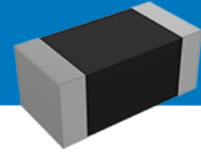


叠层片式扼流电感—MCL 系列

Multilayer Chip Inductor for Choke – MCL Series



工作温度
Operating Temp

◆ $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

特征

Features

- ◆ 迭层独石结构、高度可靠性
- ◆ 良好的可焊性和耐焊性
- ◆ 良好的磁屏蔽，无交叉耦合
- ◆ 通过磁体材料的改进，偏置电流大幅度提高
- ◆ 直流电阻大幅度降低
- ◆ Monolithic structure for high reliability
- ◆ Excellent solderability and high heat resistance
- ◆ No cross coupling due to magnetic shield
- ◆ High DC bias current due to developed material
- ◆ Low DC resistance

用途

Applications

- ◆ 用于个人电脑、移动电话、平板电脑、智能家电等各种消费类电子设备直流电源线的扼流线路
- ◆ Choke circuits in DC power line of consumer electronics such as Personal computers, mobile phones, tablets and smart home appliances

产品型号

Product Identification

1	2	3	4	5	6
MCL	1608	S	1R0	M	T

1	分类 Type
MCL	片式扼流电感 Chip Inductor for Choke

2	外形尺寸 (L×W) (mm) External Dimensions (L×W) (mm)
1608 [0603]	1.6×0.8
2012 [0805]	2.0×1.25

3	特性类别 Feature Type
S	标准型 Standard
H	改善型 Ir-Improved

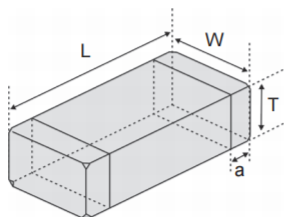
4	公称电感量 Nominal Inductance
Example	Nominal Value
1R0	1.0μH
※R= 小数点	

5	电感公差 Inductance Tolerance
M	±20%
N	±30%

6	包装 Packing
T	编带 Tape & Reel

外观尺寸

Shape and Dimensions



Type	L	W	T	a
MCL1608 [0603]	1.6±0.15 [.063±.006]	0.8±0.15 [.031±.006]	0.8±0.15 [.031±.006]	0.3±0.2 [.012±.008]
MCL2012 [0805]	2.0 (+0.3, -0.1) [.079 (+.012, -.004)]	1.25±0.2 [.049±.008]	0.85±0.2 [.033±.008]	0.5±0.3 [.020±.012]
			1.25±0.2 [.049±.008]	

Unit: mm [inch]

规格特性 Specifications

MCL1608 TYPE

型号 Part Number	电感量 Inductance	L 测试频率 L Test Freq.	直流电阻 DC Resistance		自谐频率 Min. Self-resonant Frequency	额定电流 Max. Rated Current	厚度 Thickness
单位 Units	μH	MHz	Ω		MHz	A	mm [inch]
符号 Symbol	L	Freq.	DCR		S.R.F	Ir*	T
			Max.	Typ.			
MCL1608SR10 □ T	0.1	1	0.182	0.140	240	0.70	0.8±0.15 [.031±.006]
MCL1608SR22 □ T	0.22	1	0.351	0.270	150	0.55	
MCL1608SR47 □ T	0.47	1	0.546	0.420	105	0.40	
MCL1608S1R0 □ T	1.0	1	0.260	0.200	75	0.19	
MCL1608S2R2 □ T	2.2	1	0.520	0.400	50	0.14	
MCL1608S4R7 □ T	4.7	1	0.780	0.600	35	0.10	
MCL1608S100 □ T	10	1	1.170	0.900	20	0.05	

MCL2012 TYPE

型号 Part Number	电感量 Inductance	L 测试频率 L Test Freq.	直流电阻 DC Resistance		自谐频率 Min. Self-resonant Frequency	额定电流 Max. Rated Current	厚度 Thickness
单位 Units	μH	MHz	Ω		MHz	A	mm [inch]
符号 Symbol	L	Freq.	DCR		S.R.F	Ir*	T
			Max.	Typ.			
MCL2012SR10 □ T	0.1	1	0.091	0.070	235	1.00	0.85±0.2 [.033±.008]
MCL2012SR22 □ T	0.22	1	0.169	0.130	170	0.80	
MCL2012SR47 □ T	0.47	1	0.234	0.180	125	0.55	
MCL2012S1R0 □ T	1.0	1	0.260	0.200	75	0.30	
MCL2012S2R2 □ T	2.2	1	0.364	0.280	50	0.22	
MCL2012S4R7 □ T	4.7	1	0.390	0.300	25	0.18	
MCL2012S100 □ T	10	1	0.650	0.500	15	0.06	
MCL2012H100 □ T	10	1	0.650	0.500	20	0.10	1.25±0.2 [.049±.008]

※□: 请指定电感量精度代码 (M=±20%, N=±30%);

※□: Please specify the inductance tolerance code (M=±20%, N=±30%);

※*: 额定电流是施加直流偏置后电感值下降50%的直流电流值。

※*: The rated current is the value of DC current at which the inductance value is dropped within 50% with the application of DC bias.

电气特性

Typical Electrical Characteristics

Inductance vs. Frequency Characteristics

