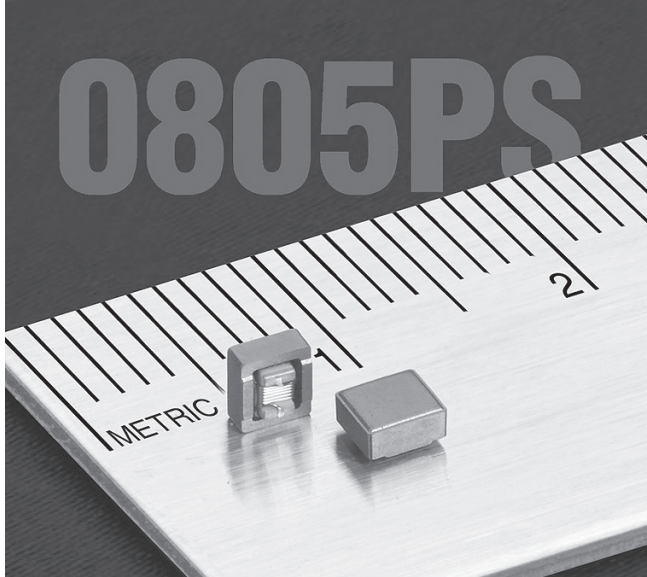




# Shielded High SRF Inductors – 0805PS



- 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](http://www.coilcraft.com/coreloss)

**Terminations** RoHS compliant silver-palladium-platinum-glass frit.

**Weight** 57.6– 62.4 mg

**Ambient temperature** –40°C to +65°C with Irms current, +65°C to +105°C with derated current

**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** Only pure water or alcohol recommended

Part number <sup>1</sup>	L <sup>2</sup> ±10% (µH)	Q min <sup>3</sup> at 1 MHz	DCR <sup>4</sup> max (Ohms)	SRF <sup>5</sup> typ (MHz)	Isat <sup>6</sup> (A)	Irms <sup>7</sup> (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 **packaging** code:

**0805PS-334KLC**

**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 which the inductance drops 10% (typ) from its value without current.

7. Current that causes a 40°C temperature rise from 25°C ambient.

8. Electrical specifications at 25°C.

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



[www.coilcraft.com](http://www.coilcraft.com)

**US** +1-847-639-6400 [sales@coilcraft.com](mailto:sales@coilcraft.com)

**UK** +44-1236-730595 [sales@coilcraft-europe.com](mailto:sales@coilcraft-europe.com)

**Taiwan** +886-2-2264 3646 [sales@coilcraft.com.tw](mailto:sales@coilcraft.com.tw)

**China** +86-21-6218 8074 [sales@coilcraft.com.cn](mailto:sales@coilcraft.com.cn)

**Singapore** + 65-6484 8412 [sales@coilcraft.com.sg](mailto:sales@coilcraft.com.sg)

Document 265-1 Revised 03/14/12

© Coilcraft Inc. 2012

This product may not be used in medical of high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check out web site for latest information.

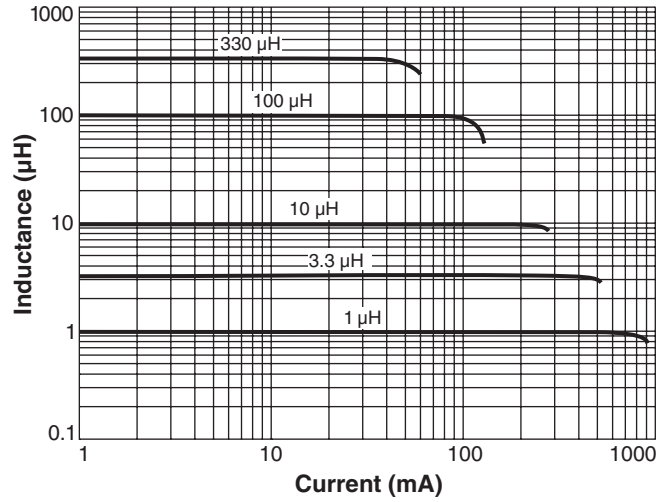
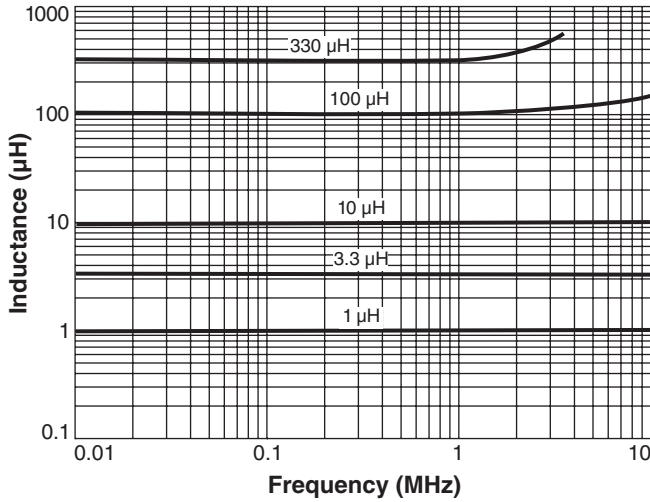
**COILCRAFT** ACCURATE  
**PRECISION** REPEATABLE  
MEASUREMENTS  
SEE WEB SITE **TEST FIXTURES**



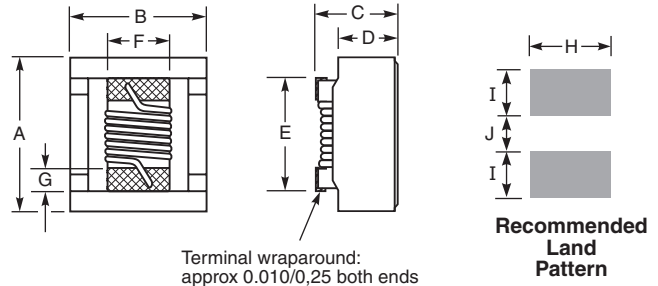
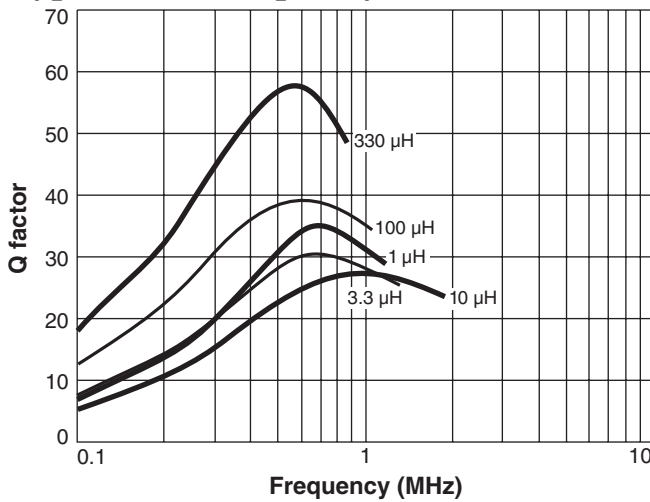
# Power Chip Inductors - 0805PS Series

**S-Parameter files**  
ON OUR WEB SITE  
**SPICE models**  
ON OUR WEB SITE

## Typical L vs Frequency Typical L vs Current

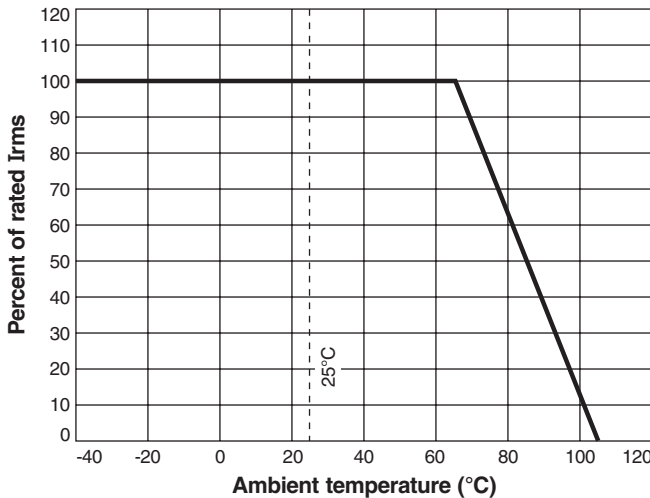


## Typical Q vs Frequency



A	B	C	D	E	F	G	H	I	J	
max	max	max								inches
0,133	0,118	0,079	0,053	0,080	0,050	0,020	0,070	0,040	0,030	
3,38	3,00	2,00	1,35	2,03	1,27	0,51	1,78	1,02	0,76	mm

## Irms Derating



**US** +1-847-639-6400 sales@coilcraft.com  
**UK** +44-1236-730595 sales@coilcraft-europe.com  
**Taiwan** +886-2-2264 3646 sales@coilcraft.com.tw  
**China** +86-21-6218 8074 sales@coilcraft.com.cn  
**Singapore** + 65-6484 8412 sales@coilcraft.com.sg

Document 265-2 Revised 03/14/12  
 © Coilcraft Inc. 2012  
 This product may not be used in medical of high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check out web site for latest information.