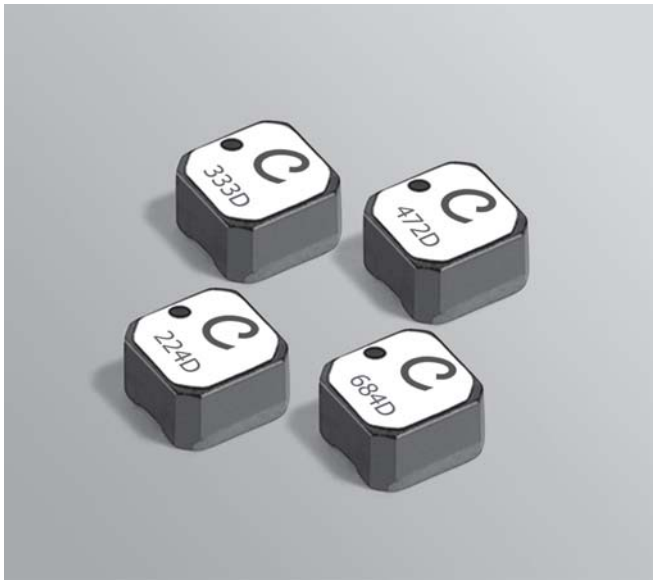
NEW!

Shielded Power Inductors–LPS5030 Series



- Very low DCR; excellent current handling
- 4.9 × 4.9 mm footprint; less than 3 mm tall

Designer's Kit C420 contains 3 each of all values
Core material Ferrite
Terminations RoHS compliant silver-palladium-platinum-glass frit. Other terminations available at additional cost.
Weight 226 – 244 mg
Ambient temperature –40°C to +85°C with Irms current, +85°C to +125°C with derated current
Storage temperature Component: –40°C to +125°C. Packaging: –40°C to +80°C
Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)
Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332
Packaging 750/7″reel; 2500/13″ reel Plastic tape: 12 mm wide, 0.32 mm thick, 8 mm pocket spacing, 3.1 mm pocket depth
Recommended pick and place nozzle OD: 5 mm; ID: ≤ 2.5 mm
PCB washing Only pure water or alcohol recommended

Part number[1]	Inductance[2] ±20% (µH)	DCR max[3] (Ohms)	SRF typ[4] (MHz)	Isat (A)[5] 10% drop	Isat (A)[5] 20% drop	Isat (A)[5] 30% drop	Irms (A)[6] 20°C rise	Irms (A)[6] 40°C rise
LPS5030-901ML_	0.90	0.040	250	3.8	4.0	4.1	2.10	2.80
LPS5030-122ML_	1.2	0.043	210	3.5	3.6	3.7	2.00	2.65
LPS5030-172ML_	1.7	0.051	190	3.0	3.2	3.3	1.90	2.50
LPS5030-222ML_	2.2	0.057	168	2.9	3.1	3.2	1.60	2.15
LPS5030-332ML_	3.3	0.066	125	2.3	2.5	2.6	1.40	1.80
LPS5030-472ML_	4.7	0.083	84	1.9	2.0	2.0	1.30	1.75
LPS5030-562ML_	5.6	0.089	70	1.8	1.8	1.9	1.25	1.65
LPS5030-682ML_	6.8	0.099	56	1.6	1.7	1.7	1.20	1.60
LPS5030-822ML_	8.2	0.125	45	1.6	1.7	1.7	1.10	1.55
LPS5030-103ML_	10.0	0.127	30	1.4	1.4	1.4	1.00	1.50
LPS5030-123ML_	12.0	0.155	24	1.3	1.4	1.4	0.95	1.40
LPS5030-153ML_	15.0	0.160	32	0.80	0.90	0.90	0.92	1.40
LPS5030-183ML_	18.0	0.170	27	0.80	0.82	0.87	0.90	1.30
LPS5030-223ML_	22.0	0.190	24	0.70	0.75	0.78	0.88	1.25
LPS5030-333ML_	33.0	0.260	19	0.60	0.63	0.64	0.85	1.20
LPS5030-473ML_	47.0	0.330	16	0.50	0.53	0.55	0.75	1.00
LPS5030-683ML_	68.0	0.440	12	0.40	0.43	0.44	0.65	0.900
LPS5030-823ML_	82.0	0.470	11	0.38	0.40	0.40	0.60	0.830
LPS5030-104ML_	100	0.600	10	0.27	0.31	0.32	0.55	0.750
LPS5030-124ML_	120	0.800	9	0.26	0.29	0.30	0.45	0.660
LPS5030-154ML_	150	0.860	7.5	0.22	0.25	0.263	0.42	0.570
LPS5030-224ML_	220	1.35	6.0	0.21	0.235	0.245	0.36	0.500
LPS5030-334ML_	330	1.80	5.0	0.155	0.155	0.200	0.32	0.420
LPS5030-474ML_	470	2.80	4.0	0.117	0.134	0.146	0.28	0.370
LPS5030-564ML_	560	3.20	3.6	0.110	0.130	0.140	0.23	0.320
LPS5030-684ML_	680	3.80	3.0	0.100	0.120	0.126	0.20	0.290
LPS5030-105ML_	1000	5.10	2.5	0.100	0.110	0.110	0.18	0.250
LPS5030-155ML_	1500	7.60	2.0	0.068	0.080	0.089	0.15	0.210
LPS5030-185ML_	1800	10.0	1.8	0.069	0.081	0.086	0.13	0.170
LPS5030-225ML_	2200	11.0	1.6	0.063	0.074	0.080	0.10	0.150
LPS5030-335ML_	3300	19.5	1.3	0.056	0.063	0.067	0.090	0.125
LPS5030-475ML_	4700	26.0	1.1	0.049	0.056	0.059	0.080	0.110

1. Please specify **termination** and **packaging** codes:

LPS5030-105M L C

Termination: **L** = RoHS compliant silver-palladium-platinum-glass frit. Special order: **T** = RoHS tin-silver-copper (95.5/4/0.5) or **S** = non-RoHS tin-lead (63/37).

Packaging: **C** = 7″ machine-ready reel. EIA-481 embossed plastic tape (750 parts per full reel).
B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter C instead.
D = 13″ machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (2500 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.
3. DCR measured on a micro-ohmmeter.
4. SRF measured using Agilent/HP 8753ES or equivalent.
5. DC current at which the inductance drops the specified amount from its value without current.
6. Current that causes the specified temperature rise from 25°C ambient.
7. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Coilcraft®

Specifications subject to change without notice.
Please check our website for latest information. Document 581-1 Revised 10/06/08

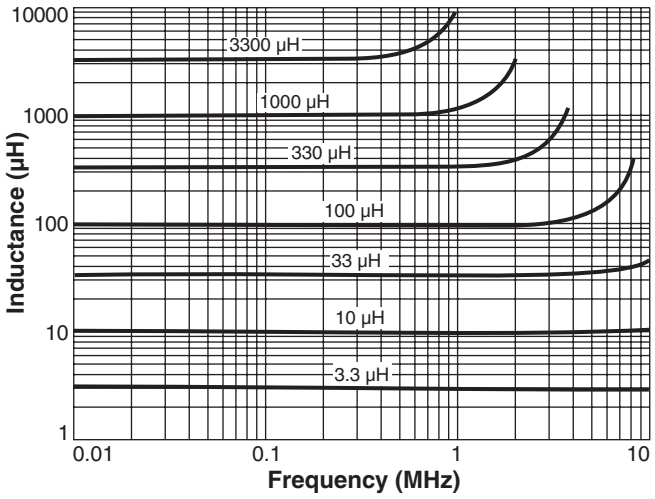
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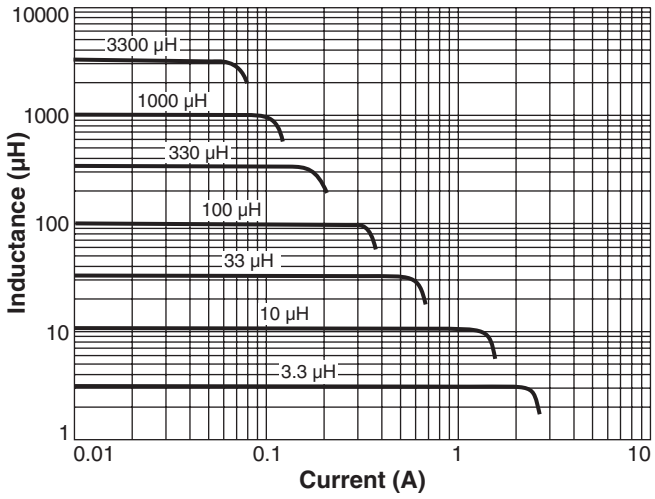
NEW!

Shielded SMT Power Inductors – LPS5030 Series

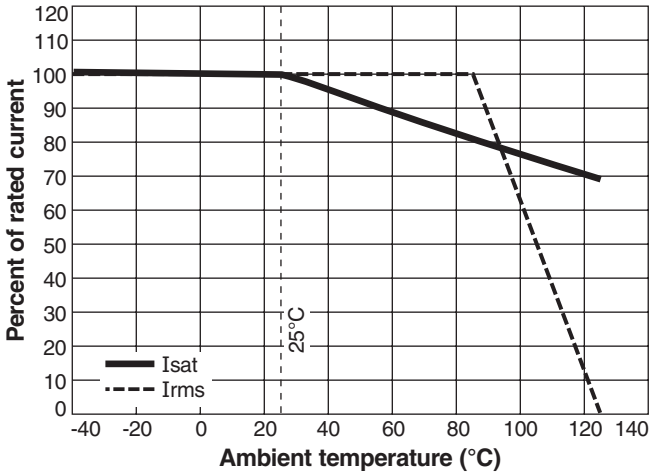
Typical L vs Frequency

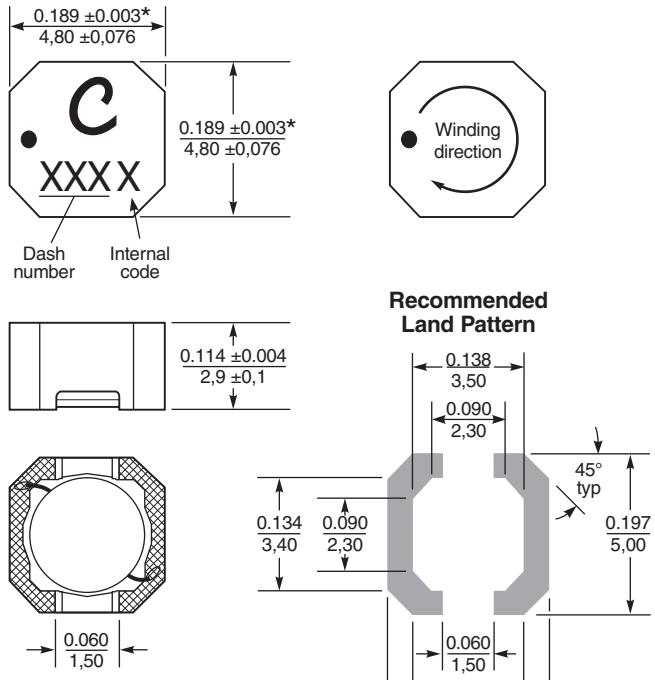


Typical L vs Current



Typical Current Derating





* Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.005 in / 0,13 mm.

Dimensions are in inches / mm

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