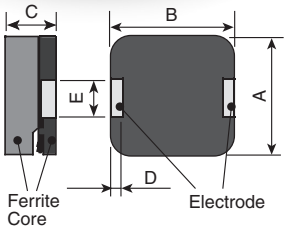
features

- 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

EU RoHS COMPLIANT

F100 J4D



Type	Dimensions inches (mm)				
	A	B	C Max.	D	E
LKS0745	.295±.020 (7.5±0.5)	.295±.020 (7.5±0.5)	.177 (4.5)	.039±.012 (1.0±0.3)	.079±.008 (2.0±0.2)
LKS1045	.398±.012 (10.1±0.3)	.398±.012 (10.1±0.3)	.177 (4.5)	.079±.012 (2.0±0.3)	.118±.008 (3.0±0.2)
LKS1260	.492±.012 (12.5±0.3)	.492±.012 (12.5±0.3)	.236 (6.0)	.059±.012 (1.5±0.3)	.197±.008 (5.0±0.2)

ordering information

LKS	0745	T	TEG	100	M
Product Code	Style (mm)	Terminal Surface Material	Packaging	Nominal Inductance	Tolerance
	0745 1045 1260	T: Sn	TEG: embossed plastic	3 digits 3R3: 3.3µH 100: 10µH 101: 100µH	M: ±20% N: ±30%

For further information on packaging, please refer to Appendix A.

applications and ratings

LKS0745

Type	Nominal Inductance (µH)	Inductance Tolerance	DC Resistance (Ω)Max.	Allowable DC Current (A) Max.*1	SRF (MHz) Typ.
LKS0745 TTEG 3R3N	3.3	N: ±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: ±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
LKS0745 TTEG 561M	560		4.200	0.31	3
LKS0745 TTEG 681M	680		4.680	0.27	3
LKS0745 TTEG 821M	820		6.360	0.24	2
LKS0745 TTEG 102M	1000		6.600	0.23	2

LKS1045

Type	Nominal Inductance (µH)	Inductance Tolerance	DC Resistance (Ω)Max.	Allowable DC Current (A) Max.*1	SRF (MHz) Typ.
LKS1045 TTEG 3R3N	3.3	N: ±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: ±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

ratings (continued)

LKS1260

Type	Nominal Inductance (μH)	Inductance Tolerance	DC Resistance (Ω)Max.	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
NEW LKS1260 TTEG 820M	82		0.140	1.8	6
LKS1260 TTEG 101M	100		0.157	1.7	6

Type	Nominal Inductance (μH)	Inductance Tolerance	DC Resistance (Ω)Max.	Allowable DC Current (A) Max.*1	SRF (MHz) Typ.
LKS1260 TTEG 121M	120	M: ±20%	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
LKS1260 TTEG 561M	560		1.210	0.68	1.9
LKS1260 TTEG 681M	680		1.370	0.66	1.8
LKS1260 TTEG 821M	820		1.810	0.57	1.7
LKS1260 TTEG 102M	1000		1.950	0.55	1.5
LKS1260 TTEG 152M	1500		2.950	0.45	1.2
LKS1260 TTEG 222M	2200		4.270	0.37	0.9
LKS1260 TTEG 332M	3300		5.900	0.31	0.8
LKS1260 TTEG 472M	4700		9.560	0.25	0.6
LKS1260 TTEG 682M	6800		16.400	0.19	0.5
LKS1260 TTEG 103M	10000		26.000	0.15	0.4

*1 Allowable DC Current: DC Current value when coil temperature rise is within ΔT= 35°C or when inductance change ratio is within ΔL/L= –30%, whichever is lower.

Operating Temperature Range: –40°C – +120°C

The operating temperature range of the coil (ambient temperature + self heating) must remain at +120°C or less

For complete environmental specifications, please refer to www.koaspeer.com

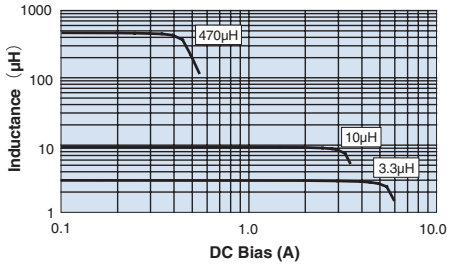
environmental applications

Performance Characteristics

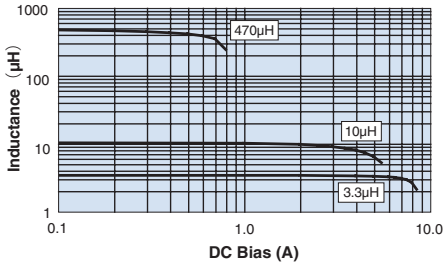
Test Items	Test Methods	Limit
Heat Shock	–40°C(30min.)/+120°C(30min.) 100 cycles	ΔL/L: ±10%
Low Temperature Exposure	–40°C, 1,000h	ΔL/L: ±10%
High Temperature Exposure	+120°C, 1,000h	ΔL/L: ±10%
Moisture Endurance	+85°C, 85%RH, 1,000h	ΔL/L: ±10%

DC Bias Characteristics

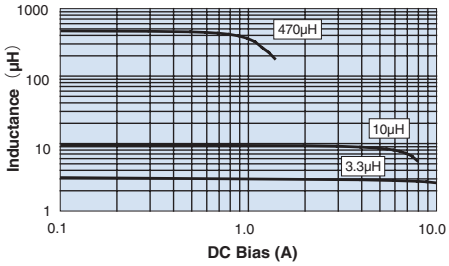
LKS0745



LKS1045

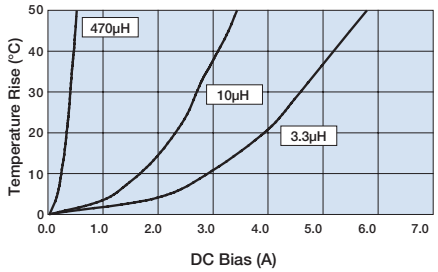


LKS1260



Surface Temperature Rise

LKS0745



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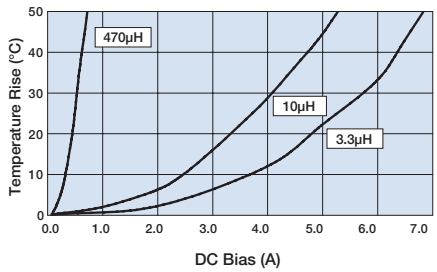

LKS1260