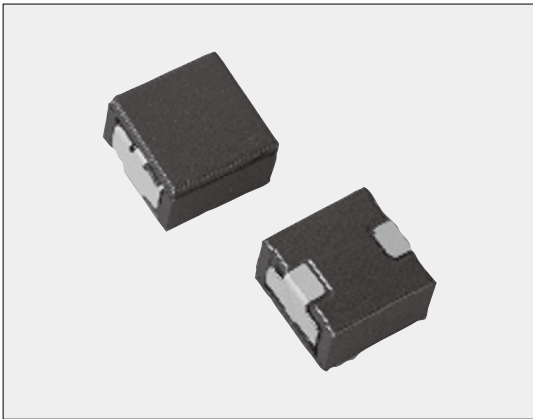


## LCM1060 片式功率电感器 Power Chip Inductors



外观颜色：黑色 Coating color: Black

### 特点 Features

- 根据独特的构造，绕线技术，实现了低直流电阻，高允许电流，低漏磁次束。
- 表面安装型，对应自动安装。
- 焊接性强，耐环境性优异。
- 对应回流焊。
- 对应欧盟RoHS。
- 对应（取得数据）AEC-Q200
- Low DC resistance and high allowable current and low leakage magnetic flux are realized by the original construction and wiring technology.
- Automatic surface mounting is applicable.
- Excellent solderability and endurance environment.
- Suitable for reflow soldering.
- Products meet EU-RoHS requirements.
- AEC-Q200 Qualified.

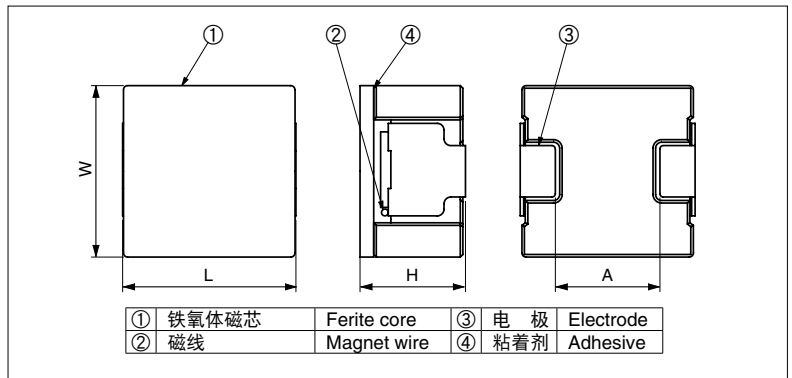
### 用途 Applications

- 面向车载 适合用于各种DC-DC转换器
- Ideal for a automotive variety of DC-DC converter inductor applications.

### 性能 Performance

试验项目 Test Items	标准值 Performance Requirements $\Delta L/L$		试验方法 Test Methods	
	保证值 Limit	代表值 Typical		
热冲击 Heat shock	$\pm 5\%$	$\pm 1.0\%$	-40°C (30min.) / +125°C (30min.) 100 cycles	
低温放置 Low temperature exposure	$\pm 5\%$	$\pm 1.0\%$	-40°C $\pm 2^\circ\text{C}$ , 1000h	
高温放置 High temperature exposure	$\pm 5\%$	$\pm 1.0\%$	125°C $\pm 2^\circ\text{C}$ , 1000h	
耐湿性 Moisture endurance	$\pm 5\%$	$\pm 1.0\%$	85°C, 85%RH, 1000h	

### 结构图 Construction



### 外形尺寸 Dimensions

型号 Type	尺寸 Dimensions (mm)				重量 Weight (g) (1000pcs)
	L	W	H	A	
LCM1060	10.1 $\pm$ 0.4	10.0 $\pm$ 0.4	6.15 $\pm$ 0.4	6.1 typ.	2480

### 品名构成 Type Designation

实例 Example

LCM1060	T	TEG	100	M
品种 Product Code	端子表面材质 Terminal Surface Material	二次加工 Taping	公称电感 Nominal Inductance	允许偏差 Tolerance
	T: Sn	TEG: Plastic embossed BK: Bulk	3 digits	N: $\pm 30\%$ M: $\pm 20\%$

编带细节请参考卷末附录C。

For further information on taping, please refer to APPENDIX C on the back pages.

### 参考规格 Reference Standards

JIS 5320

JIS 5321

## ■ 额定值 Ratings

型号 Type	公称电感 Nominal Inductance (μH)	允许偏差 Tolerance (%)	直流电阻 DC Resistance (mΩ)	允许直流电流 typ.		自共振频率 Self Resonant Frequency (MHz) typ.
				重叠 Saturation Current (A)	温度上升 Temperature Rise Current (A)	
LCM1060TTEG 1R5N	1.5	±30	10.64	6.8	6.8	154.94
LCM1060TTEG 2R2N	2.2		11.94	6.6	6.6	96.88
LCM1060TTEG 3R3N	3.3		12.75	6.4	5.7	69.79
LCM1060TTEG 4R7N	4.7		18.18	5.6	5.6	70.29
LCM1060TTEG 6R8N	6.8		21.29	5.2	4.9	35.85
LCM1060TTEG 100M	10	±20	28.61	4.2	4.1	19.89
LCM1060TTEG 150M	15		40.4	3.8	3.7	20.89
LCM1060TTEG 220M	22		48	3.2	2.8	12.63
LCM1060TTEG 330M	33		73	2.5	2.2	11.71
LCM1060TTEG 470M	47		103.7	2.2	2.1	9.9
LCM1060TTEG 680M	68		127	1.7	1.6	8.77
LCM1060TTEG 101M	100		190	1.5	1.4	7.14
LCM1060TTEG 151M	150		304.8	1.2	1	4.95
LCM1060TTEG 221M	220		383	1	0.9	4.38
LCM1060TTEG 331M	330		581	0.8	0.8	3.48
LCM1060TTEG 471M	470		892	0.68	0.6	2.6

适用温度范围 Operating Temperature Range: -40℃ ~ +125℃

直流重叠允许电流值: 直流电流时, 电感是90%公称值的电流值

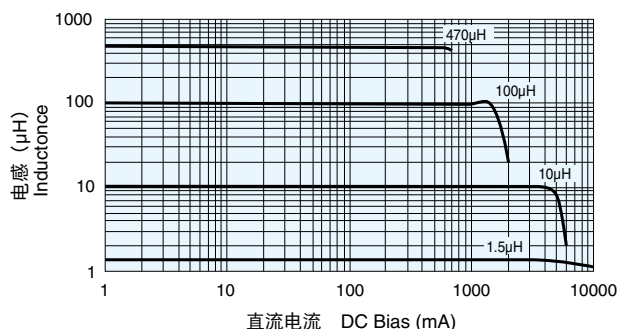
Saturation Current: This indicates the value of D.C.current when inductance become 90% nominal value.

温度上升电流值: 是直流电流时, 线圈的温升 $\Delta T=40^{\circ}\text{C}$ 的电流值.

Temperature Rise Current: The value of D.C.current when temperature of coil become  $\Delta t=40^{\circ}\text{C}$ .

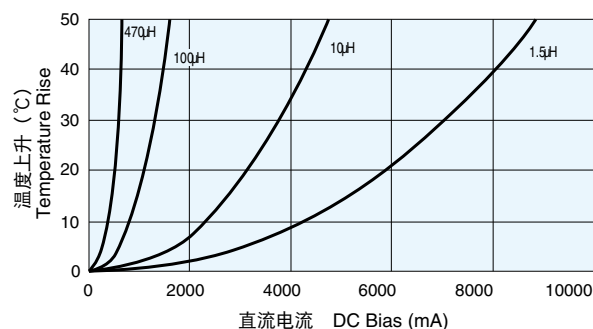
## ■ 直流重叠特性 DC Bias Characteristics

LCM1060

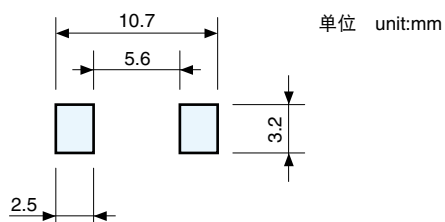


## ■ 表面温度上升 Surface Temperature Rise

LCM1060



## ■ 推荐焊接区尺寸 Recommended Pad Dimensions



## ■ 使用注意事项 Precautions for Use

- 对电感器上施加强力、过度冲击时, 电、磁特性会发生变化, 因此在装载时和装载后应不要施加过度冲击。
- 由于在线圈架上使用了铁氧体, 通过转换频率, 发热量会不同, 因此请在温度范围内使用。
- Avoid strong pressure or excessive shock at mounting or after mounting because electric/magnetic characteristics may change if it is applied to the inductors.
- Due to the products using ferrite for coil bobbins, use them within each operating temperature range because the volume of generating heat varies depending on switching frequency.