

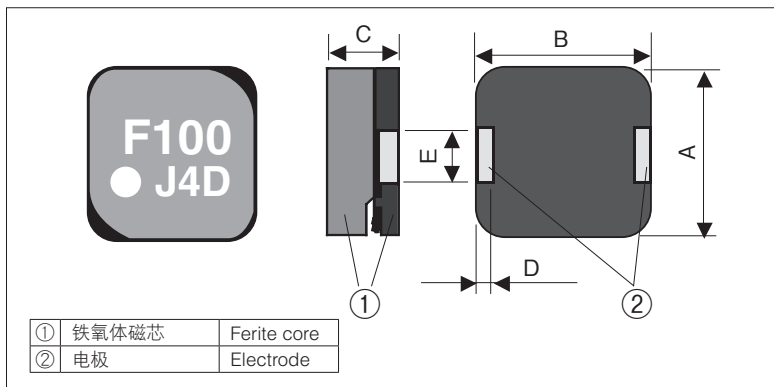
CHOKES COILS



LKS 功率片式电感器 闭磁型 Power Chip Inductors Shielded Type



■ 构造图和外形尺寸 Construction and Dimensions



■ 特点 Features

- 磁漏小的闭磁型功率电感
- 小型，超薄。
- 直流电阻小，额定电流大。
- 对应回流焊
- 欧盟RoHS对应品
- Magnetic shielded power chip inductors with a little leakage magnetic flux.
- Small size and Low-profile.
- Low DC Resistance and larger Rated Current.
- Suitable for reflow soldering.
- Products meet EU-RoHS requirements.

■ 用途 Applications

- 各种电子机器DC-DC转换器用
- DC-DC converter for various electric equipments.

■ 品名构成 Type Designation

实例	Example
LKS	0745
品种 Product Code	形状 Style (mm)
	0745 1045 1260
T	端子表面材质 Terminal Surface Material
	T : Sn
TEG	二次加工 Taping
	TEG : Plastic embossed BK : Bulk
100	公称电感 Nominal Inductance
	3 digits
M	允许偏差 Tolerance
	M : $\pm 20\%$ N : $\pm 30\%$

预知关于此产品含有的环境负荷物质详情（除EU-RoHS以外），请与我们联系。
编带细节请参考卷末附录C。
Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS.
For further information on taping, please refer to APPENDIX C on the back pages.

■ 额定值 Ratings

LKS0745

型 号 Type	公称电感 Nominal Inductance (μ H)	电感 允许偏差 Inductance Tolerance	直流阻抗 DC Resistance (Ω) Max.	允许直流电流 Allowable DC Current (A) Max.※1	SRF (MHz) Typ.
LKS0745 TTEG 3R3N	3.3	N: $\pm 30\%$	0.022	4.5	41
LKS0745 TTEG 4R7N	4.7		0.031	3.8	34
LKS0745 TTEG 5R6N	5.6		0.035	3.6	31
LKS0745 TTEG 6R8N	6.8		0.038	3.4	28
LKS0745 TTEG 8R2N	8.2		0.050	2.8	25
LKS0745 TTEG 100M	10	M: $\pm 20\%$	0.057	2.6	24
LKS0745 TTEG 120M	12		0.067	2.4	22
LKS0745 TTEG 150M	15		0.100	2.1	19
LKS0745 TTEG 180M	18		0.113	2.0	17
LKS0745 TTEG 220M	22		0.127	1.9	16
LKS0745 TTEG 330M	33		0.199	1.5	13
LKS0745 TTEG 470M	47		0.253	1.3	11
LKS0745 TTEG 560M	56		0.288	1.3	10
LKS0745 TTEG 680M	68		0.437	1.0	9
LKS0745 TTEG 820M	82		0.483	1.0	8
LKS0745 TTEG 101M	100		0.598	0.9	7
LKS0745 TTEG 121M	120		0.644	0.8	6
LKS0745 TTEG 151M	150		0.817	0.7	6
LKS0745 TTEG 181M	180		0.897	0.7	5
LKS0745 TTEG 221M	220		1.104	0.6	5
LKS0745 TTEG 331M	330		2.093	0.5	4
LKS0745 TTEG 471M	470		2.576	0.4	3

LKS1045

型 号 Type	公称电感 Nominal Inductance (μ H)	电感 允许偏差 Inductance Tolerance	直流阻抗 DC Resistance (Ω) Max.	允许直流电流 Allowable DC Current (A) Max.※1	SRF (MHz) Typ.
LKS1045 TTEG 3R3N	3.3	N: $\pm 30\%$	0.017	5.8	37
LKS1045 TTEG 4R7N	4.7		0.022	5.1	31
LKS1045 TTEG 5R6N	5.6		0.024	4.9	28
LKS1045 TTEG 6R8N	6.8		0.027	4.6	25
LKS1045 TTEG 8R2N	8.2		0.032	4.0	23
LKS1045 TTEG 100M	10	M: $\pm 20\%$	0.042	3.6	21
LKS1045 TTEG 120M	12		0.043	3.4	19
LKS1045 TTEG 150M	15		0.065	3.0	17
LKS1045 TTEG 180M	18		0.066	2.9	15
LKS1045 TTEG 220M	22		0.089	2.5	14
LKS1045 TTEG 330M	33		0.159	1.9	11
LKS1045 TTEG 470M	47		0.196	1.7	9
LKS1045 TTEG 560M	56		0.215	1.5	8
LKS1045 TTEG 680M	68		0.242	1.4	8
LKS1045 TTEG 820M	82		0.265	1.3	7
LKS1045 TTEG 101M	100		0.414	1.2	6
LKS1045 TTEG 121M	120		0.472	1.0	6
LKS1045 TTEG 151M	150		0.575	0.9	5
LKS1045 TTEG 181M	180		0.633	0.8	4
LKS1045 TTEG 221M	220		0.874	0.7	4
LKS1045 TTEG 331M	330		1.300	0.6	3
LKS1045 TTEG 471M	470		1.716	0.5	3

LKS1260

型号 Type	公称电感 Nominal Inductance (μH)	电感允许偏差 Inductance Tolerance	直流阻抗 DC Resistance (Ω) Max.	允许直流电流 Allowable DC Current (A) Max.※1	SRF (MHz) Typ.
LKS1260 TTEG 3R3N	3.3	N : ±30%	0.011	6.6	34
LKS1260 TTEG 4R7N	4.7		0.012	6.3	28
LKS1260 TTEG 5R6N	5.6		0.014	5.8	25
LKS1260 TTEG 6R8N	6.8		0.015	5.6	23
LKS1260 TTEG 8R2N	8.2		0.019	5.0	21
LKS1260 TTEG 100M	10	M : ±20%	0.021	4.8	19
LKS1260 TTEG 120M	12		0.023	4.6	18
LKS1260 TTEG 150M	15		0.026	4.3	16
LKS1260 TTEG 180M	18		0.034	3.8	14
LKS1260 TTEG 220M	22		0.040	3.5	13
LKS1260 TTEG 330M	33		0.058	2.9	10
LKS1260 TTEG 470M	47		0.083	2.4	8
LKS1260 TTEG 560M	56		0.093	2.3	8
LKS1260 TTEG 680M	68		0.127	1.9	7
LKS1260 TTEG 820M	82		0.140	1.8	6
LKS1260 TTEG 101M	100		0.157	1.7	6
LKS1260 TTEG 121M	120		0.181	1.5	5
LKS1260 TTEG 151M	150		0.247	1.2	5
LKS1260 TTEG 181M	180		0.301	1.1	4
LKS1260 TTEG 221M	220		0.355	1.0	4
LKS1260 TTEG 331M	330		0.566	0.8	3
LKS1260 TTEG 471M	470		0.853	0.7	2

※1 允许直流电流：线圈温度上升 ΔT 35度以内的直流电流值，电感感值变化率 $\Delta L/L$ -30度以内的的直流电阻值，两者中的最小值。

※2 使用温度范围-40℃~120℃（包含自己的温升）

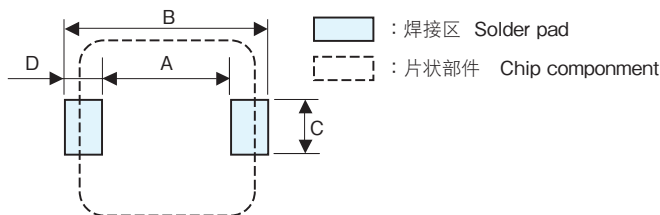
※1 Allowable DC Current: DC Current value when coil temperature rise is within $\Delta T = 35^\circ\text{C}$ or when inductance change ratio is within $\Delta L/L = -30\%$, whichever is lower.

※2 Operating Temperature range: $-40^\circ\text{C} \sim 120^\circ\text{C}$ (Including Self-temperature Rise)

性能 Performance

试验项目 Test Items	试验方法 Test Methods	保证值 Limit
热冲击 Heat shock	-40°C (30min.)/ $+120^\circ\text{C}$ (30min.) 100 cycles	$\Delta L/L : \pm 10\%$
低温放置 Low temperature exposure	-40°C , 1,000h	$\Delta L/L : \pm 10\%$
高温放置 High temperature exposure	$+120^\circ\text{C}$, 1,000h	$\Delta L/L : \pm 10\%$
耐湿性 Moisture endurance	$+85^\circ\text{C}$, 85%RH, 1,000h	$\Delta L/L : \pm 10\%$

推荐焊接区尺寸 Recommended Pad Dimensions



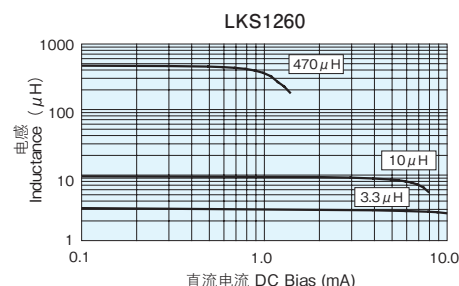
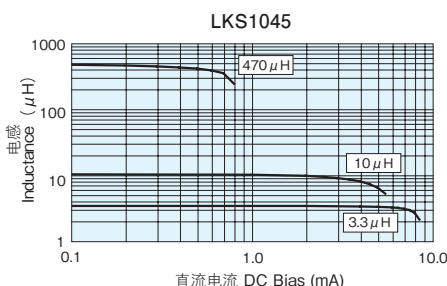
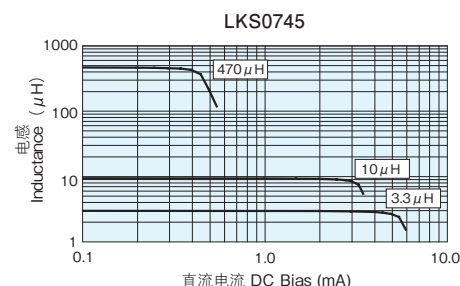
型号 Type	推荐焊接区尺寸 Pad Dimensions(mm)			
	A	B	C	D
LKS0745	5.5	8.7	2.3	1.6
LKS1045	5.5	10.7	3.6	2.6
LKS1260	9.5	13.9	5.3	2.2

※推荐焊接尺寸为标准焊盘，不能对特性进行保证。使用前请确认。

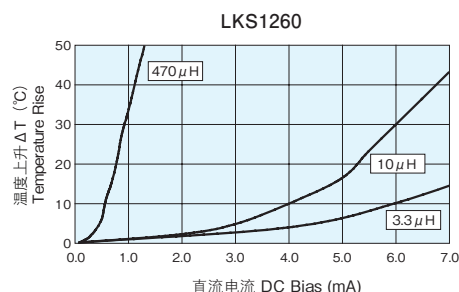
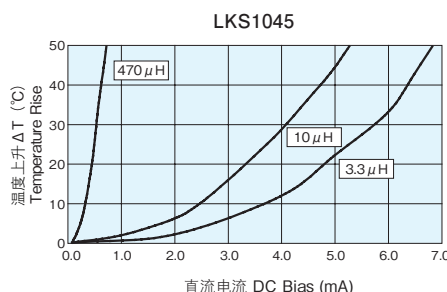
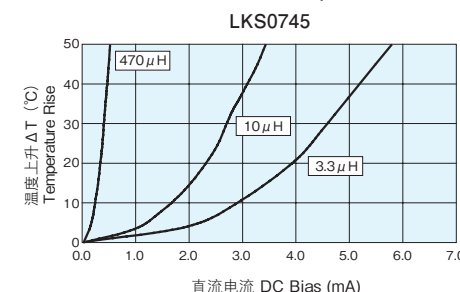
※These pad dimensions are only for standard pattern and the characteristics are not guaranteed, which you are suggested to confirm before use.

特性 Characteristics

直流重叠特性 DC Bias Characteristics



表面温度上升 Surface Temperature Rise



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。
- 不是完全闭磁品，在狭小的空间放置多个电感会产生电磁结合。设计时请考虑线圈位置的摆放。
- 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.
- The narrow space between inductors may cause magnetic coupling because they are not magnetic shielded perfectly. Make designing of a circuit by taking into consideration the parts layout for inductors.
- Due to the product used the ferrite, use them within each operating temperature range, because calorific power differs from switching frequency.

本样本手册中记载的产品规格如有变更，恕不一一奉告。订购以及使用之前，请仔细确认规格表的内容。

用于车载设备、医疗设备、航空设备以及其他涉及人身安全、或可能引起重大损失的设备上时，请务必事先与我公司联系。这些产品在这类用途中出现故障或失灵可能导致人身事故或严重损坏。

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Contact our sales representatives before you use our products for applications including automobiles, medical equipment and aerospace equipment.

Malfunction or failure of the products in such applications may cause loss of human life or serious damage.