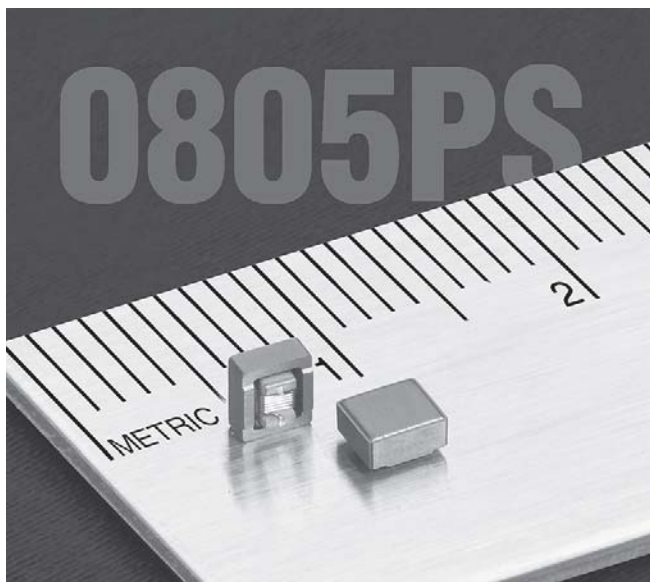




# Power Chip Inductors – 0805PS Series



- Shielded power chip inductors
- Excellent current handling for a part this size

For new designs, we recommend the EPL2010, EPL2014 or LPS3010 as an alternative to this series. They all offer better current handling, lower DCR, lower profile and a smaller footprint. We will continue to manufacture and support the 0805PS.

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

Part number <sup>1</sup>	L <sup>2</sup> ±10% (µH)	Q <sub>min</sub> <sup>3</sup> at 1 MHz	DCR <sup>4</sup> max (Ohms)	SRF <sup>5</sup> typ (MHz)	Isat <sup>6</sup> (A)	I <sub>rms</sub> <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

- When ordering, please specify **termination** and **packaging** codes:

0805PS-334KL 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 (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).

- Inductance measured at 100 kHz, 0.1 V<sub>rms</sub>, 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 which the inductance drops 10% (typ) from its value without current.
  - Current that causes a 40°C temperature rise from 25°C ambient.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

**COILCRAFT** ACCURATE  
**PRECISION** REPEATABLE  
MEASUREMENTS  
SEE INDEX **TEST FIXTURES**

**Coilcraft**<sup>®</sup>

Specifications subject to change without notice.  
Please check our website for latest information.

Document 265-1 Revised 08/18/09

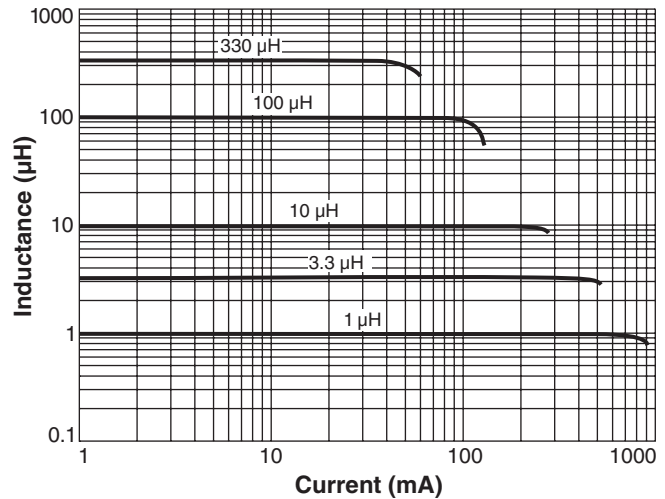
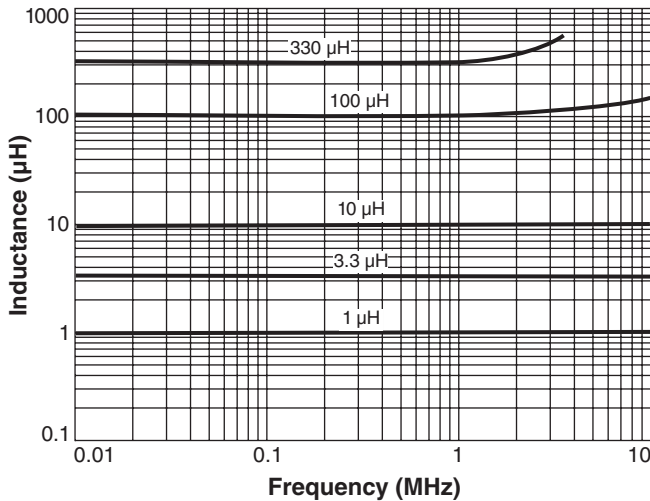
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

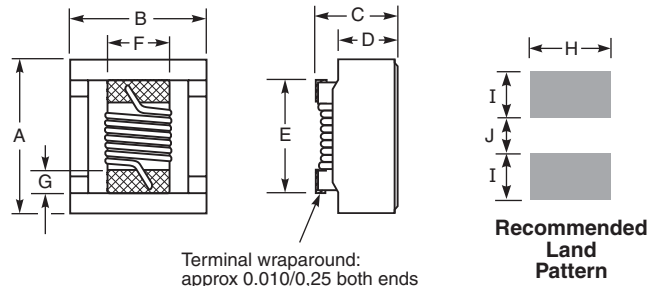
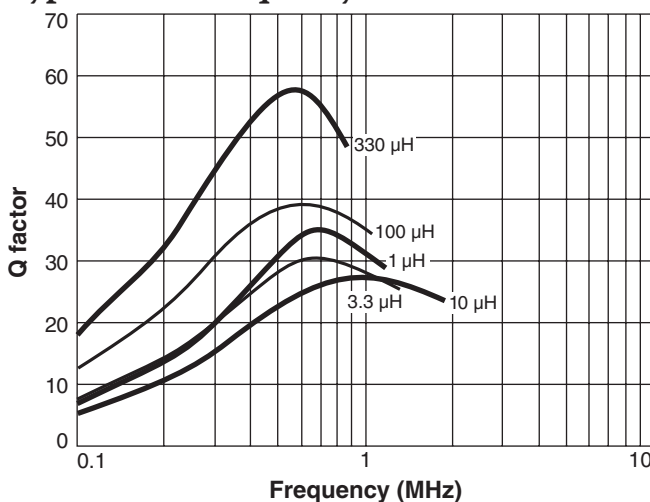


# Power Chip Inductors - 0805PS Series

Typical L vs Frequency    Typical L vs Current

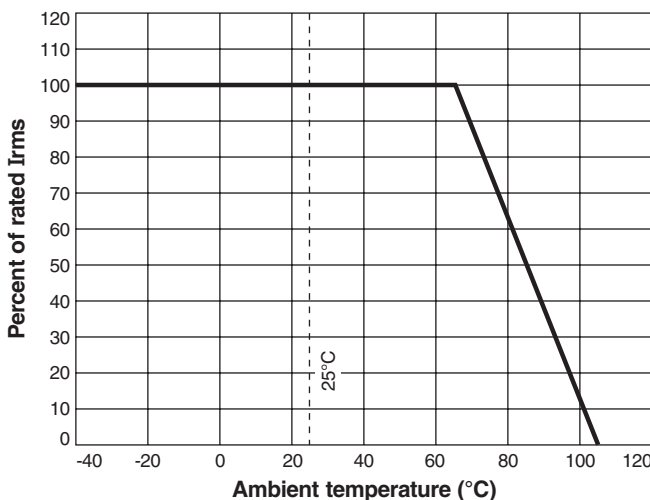


## Typical Q vs Frequency



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

## Irms Derating



**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. Other terminations available at additional cost.

**Weight** 57.6 – 62.4 mg

**Ambient temperature** -40°C to +65°C with I<sub>rms</sub> current, +65°C to +105°C with derated current

**Storage temperature** Component: -40°C to +105°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

**Temperature Coefficient of Inductance (TCL)** +100 to +250 ppm/°C

**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



Specifications subject to change without notice. Please check our website for latest information.

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