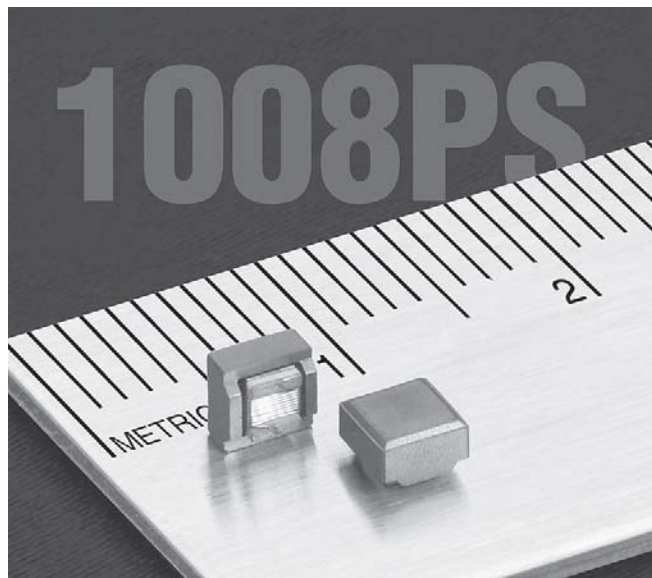




Power Chip Inductors - 1008PS Series



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

Designer's Kit C341 contains 6 of each part

Core material Ceramic/Ferrite

Terminations RoHS compliant silver-palladium-platinum-glass frit. Other terminations available at additional cost.

Weight 122 – 132 mg

Ambient temperature –40°C to +105°C with I_{rms} current, +105°C to +145°C with derated current

Storage temperature Component: –40°C to +145°C. Packaging: –55°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 +350 ppm/°C

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Mean Time Between Failures (MTBF) 26,315,789 hours

Packaging 750/7" reel; 2500/13" reel Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 3.3 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number ¹	L ±10% ² (µH)	Q _{min} ³ at 1 MHz	DCR ⁴ max (Ohms)	SRF ⁵ typ (MHz)	Isat ⁶ (A)	I _{rms} ⁷ (A)
1008PS-102KL_	1.0	35	0.05	344	3.0	2.00
1008PS-152KL_	1.5	35	0.06	260	2.8	2.00
1008PS-182KL_	1.8	35	0.09	225	2.1	1.90
1008PS-272KL_	2.7	38	0.14	185	1.3	1.60
1008PS-392KL_	3.9	38	0.26	175	1.2	1.20
1008PS-472KL_	4.7	38	0.35	160	1.0	1.10
1008PS-562KL_	5.6	38	0.36	150	1.0	0.90
1008PS-682KL_	6.8	38	0.58	120	0.84	0.80
1008PS-103KL_	10	38	0.92	105	0.78	0.72
1008PS-153KL_	15	38	1.15	35	0.70	0.60
1008PS-223KL_	22	40	1.40	26	0.65	0.55
1008PS-333KL_	33	45	1.61	20	0.51	0.50
1008PS-393KL_	39	45	1.85	16	0.45	0.47
1008PS-473KL_	47	45	2.5	19	0.40	0.42
1008PS-683KL_	68	45	3.8	12	0.31	0.32
1008PS-823KL_	82	45	4.3	9.0	0.30	0.30
1008PS-104KL_	100	45	5.8	7.0	0.30	0.30
1008PS-124KL_	120	50	6.3	7.0	0.25	0.28
1008PS-154KL_	150	50	7.5	5.8	0.22	0.26
1008PS-224KL_	220	55	10.0	5.0	0.22	0.21
1008PS-334KL_	330	55	11.5	3.8	0.20	0.19
1008PS-474KL_	470	55	16.3	3.1	0.16	0.18
1008PS-564KL_	560	55	18.1	2.8	0.13	0.15
1008PS-684KL_	680	55	24.0	2.5	0.12	0.14
1008PS-824KL_	820	45	26.0	1.5	0.10	0.12
1008PS-105KL_	1000	45	29.0	2.0	0.10	0.11

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

1008PS-105KL 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).

- Inductance measured at 100 kHz, 0.1 V_{rms}, using Coilcraft SMD-A fixture in Agilent/HP 4263B impedance analyzer.
- Q measured on Agilent/HP 4291 with Agilent/HP 16193 test fixture.
- DCR measured on micro-ohmmeter and Coilcraft CCF840 test fixture.
- SRF measured using Agilent/HP 8753D network analyzer and Coilcraft SMD-D test fixture.
- DC current at which the inductance drops 10% (typ) from its value without current.
- Electrical specifications at 25°C. See Qualification Standards section for environmental and test data. Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

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

Coilcraft[®]

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

Document 219-1 Revised 10/03/07

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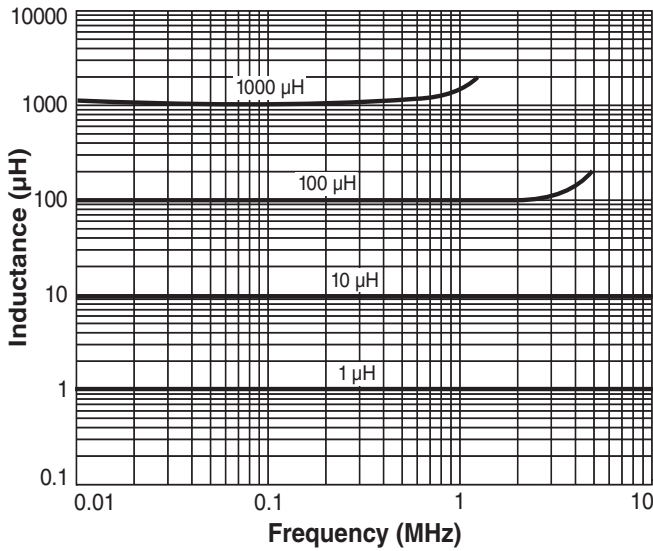
E-mail info@coilcraft.com Web <http://www.coilcraft.com>



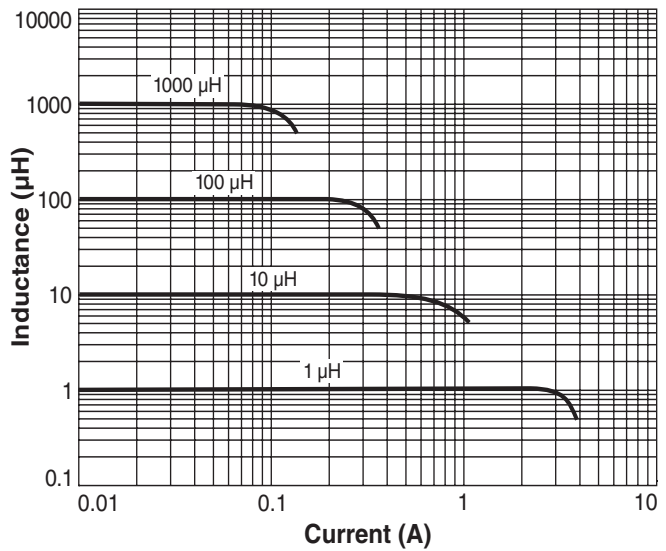
Power Chip Inductors - 1008PS Series

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

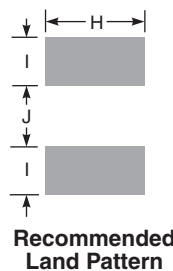
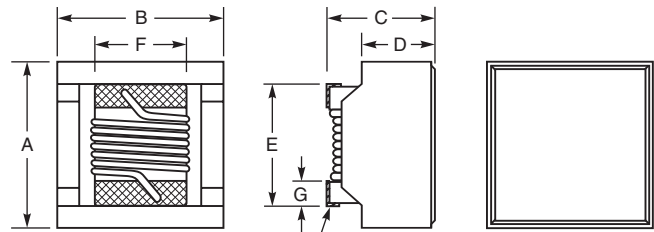
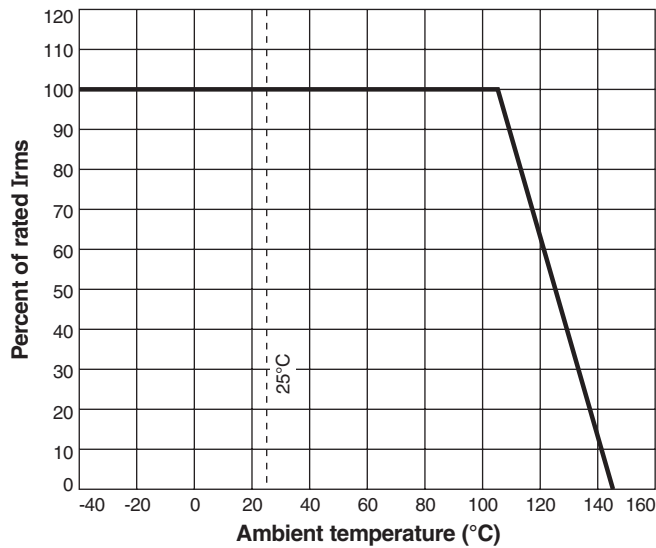
Typical L vs Frequency



Typical L vs Current



Irms Derating



A	B	C	D	E	F	G	H	I	J	
max	max	max	max	max	max	max				inches
0.150	0.150	0.108	0.070	0.100	0.083	0.020	0.100	0.040	0.050	
3,81	3,81	2,74	1,78	2,54	2,11	0,51	2,54	1,02	1,27	mm



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