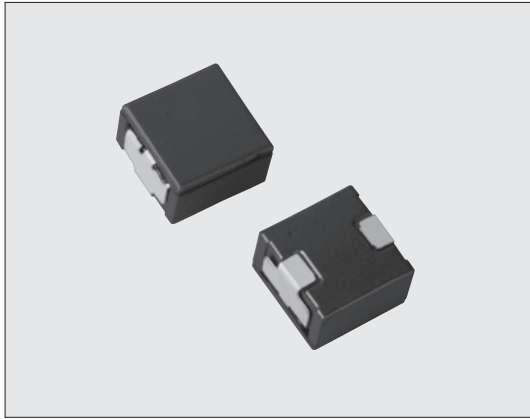
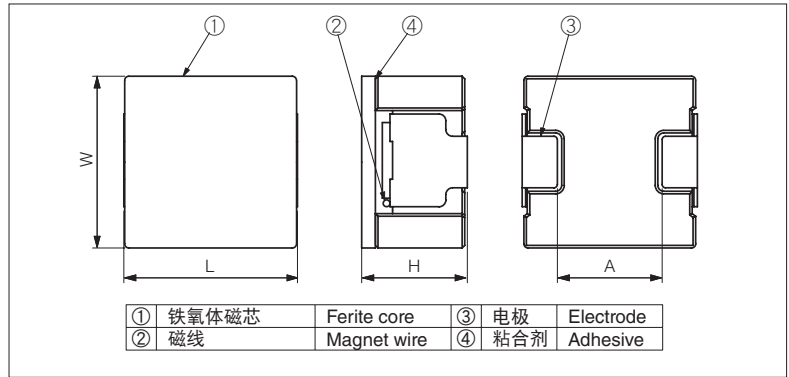


## LCM1060 功率片式电感器 Power Chip Inductors



外观颜色: 黑色 Coating color: Black

### ■ 结构图 Construction



### ■ 特点 Features

- 通过独特的结构、卷线技术, 实现了低直流电阻、高容许电流、低磁漏。
- 表面封装型, 对应自动装载。
- 焊接性、耐环境性优异。
- 对应回流焊接。
- 符合欧盟RoHS。
- AEC-Q200相关数据已取得。
- 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.

### ■ 外形尺寸 Dimensions

型号 Type	尺寸 Dimensions (mm)				重量 Weight (g) (1000pcs)
	L	W	H	A	
LCM1060	10.1±0.4	10.0±0.4	6.15±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: ±30% M: ±20%

编带细节参照卷末附录C。

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

### ■ 用途 Applications

- 最适合于车载、各种DC-DC换流器用电感器。
- Ideal for a automotive variety of DC-DC converter inductor applications.

### ■ 参考标准 Reference Standards

JIS C 5320  
JIS C 5321

### ■ 性能 Performance

试验项目 Test Items	标准值 Performance Requirements △L/L		试验方法 Test Methods
	保证值 Limit	代表值 Typical	
热冲击 Heat shock	±5%	±1.0%	-40°C (30min.)/+150°C (30min.) 100 cycles
低温放置 Low temperature exposure	±5%	±1.0%	-40°C±2°C、1000h
高温放置 High temperature exposure	±5%	±1.0%	150°C±2°C、1000h
耐湿性 Moisture endurance	±5%	±1.0%	85°C、85%RH、1000h

## ■ 额定值 Ratings

型号 Type	公称电感 Nominal Inductance (μH)	允许偏差 Tolerance (%)	直流电阻值 DC Resistance (mΩ) ±30%	容许直流电流值		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	9	6.8	6.8	132
LCM1060TTEG 2R2N	2.2		11	6.6	6.6	81
LCM1060TTEG 3R3N	3.3		14	6.4	5.7	48
LCM1060TTEG 4R7N	4.7		15	5.6	5.6	47
LCM1060TTEG 6R8N	6.8		18	5.2	4.9	32
LCM1060TTEG 100M	10	±20	26	4.2	4.1	17
LCM1060TTEG 150M	15		39	3.8	3.7	15
LCM1060TTEG 220M	22		68	3.2	2.8	13
LCM1060TTEG 330M	33		80	2.5	2.2	10
LCM1060TTEG 470M	47		103	2.2	2.1	8.5
LCM1060TTEG 680M	68		150	1.7	1.6	6.5
LCM1060TTEG 101M	100		200	1.5	1.4	5.3
LCM1060TTEG 151M	150		410	1.2	1	4.9
LCM1060TTEG 221M	220		487	1	0.9	3.7
LCM1060TTEG 331M	330		588	0.8	0.8	2.7
LCM1060TTEG 471M	470	880	0.68	0.6	2.2	

● 使用温度范围 Operating Temperature Range: -40°C ~ +150°C (※包含自身的温升 Self-heating is included.)

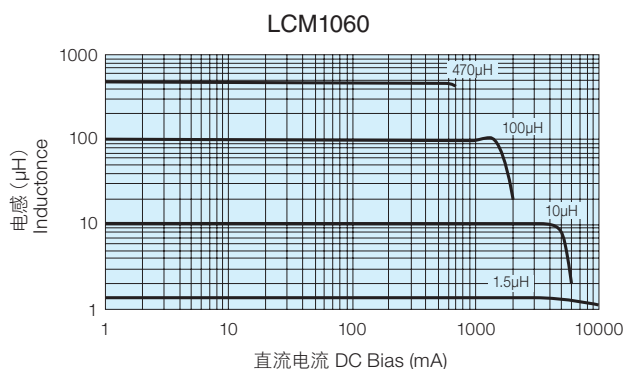
※线圈绕组部分的温度(环境温度+自身发热)须在工作温度上限(+150°C)以下。

※That the operating temperature upper limit temperature of the coil winding portions (ambient temperature + self-heating) is (+150°C) or less.

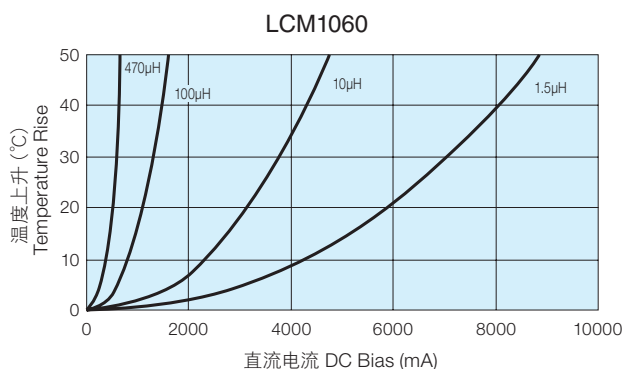
● 允许直流电流值, 是比电感值设定值减少10%, 或线圈温度上升至40度两者中的最小直流电流值。

Allowable current is a DC Current which causes initial inductance to decrease by 10%, or Coil temperature to rise by 40°C, whichever is smaller.

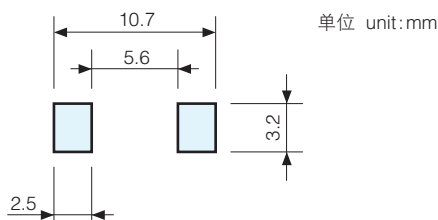
## ■ 直流重叠特性 DC Bias Characteristics



## ■ 表面温度上升 Surface Temperature Rise



## ■ 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、磁特性会有变化, 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, 因此使用时的温度应在使用温度范围以内。
- 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.