



The LQH1C and LQH3C Series are subminiature chip coils with low DC resistance, high current capacity and high impedance characteristics. These features are made possible by the development of Murata Electronics' own automatic winding and multilayer techniques. They are excellent for use as choke coils in DC power supply circuits.

### LQH1C

The sub-miniature dimensions (3.2 x 1.6 x 1.8mm) allow parallel mounting on 2.5mm centers. Despite their small size, at 0.12μH these coils have a maximum current rating of 970mA.

### LQH3C

The low DC resistance means high current and high inductance.

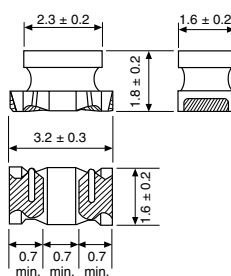
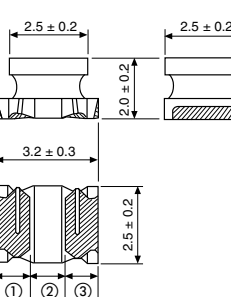
### LQH4C

Low voltage drop and small variations in inductance with respect to temperature rise and DC current level.

## PART NUMBERING SYSTEM

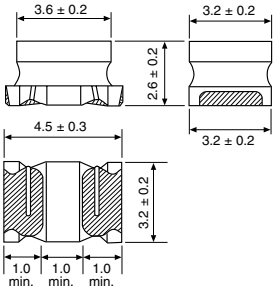
<b>LQH</b>	<b>3</b>	<b>C</b>	<b>1R0</b>	<b>M</b>	<b>34</b>	<b>M00</b>
<b>TYPE</b> LQH: With Coating	<b>SIZE</b> 1: 3.2 x 1.6 (1206) 3: 3.2 x 2.5 (1210) 4: 4.5 x 3.2 (1812)	<b>CHOKE APPLICATION</b>	<b>INDUCTANCE</b> R12: 0.12μH 1R0: 1.0μH	<b>TOLERANCE</b> K: ±10% M: ±20%	<b>ELECTRODE CHARACTERISTICS</b> 04/24/34: Nickel & Solder	<b>UNMARKED</b>

## SPECIFICATIONS

Dimensions: mm	Part Number	Inductance			DC Resistance (Ohms)	Self-resonant Frequency		Allowable Current (mA)	Operating Temp. Range		
		Nominal Value (μH)	Tolerance (%)	Measurement Frequency		Typical	Min. Value (MHz)				
<b>1206</b> 	*LQH1CR12M04	0.12	±20	1MHz	0.08 ± 40%	900	250	970	-25°C ~ +85°C		
	*LQH1CR22M04	0.22			0.10 ± 40%	570	250	850			
	*LQH1CR47M04	0.47			0.15 ± 40%	310	180	700			
	*LQH1C1R0M04	1.0			0.28 ± 30%	190	100	510			
	*LQH1C2R2M04	2.2			0.41 ± 30%	110	50	430			
	*LQH1C4R7M04	4.7	0.65 ± 30%		67	31	340				
	*LQH1C100K04	10	±10		1MHz	1.3 ± 30%	42	20		230	
	*LQH1C220K04	22				3.0 ± 30%	26	14		160	
	*LQH1C470K04	47				8.0 ± 30%	18	10		100	
	*LQH1C101K04	100				12.0 ± 30%	12	7		80	
<b>1210</b> 	*LQH3C1R0M34	1.0	±20	1MHz		0.09 ± 30%	150	96	800	-25°C ~ +85°C	
	*LQH3C2R2M34	2.2				0.13 ± 30%	100	64	600		
	*LQH3C4R7M34	4.7				0.20 ± 30%	66	43	450		
	*LQH3C100K34	10				0.44 ± 30%	40	26	300		
	*LQH3C220K34	22				0.71 ± 30%	27	19	250		
	*LQH3C470K34	47	±10		1MHz	1.3 ± 30%	19	15	170		
	*LQH3C101K34	100				3.5 ± 30%	13	10	100		
	*LQH3C221K34	220				8.4 ± 30%	8.5	6.8	70		
	*LQH3C331K34	330				10.0 ± 30%	7.0	5.6	60		
	*LQH3C391K34	390				17.0 ± 30%	6.6	5.0			
	*LQH3C471K34	470	±20			1MHz	19.0 ± 30%		6.2		60
	*LQH3C561K34	560					22.0 ± 30%	5.7			
	*LQH3CR15M24	0.15					0.028 ± 30%	650	400		1450
	*LQH3CR27M24	0.27					0.034 ± 30%	450	250		1250
	*LQH3CR47M24	0.47					0.042 ± 30%	300	150		1100
	*LQH3C1R0M24	1.0	±10		1MHz		0.060 ± 30%	200	100		1000
	*LQH3C2R2M24	2.2					0.097 ± 30%	120	64		790
	*LQH3C4R7M24	4.7					0.15 ± 30%	77	43		650
	*LQH3C100K24	10					0.30 ± 30%	50	26		450

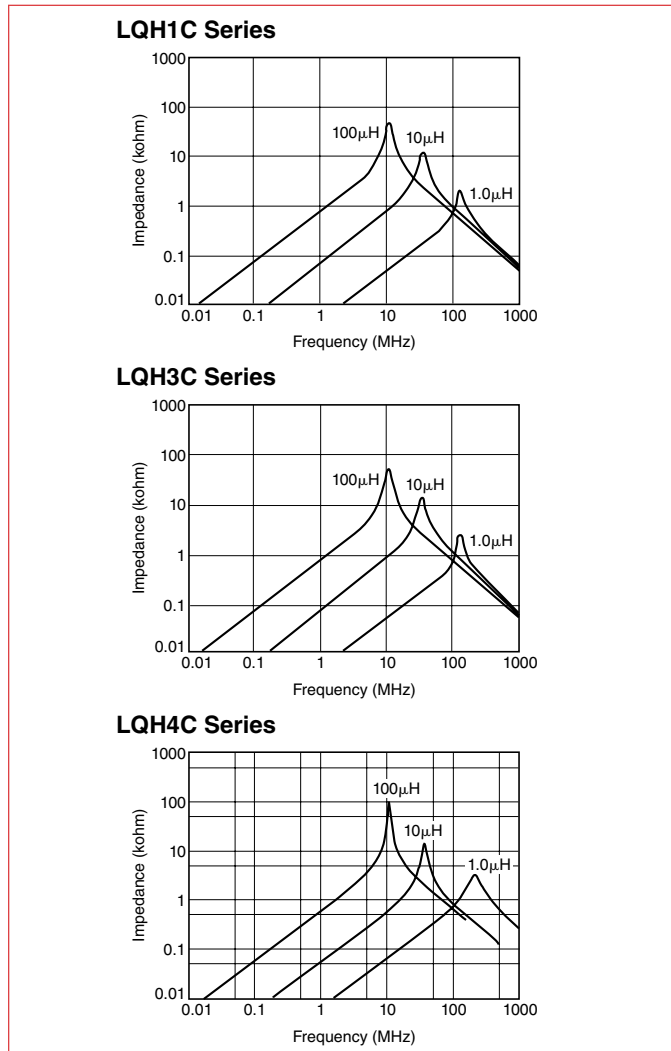
\* Available as standard through authorized Murata Electronics Distributors.

### SPECIFICATIONS

Dimensions: mm	Part Number	Inductance			DC Resistance (Ohms max.)	Self-resonant Frequency (MHz min.)	Allowable Current (mA)	Operating Temperature Range
		Nominal Value ( $\mu\text{H}$ )	Tolerance (%)	Test Frequency				
	*LQH4C1R0M04	1.0	±20	1MHz	0.08	100	1080	-25°C ~ +85°C
	*LQH4C1R5M04	1.5			0.09	85	1000	
	*LQH4C2R2M04	2.2			0.11	60	900	
	*LQH4C3R3M04	3.3			0.13	47	800	
	*LQH4C4R7M04	4.7			0.15	35	750	
	*LQH4C6R8M04	6.8			0.20	30	720	
	*LQH4C100K04	10	±10		0.24	23	650	
	*LQH4C150K04	15			0.32	20	570	
	*LQH4C220K04	22			0.6	15	420	
	*LQH4C330K04	33			1.0	12	310	
	*LQH4C470K04	47			1.1	10	280	
	*LQH4C680K04	68			1.7	8.4	220	
	*LQH4C101K04	100	1kHz		2.2	6.8	190	
	*LQH4C151K04	150			3.5	5.5	130	
	*LQH4C221K04	220			4.0	4.5	110	
	*LQH4C331K04	330			6.8	3.6	100	
	*LQH4C471K04	470			8.5	3.0	90	

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### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE-FREQUENCY CHARACTERISTICS



### DIRECT CURRENT CHARACTERISTICS

