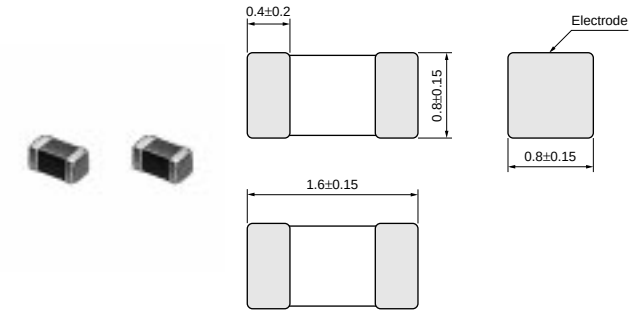
Chip Coils

for General Use Monolithic Type LQM18N/LQM21N Series

LQM18N Series

The LQM18N series of magnetically shielded chip coils was developed by using original multilayer process technology and magnetic materials.
Compact size is suitable for high density mounting.
Shielded construction is not affected by interference from peripheral components.



(in mm)

■ Features

1. Magnetically shielded structure provides excellent characteristics in cross talk and magnetic coupling.
2. Compact size (1.6x0.8mm) and light weight
3. The external electrodes with nickel barrier structure provide excellent solder heat resistance. Both flow and reflow soldering can be applicable.

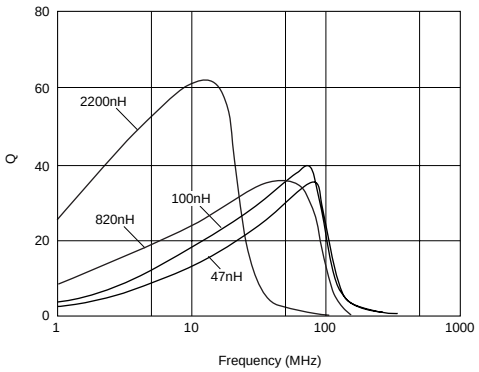
■ Applications

1. Resonance circuit, traps, filter circuits
2. RF choke in telecommunication equipment, cordless phones, radio equipment

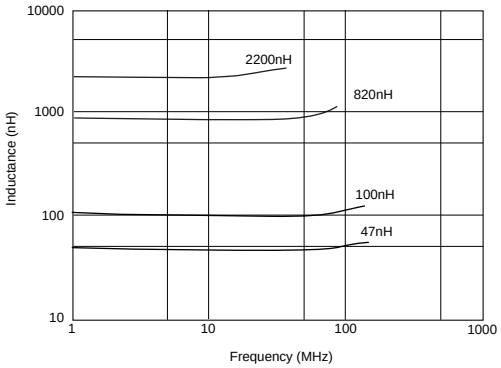
Part Number	Inductance (nH)	Test Frequency (MHz)	Rated Current (mA)	DC Resistance (ohm)	Q (min.)	Test Frequency (MHz)	Self Resonance Frequency (min.) (MHz)	EIA
LQM18NN47NM00	47 ±20%	50	50	0.30 max.	10	50	260	0603
LQM18NN68NM00	68 ±20%	50	50	0.30 max.	10	50	250	0603
LQM18NN82NM00	82 ±20%	50	50	0.30 max.	10	50	245	0603
LQM18NNR10K00	100 ±10%	25	50	0.50 max.	15	25	240	0603
LQM18NNR12K00	120 ±10%	25	50	0.50 max.	15	25	205	0603
LQM18NNR15K00	150 ±10%	25	50	0.60 max.	15	25	180	0603
LQM18NNR18K00	180 ±10%	25	50	0.60 max.	15	25	165	0603
LQM18NNR22K00	220 ±10%	25	50	0.80 max.	15	25	150	0603
LQM18NNR27K00	270 ±10%	25	50	0.80 max.	15	25	136	0603
LQM18NNR33K00	330 ±10%	25	35	0.85 max.	15	25	125	0603
LQM18NNR39K00	390 ±10%	25	35	1.00 max.	15	25	110	0603
LQM18NNR47K00	470 ±10%	25	35	1.35 max.	15	25	105	0603
LQM18NNR56K00	560 ±10%	25	35	1.55 max.	15	25	95	0603
LQM18NNR68K00	680 ±10%	25	35	1.70 max.	15	25	90	0603
LQM18NNR82K00	820 ±10%	25	35	2.10 max.	15	25	85	0603
LQM18NN1R0K00	1000 ±10%	10	25	0.60 max.	35	10	75	0603
LQM18NN1R2K00	1200 ±10%	10	25	0.80 max.	35	10	65	0603
LQM18NN1R5K00	1500 ±10%	10	25	0.80 max.	35	10	60	0603
LQM18NN1R8K00	1800 ±10%	10	25	0.95 max.	35	10	55	0603
LQM18NN2R2K00	2200 ±10%	10	15	1.15 max.	35	10	50	0603

Operating Temp. Range : -40°C to +85°C

■ Q-Frequency Characteristics



■ Inductance-Current Characteristics

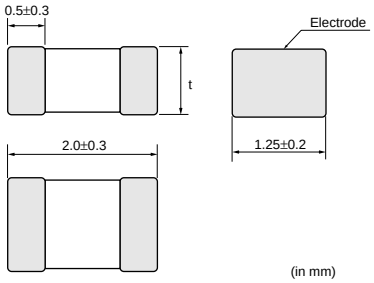


6

LQM21N Series

■ Features

The LQM21N series consists of magnetically shielded chip inductors developed using Murata's original multilayer process technology and magnetic materials. The miniature size of 2.0x1.25mm enables compact design of electric equipment. Inductance range from 0.1 micro H to 4.7 micro H is available.

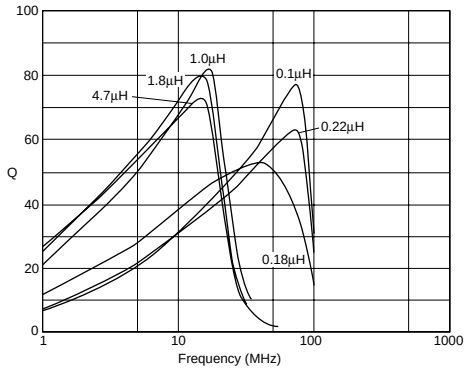


Dimension of t	Inductance : 0.1 to 2.2μH	0.85±0.2
	Inductance : 2.7 to 4.7μH	1.25±0.2

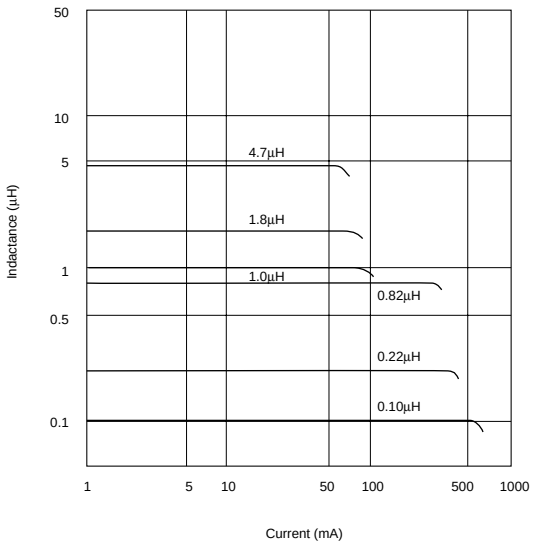
Part Number	Inductance (μH)	Test Frequency (MHz)	Rated Current (mA)	DC Resistance (ohm)	Q (min.)	Test Frequency (MHz)	Self Resonance Frequency (min.) (MHz)	EIA
LQM21NNR10K10	0.1 ±10%	25	250	0.26 max.	20	25	340	0805
LQM21NNR12K10	0.12 ±10%	25	250	0.29 max.	20	25	310	0805
LQM21NNR15K10	0.15 ±10%	25	250	0.32 max.	20	25	270	0805
LQM21NNR18K10	0.18 ±10%	25	250	0.35 max.	20	25	250	0805
LQM21NNR22K10	0.22 ±10%	25	250	0.38 max.	20	25	220	0805
LQM21NNR27K10	0.27 ±10%	25	250	0.42 max.	20	25	200	0805
LQM21NNR33K10	0.33 ±10%	25	250	0.48 max.	20	25	180	0805
LQM21NNR39K10	0.39 ±10%	25	200	0.53 max.	25	25	165	0805
LQM21NNR47K10	0.47 ±10%	25	200	0.57 max.	25	25	150	0805
LQM21NNR56K10	0.56 ±10%	25	150	0.63 max.	25	25	140	0805
LQM21NNR68K10	0.68 ±10%	25	150	0.72 max.	25	25	125	0805
LQM21NNR82K10	0.82 ±10%	25	150	0.81 max.	25	25	115	0805
LQM21NN1R0K10	1 ±10%	10	50	0.40 max.	45	10	107	0805
LQM21NN1R2K10	1.2 ±10%	10	50	0.47 max.	45	10	97	0805
LQM21NN1R5K10	1.5 ±10%	10	50	0.50 max.	45	10	87	0805
LQM21NN1R8K10	1.8 ±10%	10	50	0.57 max.	45	10	80	0805
LQM21NN2R2K10	2.2 ±10%	10	30	0.63 max.	45	10	71	0805
LQM21NN2R7K10	2.7 ±10%	10	30	0.69 max.	45	10	66	0805
LQM21NN3R3K10	3.3 ±10%	10	30	0.80 max.	45	10	59	0805
LQM21NN3R9K10	3.9 ±10%	10	30	0.89 max.	45	10	53	0805
LQM21NN4R7K10	4.7 ±10%	10	30	1.00 max.	45	10	47	0805

Operating Temp. Range : -40°C to +85°C

■ Q-Frequency Characteristics



■ Inductance-Current Characteristics



6