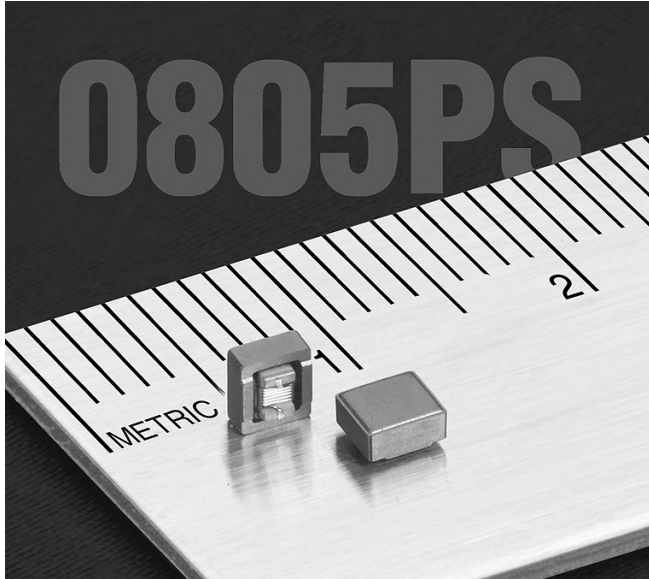




# Shielded High SRF Inductors – 0805PS



- 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)

**Environmental** RoHS compliant; halogen free optional

**Terminations** RoHS matte Sn over Ni over Ag-Pt-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)

**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 <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-102KR_	1.0	21	0.14	340	0.90	1.6
0805PS-152KR_	1.5	21	0.18	265	0.85	1.3
0805PS-272KR_	2.7	21	0.35	190	0.60	0.88
0805PS-332KR_	3.3	21	0.50	180	0.55	0.70
0805PS-392KR_	3.9	21	0.74	165	0.50	0.61
0805PS-472KR_	4.7	21	0.85	155	0.43	0.59
0805PS-562KR_	5.6	21	0.91	143	0.38	0.57
0805PS-682KR_	6.8	21	1.37	118	0.32	0.46
0805PS-103KR_	10	21	1.51	66	0.27	0.43
0805PS-153KR_	15	21	2.04	34	0.22	0.34
0805PS-223KR_	22	25	2.48	22	0.18	0.33
0805PS-333KR_	33	25	3.00	17	0.16	0.28
0805PS-473KR_	47	25	3.85	15	0.15	0.26
0805PS-683KR_	68	28	4.42	12	0.12	0.24
0805PS-823KR_	82	30	6.00	12	0.11	0.21
0805PS-104KR_	100	32	6.96	9.0	0.10	0.19
0805PS-124KR_	120	32	7.51	7.7	0.10	0.18
0805PS-154KR_	150	32	8.33	5.0	0.08	0.18
0805PS-224KR_	220	32	13.71	5.0	0.07	0.14
0805PS-334KR_	330	32	20.53	3.5	0.06	0.11

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

**0805PS-334KRC**

**Terminations:** R = RoHS matte Sn over Ni over Ag-Pt-glass frit.

**Packaging:** C = 7" machine-ready reel. EIA-481 embossed plastic tape (1500 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (7500 parts per full reel).

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

- Inductance measured at 100 kHz, 0.1 Vrms, using a Coilcraft SMD-A fixture in Agilent/HP 4263B LCR meter.
  - Q measured on an Agilent/HP 4291 with an Agilent/HP 16193 test fixture.
  - DCR measured on a micro-ohmmeter and a Coilcraft CCF840 test fixture.
  - SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.
  - DC current at 25°C that causes an inductance drop of 10% (typ) from its value without current. [Click for temperature derating information.](#)
  - 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.](#)
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

**COILCRAFT** ACCURATE  
PRECISION REPEATABLE  
MEASUREMENTS  
TEST FIXTURES  
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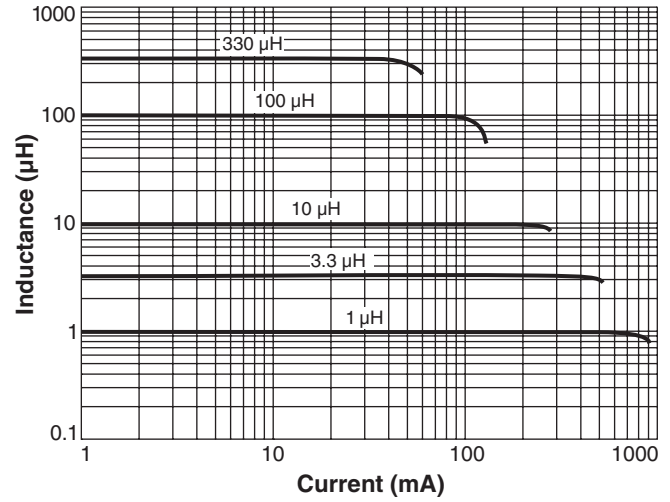
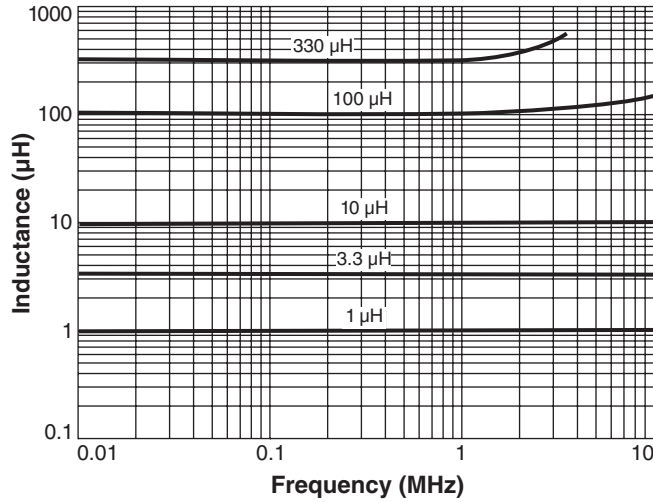
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

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

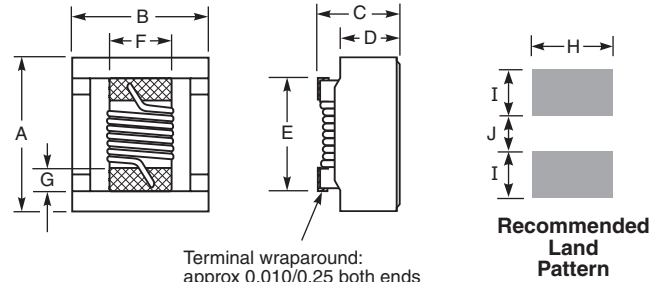
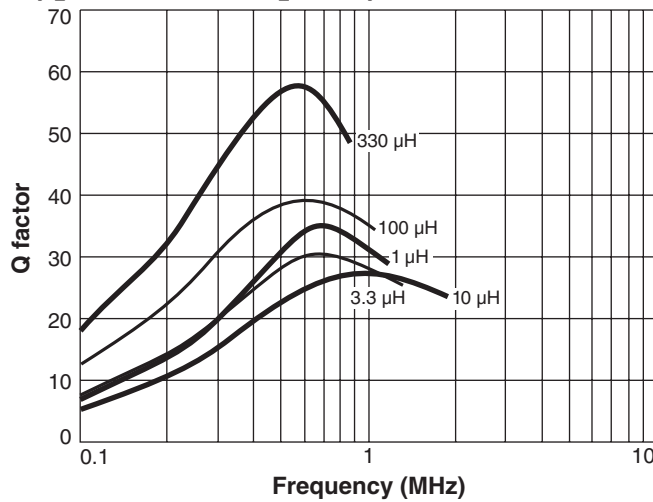


# Power Chip Inductors - 0805PS Series

## 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



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