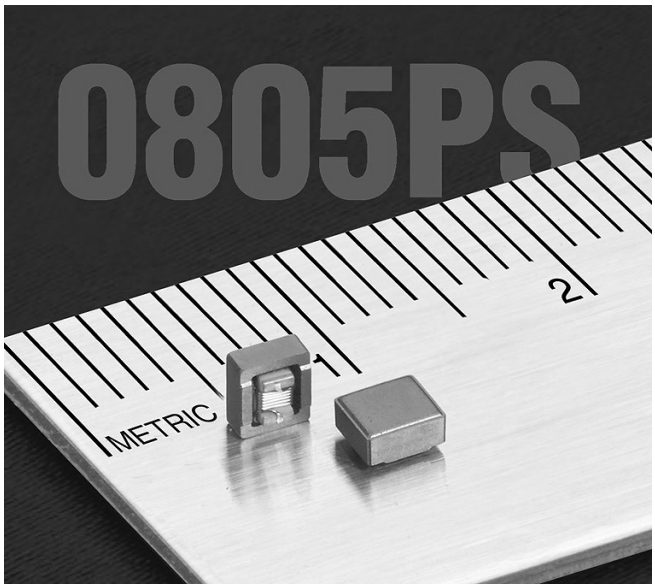
Shielded High SRF Inductors – 0805PS



- Higher SRF and than our other power inductors
- High inductance with tight tolerance
- Excellent current handling for a part this size

Designer's Kit C348 contains 6 of each part
Core material Ceramic/Ferrite
Core and winding loss See www.coilcraft.com/coreloss
Environmental RoHS compliant; halogen free optional
Terminations Silver-palladium-platinum-glass frit. Other terminations available at additional cost
Weight 57.6 – 62.4 mg
Ambient temperature –40°C to +65°C with Irms current
Maximum part temperature +105°C (ambient + temp rise) Derating.
Storage temperature Component: –40°C to +105°C.
Tape and reel 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 1500/7″reel; 7500/13″ reel Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 2.34 mm pocket depth
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

Part number[1]	L[2] ±10% (µH)	Q min[3] at 1 MHz	DCR[4] max (Ohms)	SRF[5] typ (MHz)	Isat[6] (A)	Irms[7] (A)
0805PS-102KL_	1.0	21	0.14	340	0.90	1.6
0805PS-152KL_	1.5	21	0.18	265	0.85	1.3
0805PS-272KL_	2.7	21	0.35	190	0.60	0.88
0805PS-332KL_	3.3	21	0.50	180	0.55	0.70
0805PS-392KL_	3.9	21	0.74	165	0.50	0.61
0805PS-472KL_	4.7	21	0.85	155	0.43	0.59
0805PS-562KL_	5.6	21	0.91	143	0.38	0.57
0805PS-682KL_	6.8	21	1.37	118	0.32	0.46
0805PS-103KL_	10	21	1.51	66	0.27	0.43
0805PS-153KL_	15	21	2.04	34	0.22	0.34
0805PS-223KL_	22	25	2.48	22	0.18	0.33
0805PS-333KL_	33	25	3.00	17	0.16	0.28
0805PS-473KL_	47	25	3.85	15	0.15	0.26
0805PS-683KL_	68	28	4.42	12	0.12	0.24
0805PS-823KL_	82	30	6.00	12	0.11	0.21
0805PS-104KL_	100	32	6.96	9.0	0.10	0.19
0805PS-124KL_	120	32	7.51	7.7	0.10	0.18
0805PS-154KL_	150	32	8.33	5.0	0.08	0.18
0805PS-224KL_	220	32	13.71	5.0	0.07	0.14
0805PS-334KL_	330	32	20.53	3.5	0.06	0.11

1. When ordering, please specify **termination** and **packaging** codes:

0805PS-334KLC

Terminations: **L** = RoHS compliant, not halogen-free. Silver-palladium-platinum-glass frit terminations
R = Halogen free component. Matte tin over nickel over silver-platinum-glass frit terminations.

Packaging: **C** = 7″ machine-ready reel. EIA-481 embossed plastic tape (1500 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 (7500 parts per full reel).

2. Inductance measured at 100 kHz, 0.1 Vrms, using a Coilcraft SMD-A fixture in Agilent/HP 4263B LCR meter.
3. Q measured on an Agilent/HP 4291 with an Agilent/HP 16193 test fixture.
4. DCR measured on a micro-ohmmeter and a Coilcraft CCF840 test fixture.
5. SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.
6. DC current at 25°C that causes an inductance drop of 10% (typ) from its value without current. Click for temperature derating information.
7. Current that causes a 40°C temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. Click for temperature derating information.
8. Electrical specifications at 25°C.

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

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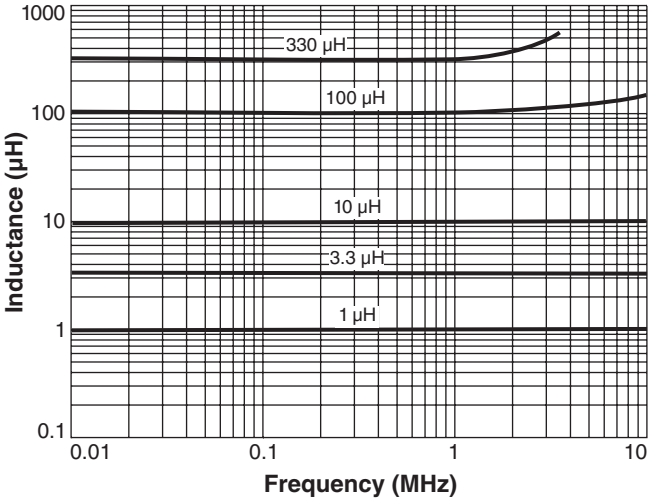
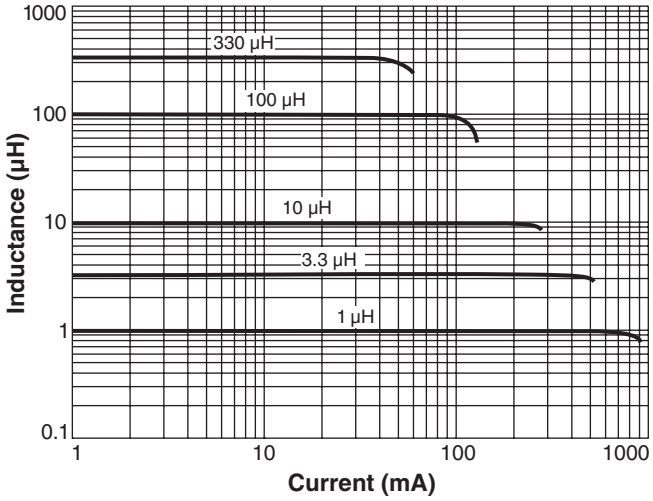
Power Chip Inductors - 0805PS Series

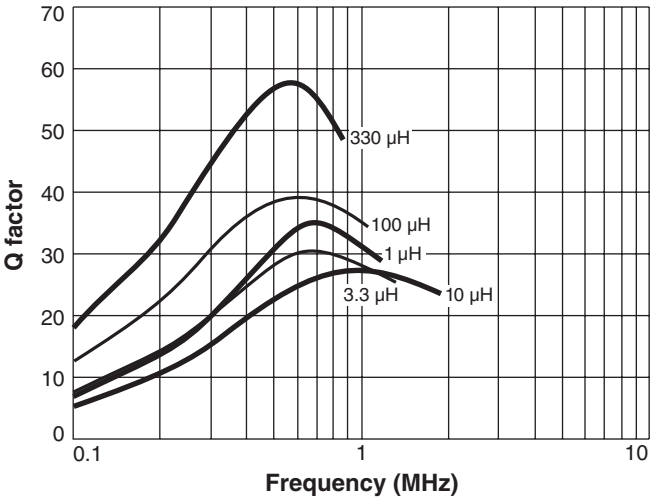
Typical L vs Frequency

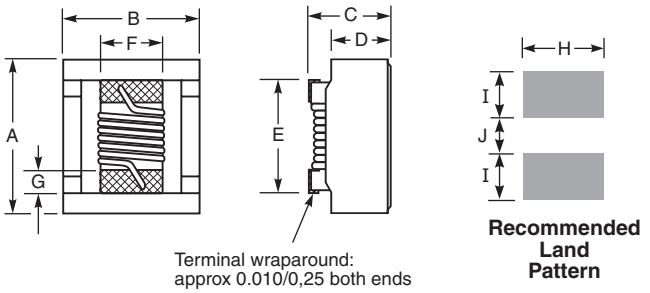


Typical L vs Current



Typical Q vs Frequency





A max	B max	C max	D	E	F	G	H	I	J	
0.133	0.118	0.079	0.053	0.080	0.050	0.020	0.070	0.040	0.030	inches
3,38	3,00	2,00	1,35	2,03	1,27	0,51	1,78	1,02	0,76	mm

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