

Surface Mount Power Inductors

PSPICE models
Available on our web site

Coilcraft offers a wide variety of ultraminiature surface mount inductors for DC-DC conversion and other power applications. The PS Series is an economical alternative to larger and more costly shielded power inductors. Their specially designed ferrite cover provides magnetic shielding and the best possible surface for pick and place handling. The DS, DT and LPT Series are shielded; the Power Wafer® Series have the lowest profiles; and the DO Series offers exceptionally high current capabilities. The MOS6020 features exceptionally low DC resistance and excellent current handling and has an extremely space-efficient 6 × 6 mm footprint. The new MSS Series provides high inductance and high efficiency in a low profile, low cost part. The SPT Series is designed for exceptionally high current handling. Their self-leaded design ensures rugged reliability and toroid winding eliminates virtually all stray electromagnetic emissions. In addition to the standard versions shown here, custom inductors are available to meet your exact requirements. Coilcraft **Designer's Kits** are available for many of these series.

LPO1704 Power Wafer®

Part number	Inductance (µH) ±20%	DCR max (Ohms)	SRF typ (MHz)	Isat (A)	Irms (A)
LPO1704-122MC	1.2	0.08	190	2.1	3.6
LPO1704-152MC	1.5	0.10	140	1.9	2.8
LPO1704-222MC	2.2	0.12	115	1.6	2.4
LPO1704-332MC	3.3	0.16	90	1.3	2.0
LPO1704-472MC	4.7	0.20	88	1.1	1.7
LPO1704-682MC	6.8	0.32	66	0.90	1.2
LPO1704-103MC	10	0.41	55	0.80	1.1
LPO1704-153MC	15	0.55	42	0.65	0.90
LPO1704-223MC	22	0.85	38	0.50	0.83
LPO1704-333MC	33	1.3	29	0.40	0.62
LPO1704-473MC	47	1.8	22	0.35	0.52
LPO1704-683MC	68	2.5	18	0.30	0.35
LPO1704-104MC	100	3.5	14	0.25	0.27
LPO1704-154MC	150	5.0	12	0.18	0.24
LPO1704-224MC	220	7.0	10	0.16	0.23
LPO1704-334MC	330	15.0	8	0.13	0.13

LPO2506 Power Wafer®

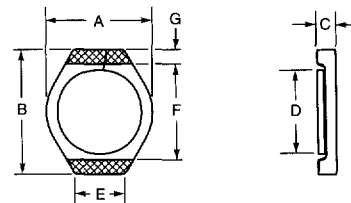
In-board style part number	On-board style part number	Inductance (µH) ±20%	DCR max (Ohms)	SRF typ (MHz)	Isat (A)	Irms (A)
LPO2506IB-472	LPO2506OB-472	4.7	0.145	90	1.60	1.90
LPO2506IB-682	LPO2506OB-682	6.8	0.165	75	1.30	1.70
LPO2506IB-103	LPO2506OB-103	10	0.240	60	1.00	1.50
LPO2506IB-153	LPO2506OB-153	15	0.300	45	0.900	1.30
LPO2506IB-223	LPO2506OB-223	22	0.420	35	0.700	1.00
LPO2506IB-333	LPO2506OB-333	33	0.550	30	0.600	0.900
LPO2506IB-473	LPO2506OB-473	47	0.765	22	0.500	0.700
LPO2506IB-683	LPO2506OB-683	68	1.10	20	0.400	0.600
LPO2506IB-104	LPO2506OB-104	100	1.60	15	0.300	0.500
LPO2506IB-154	LPO2506OB-154	150	2.50	12	0.250	0.400
LPO2506IB-224	LPO2506OB-224	220	3.65	10	0.220	0.320
LPO2506IB-334	LPO2506OB-334	330	4.65	8.0	0.180	0.280
LPO2506IB-474	LPO2506OB-474	470	6.75	6.5	0.140	0.240
LPO2506IB-684	LPO2506OB-684	680	9.15	5.5	0.120	0.200
LPO2506IB-105	LPO2506OB-105	1000	14.20	4.5	0.100	0.160

LPO6013 Power Wafer® **NEW!**

Part number	Inductance (µH)	DCR max (Ohms)	SRF typ (MHz)	Isat (A)	Irms (A)
LPO6013-102MXX	1.0 ±20%	0.06	200	1.9	1.5
LPO6013-152MXX	1.5 ±20%	0.07	200	1.6	1.4
LPO6013-222MXX	2.2 ±20%	0.08	150	1.3	1.3
LPO6013-332MXX	3.3 ±20%	0.11	110	1.1	1.3
LPO6013-392MXX	3.9 ±20%	0.13	100	1.0	1.2
LPO6013-472MXX	4.7 ±20%	0.15	90	0.90	1.2
LPO6013-682MXX	6.8 ±20%	0.20	70	0.70	1.2
LPO6013-822MXX	8.2 ±20%	0.22	65	0.70	1.0
LPO6013-103KXC	10 ±10%	0.30	60	0.60	1.0
LPO6013-153KXC	15 ±10%	0.38	47	0.55	0.85
LPO6013-223KXC	22 ±10%	0.52	37	0.45	0.80
LPO6013-333KXC	33 ±10%	0.73	30	0.40	0.74
LPO6013-393KXC	39 ±10%	0.96	28	0.35	0.67
LPO6013-473KXC	47 ±10%	1.0	25	0.30	0.60
LPO6013-683KXC	68 ±10%	1.7	21	0.28	0.49
LPO6013-104KXC	104 ±10%	3.2	17	0.22	0.35
LPO6013-154KXC	154 ±10%	4.3	14	0.19	0.30
LPO6013-224KXC	224 ±10%	5.8	10	0.15	0.26
LPO6013-334KXC	334 ±10%	7	8	0.13	0.23
LPO6013-474KXC	474 ±10%	10	7	0.1	0.20
LPO6013-684KXC	684 ±10%	14	5.6	0.09	0.18
LPO6013-105KXC	1000 ±10%	21	4.7	0.07	0.13

DO1606 Power Wafer®

Part number	Inductance (µH) ±20%	DCR max (Ohms)	SRF typ (MHz)	Isat (A)	Irms (A)
DO1606T-102	1.0	0.04	230	2.5	2.3
DO1606T-152	1.5	0.06	180	2.2	2.1
DO1606T-222	2.2	0.07	140	1.8	1.7
DO1606T-332	3.3	0.12	110	1.4	1.3
DO1606T-472	4.7	0.15	100	1.2	1.1
DO1606T-682	6.8	0.20	80	1.1	1.0
DO1606T-103	10	0.30	60	1.0	0.90
DO1606T-153	15	0.40	45	0.8	0.70
DO1606T-223	22	0.54	35	0.6	0.50
DO1606T-333	33	0.74	30	0.5	0.45
DO1606T-473	47	1.1	22	0.45	0.40
DO1606T-683	68	1.6	20	0.35	0.35
DO1606T-104	100	2.3	15	0.30	0.30
DO1606T-154	150	3.5	10	0.25	0.25
DO1606T-224	220	5.7	9	0.20	0.18
DO1606T-334	330	8.2	8	0.16	0.16
DO1606T-474	470	10.8	7	0.14	0.12
DO1606T-684	680	17.2	5	0.12	0.10
DO1606T-105	1000	22.6	4	0.08	0.08



Dimensions

Series	A max	B max	C	D dia	E	F	G
LPO1704	0.216 5.50	0.260 6.60	0.040 1.00	0.168 4.30	0.100 2.54	0.192 4.90	0.029 0.75
LPO2506IB	0.310 7.87	0.360 9.14	0.047 1.19*	0.254 6.45	0.230 5.84	0.284 7.24	0.048 1.21
LPO2506OB	0.310 7.87	0.360 9.14	0.065 1.65	0.254 6.45	0.230 5.84	0.284 7.24	0.048 1.21
LPO6013	0.213 5.40	0.236 6.0	0.051 1.30		0.134 3.40	0.156 3.96	0.040 1.02
DO1606	0.210 5.30	0.260 6.60	0.079 2.00		0.080 2.00	0.192 4.88	0.029 0.74

*Above board height. Inductor core is submerged in 0.284/7.21 \varnothing hole in circuit board