

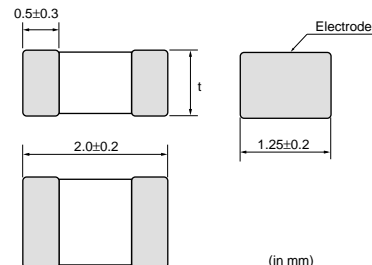
CHIP COILS



for Choke Monolithic Type LQM21D/LQM21F/LQM31F Series

LQM21D Series

The LQM21D series consists of magnetically shielded chip inductors. It has less than half the DC resistance of our conventional monolithic chip inductors as well as high inductance.



Dimension of T	Inductance : 1.0 to 10 μ H	0.85 \pm 0.2
	Inductance : 22 to 47 μ H	1.25 \pm 0.2

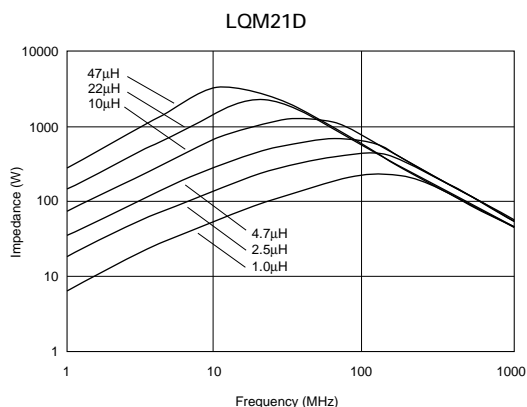
■ Features

1. The inductors have very low DC resistance.
2. The series has an inductance range of 1.0 micro H to 47 micro H.
3. Magnetically shielded structure provides excellent crosstalk characteristics.
4. Compact (2.0x1.25mm) and lightweight.
5. Outstanding solder heat resistance. Either flow or reflow soldering methods can be employed.

Part Number	Inductance (μ H)	Test Frequency (MHz)	Rated Current (mA)	DC Resistance (ohm)	Self Resonance Frequency (MHz)	EIA
LQM21DN1R0N00	1.0 \pm 30%	1	60	0.10 max.	75 min.	0805
LQM21DN2R2N00	2.2 \pm 30%	1	40	0.17 max.	50 min.	0805
LQM21DN4R7N00	4.7 \pm 30%	1	30	0.30 max.	35 min.	0805
LQM21DN100N00	10 \pm 30%	1	15	0.50 max.	24 min.	0805
LQM21DN220N00	22 \pm 30%	1	13	0.65 max.	16 min.	0805
LQM21DN470N00	47 \pm 30%	1	7	1.20 max.	7.5 min.	0805

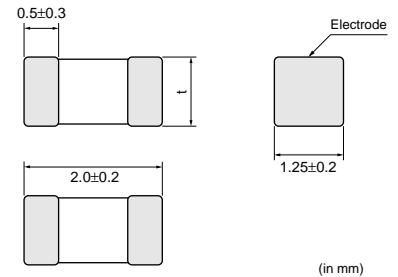
Operating Temp. Range : -40°C to 85°C

■ Impedance-Frequency Characteristics



LQM21F Series

The LQM21F series consists of magnetically shielded chip coils based on Murata's technologies of multilayer process and magnetic materials. Excellent direct current characteristics are realized by using magnetic materials which have excellent saturation characteristics. The inductance of LQM21F is four times as large as that of conventional items.



Dimension of T	Inductance : 1.0 to 2.2μH	0.85±0.2
	Inductance : 4.7 to 47μH	1.25±0.2

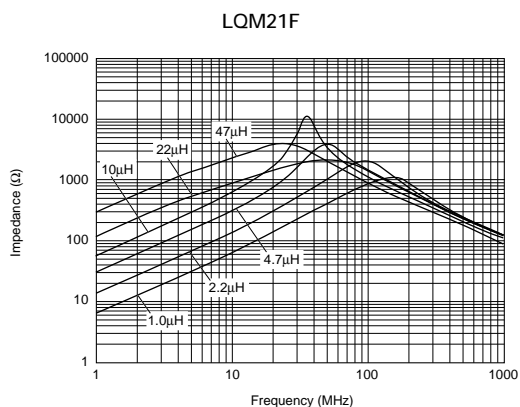
■ Features

1. LQM21F series is suitable for power line choke because of its excellent direct current characteristics. The series has large rated current (60mA at 10 micro H) than conventional rated current.
2. Low DC Resistance is realized.
3. The cross talk characteristics are excellent because of the use of magnetically shielded structure.
4. Small size (2.0x1.25mm) and light weight.
5. The series has excellent solder heat resistance. Both flow and reflow soldering can be employed.

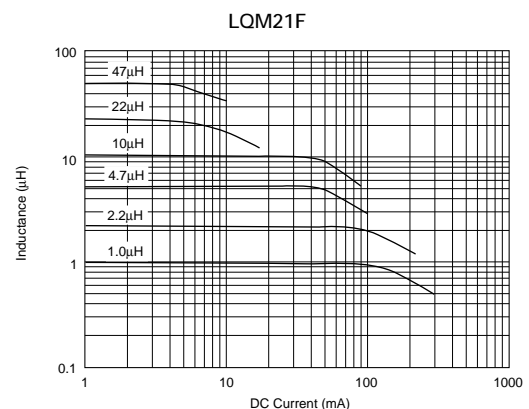
Part Number	Inductance (μH)	Test Frequency (MHz)	Rated Current (mA)	DC Resistance (ohm)	Self Resonance Frequency (MHz)	EIA
LQM21FN1R0N00	1.0 ±30%	1	220	0.20 ±30%	105 min.	0805
LQM21FN2R2N00	2.2 ±30%	1	150	0.28 ±30%	70 min.	0805
LQM21FN4R7N00	4.7 ±30%	1	80	0.30 ±30%	25 min.	0805
LQM21FN100N00	10 ±30%	1	60	0.50 ±30%	15 min.	0805
LQM21FN220N00	22 ±30%	1	13	0.35 ±30%	15 min.	0805
LQM21FN470N00	47 ±30%	1	7	0.60 ±30%	7.5 min.	0805

Operating Temp. Range : -40°C to 85°C

■ Impedance-Frequency Characteristics



■ Inductance-Current Characteristics

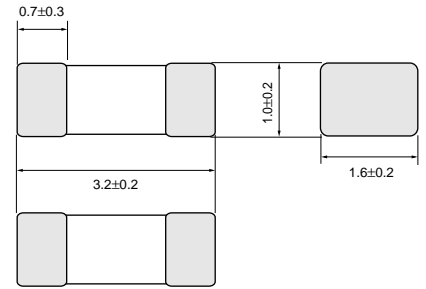


LQM31F Series

LQM31F series consists of magnetically shielded chip coils based on Murata's technologies of multilayer process and magnetic materials. Excellent direct current characteristics and low DC resistance are realized by using magnetic materials which have excellent saturation characteristics and high permeability.

■ Features

1. LQM31F series is suitable for power line choke because of its excellent direct current characteristics and large rated current. (70mA at 10 micro H)
2. Low DC resistance is realized.
3. The cross talk characteristics are excellent because of magnetically shielded structure.
4. Low profile 1.0mm.
5. The series has excellent solder heat resistance. Both flow and reflow soldering can be employed.



(in mm)

■ Applications

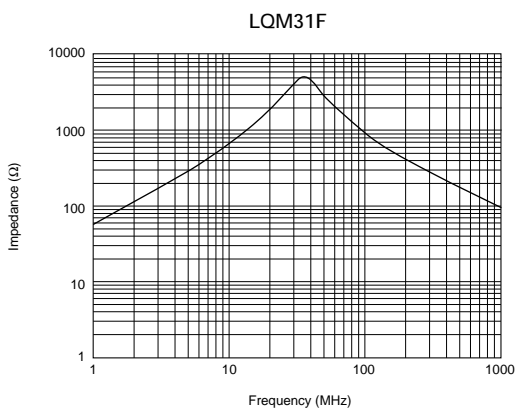
Circuits for DC power line choke of telecommunication equipments such as PDA, Note-PC, digital camera, PDA, MD and DVD-RAM

8

Part Number	Inductance (μH)	Test Frequency (MHz)	Rated Current (mA)	DC Resistance (ohm)	Self Resonance Frequency (MHz)	EIA
LQM31FN100M00	10 ±20%	1	70	0.50 max.	20 min.	1206

Operating Temp. Range : -40°C to 85°C

■ Impedance-Frequency Characteristics



■ Inductance-Current Characteristics

