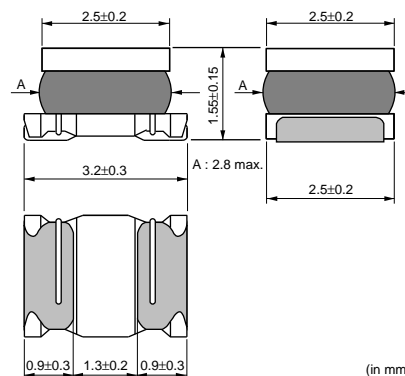
These features are made possible by the development of Murata's innovative winding techniques. They are excellent for use as choke coils in DC power supply circuits.

■ Features (LQH32C_51)

1. The series have a wide inductance range of 1.0 micro H to 100 micro H.
2. The series exhibit low voltage drops and small variations in inductance with respect to temperature and DC current level. This makes them excellent for use as power supply line choke coils.
3. The series has excellent solder heat resistance. Both flow and reflow soldering methods can be employed.



LQH32C_51



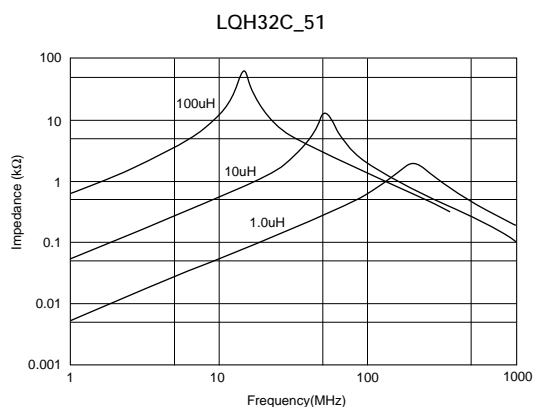
(in mm)

Part Number	Inductance (μH)	Test Frequency (MHz)	Rated Current (mA)	DC Resistance (ohm)	Self Resonance Frequency (MHz)	EIA
LQH32CN1R0M51	1.0 ±20%	1	1000	0.060 ±30%	100 min.	1210
LQH32CN2R2M51	2.2 ±20%	1	790	0.097 ±30%	64 min.	1210
LQH32CN4R7M51	4.7 ±20%	1	650	0.15 ±30%	43 min.	1210
LQH32CN100K51	10 ±10%	1	450	0.30 ±30%	26 min.	1210
LQH32CN150K51	15 ±10%	1	300	0.58 ±30%	26 min.	1210
LQH32CN220K51	22 ±10%	1	250	0.71 ±30%	19 min.	1210
LQH32CN330K51	33 ±10%	1	200	1.1 ±30%	17 min.	1210
LQH32CN470K51	47 ±10%	1	170	1.3 ±30%	15 min.	1210
LQH32CN680K51	68 ±10%	1	130	2.2 ±30%	12 min.	1210
LQH32CN101K51	100 ±10%	1	100	3.5 ±30%	10 min.	1210

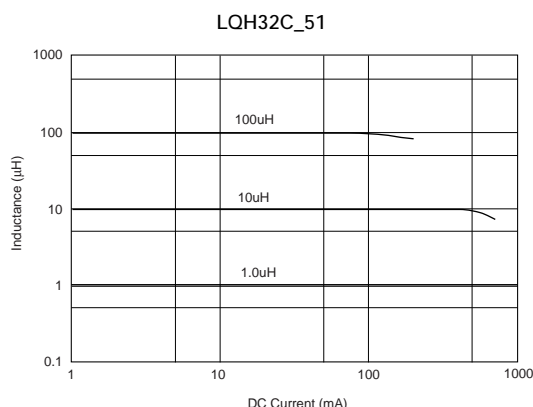
Operating Temp. Range : -25°C to 85°C

10

■ Impedance-Frequency Characteristics

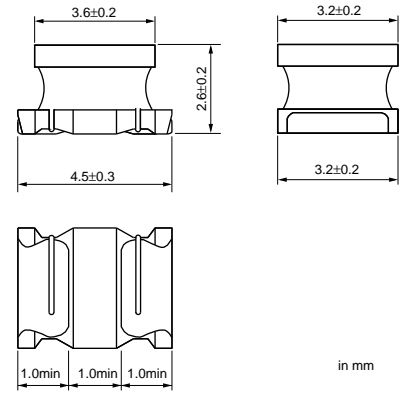


■ Inductance-Current Characteristics



LQH43C Series

The LQH43C series consists of miniature chip inductors with low DC resistance, high current capacity, and high impedance characteristics. It is suitable for use as choke coils in DC power supply circuits.



■ Features

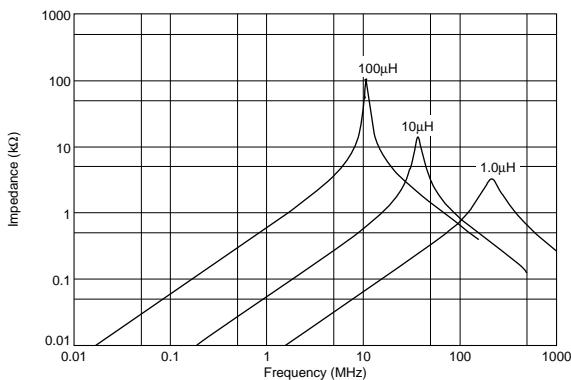
1. The LQH43C series has an open magnetic structure. Various inductance range is available.
2. The series exhibits low voltage drops and small change in inductance with respect to temperature rise and DC current level. This makes them excellent to use as power supply line choke coils.
3. The LQH43C has miniature size 4.5mmx3.2mm and realized low height 2.8mm at max.
4. The series has excellent solder heat resistance. Both flow and reflow soldering methods can be employed.

Part Number	Inductance (μH)	Test Frequency	Rated Current (mA)	DC Resistance (ohm)	Self Resonance Frequency (MHz)	EIA
LQH43CN1R0M01	1.0 ±20%	1MHz	1080	0.08 max.	100	1812
LQH43CN1R5M01	1.5 ±20%	1MHz	1000	0.09 max.	85	1812
LQH43CN2R2M01	2.2 ±20%	1MHz	900	0.11 max.	60	1812
LQH43CN3R3M01	3.3 ±20%	1MHz	800	0.13 max.	47	1812
LQH43CN4R7M01	4.7 ±20%	1MHz	750	0.15 max.	35	1812
LQH43CN6R8M01	6.8 ±20%	1MHz	720	0.20 max.	30	1812
LQH43CN100K01	10 ±10%	1MHz	650	0.24 max.	23	1812
LQH43CN150K01	15 ±10%	1MHz	570	0.32 max.	20	1812
LQH43CN220K01	22 ±10%	1MHz	420	0.6 max.	15	1812
LQH43CN330K01	33 ±10%	1MHz	310	1.0 max.	12	1812
LQH43CN470K01	47 ±10%	1MHz	280	1.1 max.	10	1812
LQH43CN680K01	68 ±10%	1MHz	220	1.7 max.	8.4	1812
LQH43CN101K01	100 ±10%	1MHz	190	2.2 max.	6.8	1812
LQH43CN151K01	150 ±10%	1MHz	130	3.5 max.	5.5	1812
LQH43CN221K01	220 ±10%	1MHz	110	4.0 max.	4.5	1812
LQH43CN331K01	330 ±10%	1MHz	100	6.8 max.	3.6	1812
LQH43CN471K01	470 ±10%	1kHz	90	8.5 max.	3.0	1812

Operating Temp. Range : -25°C to 85°C

10

■ Impedance-Frequency Characteristics



■ Inductance-Current Characteristics

