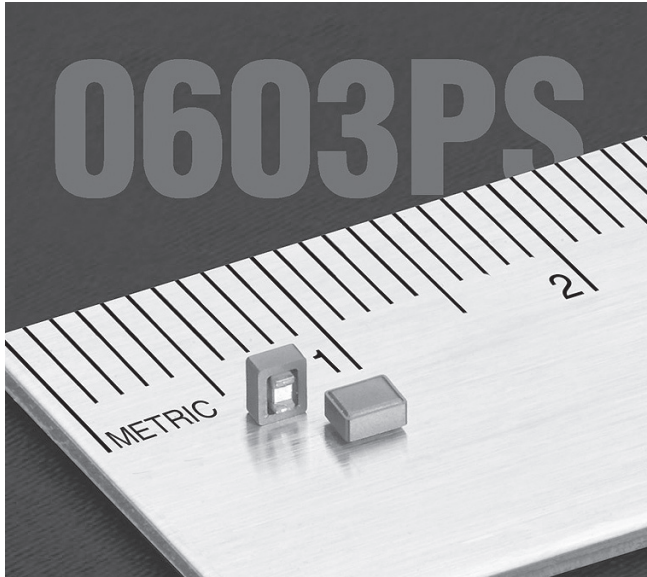




Shielded High SRF Inductors – 0603PS



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

Core material Ceramic/Ferrite

Core and winding loss See www.coilcraft.com/coreloss

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

Weight 26.4– 27.9 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.

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) +50 to +150 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 2000/7" reel; 7500/13" reel Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.8 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)	Irms ⁷ (A)
0603PS-781KL	0.78	15	0.24	475	0.55	1.30
0603PS-102KL	1.0	15	0.26	390	0.40	1.00
0603PS-182KL	1.8	15	0.54	155	0.39	0.70
0603PS-222KL	2.2	15	0.75	245	0.33	0.60
0603PS-272KL	2.7	15	0.75	127	0.33	0.55
0603PS-332KL	3.3	15	0.88	72	0.32	0.50
0603PS-392KL	3.9	15	1.00	72	0.27	0.48
0603PS-472KL	4.7	15	1.08	64	0.26	0.47
0603PS-562KL	5.6	15	1.23	51	0.25	0.41
0603PS-682KL	6.8	15	1.37	39	0.23	0.40
0603PS-822KL	8.2	20	1.43	30	0.22	0.39
0603PS-103KL	10	20	1.60	30	0.21	0.38
0603PS-153KL	15	20	1.92	22	0.16	0.35
0603PS-223KL	22	20	2.96	16	0.13	0.27
0603PS-333KL	33	20	5.63	12	0.10	0.20
0603PS-473KL	47	20	5.69	12	0.10	0.18

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

0603PS-473KLC

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 (2000 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 (7500 parts per full reel).

- Inductance measured at 100 kHz, 0.1 Vrms, using a Coilcraft SMD-A fixture in an 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[®]

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

Document 266-1 Revised 08/17/09

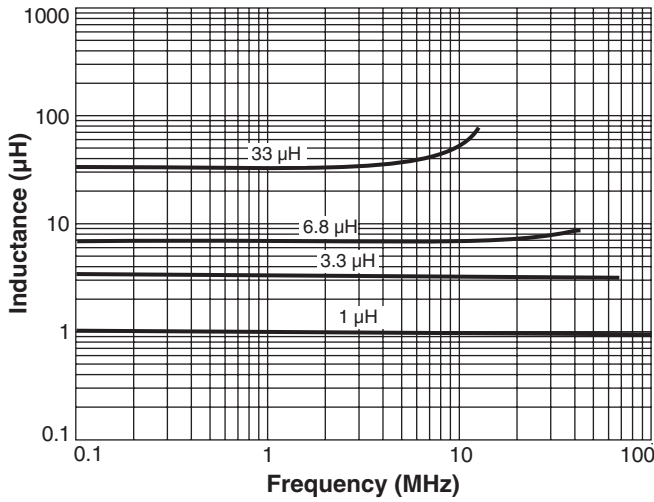
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

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

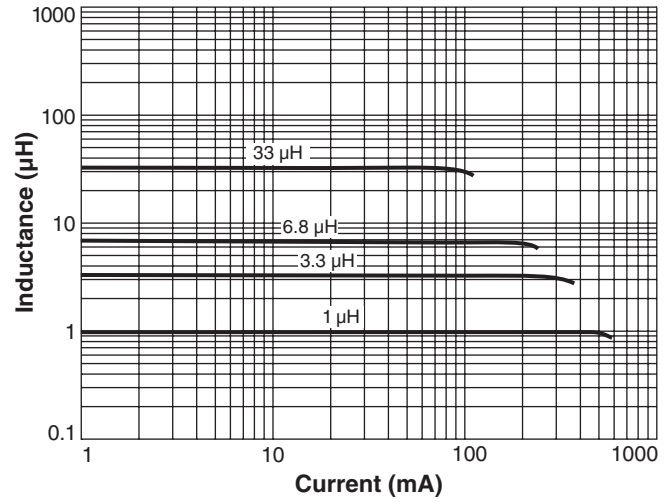


Power Chip Inductors - 0603PS Series

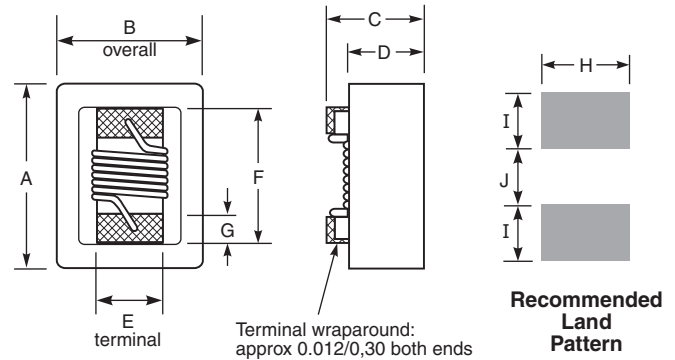
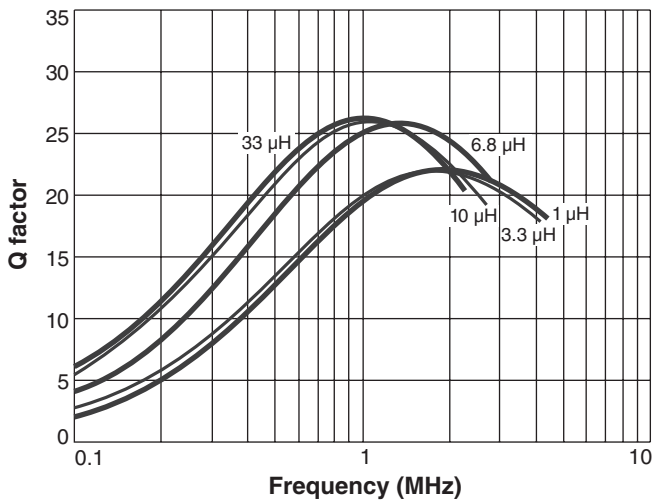
Typical L vs Frequency



Typical L vs Current

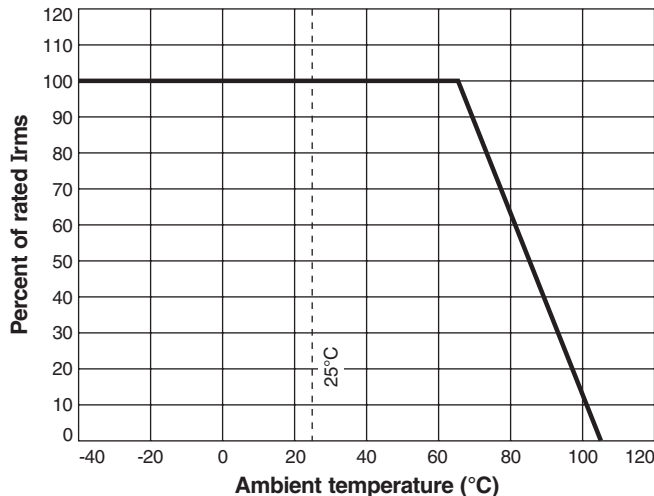


Typical Q vs Frequency



A	B	C	D	E	F	G	H	I	J	
max	max	max								inches
0,102	0,082	0,071	0,049	0,030	0,060	0,013	0,040	0,025	0,025	
2,59	2,08	1,80	1,24	0,76	1,52	0,33	1,02	0,64	0,64	mm

Irms Derating



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

Document 266-2 Revised 08/17/09

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