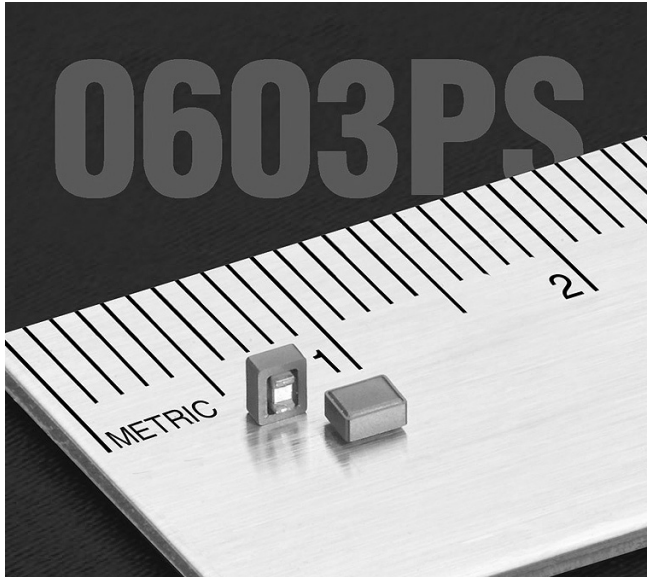




Shielded High SRF Inductors – 0603PS



- 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.

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.
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 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 Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

Part number ¹	$L \pm 10\%^2$ (μH)	$Q \text{ min}^3$ 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 **packaging** code:

0603PS-473KLC

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).

2. Inductance measured at 100 kHz, 0.1 Vrms, using a Coilcraft SMD-A fixture in an 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.



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Taiwan +886-2-2264 3646 sales@coilcraft.com.tw

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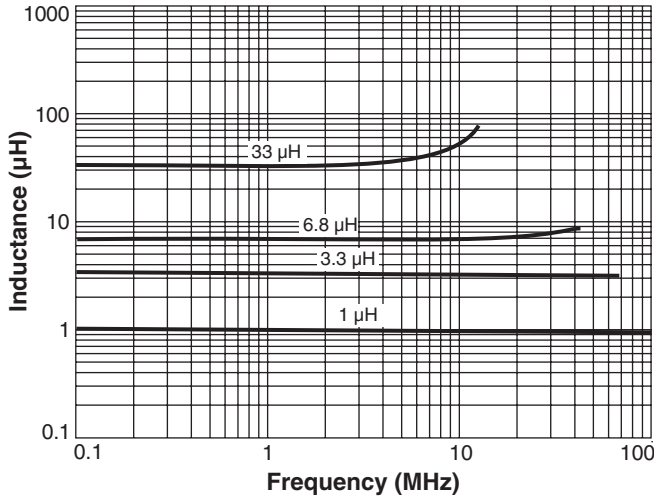
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

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

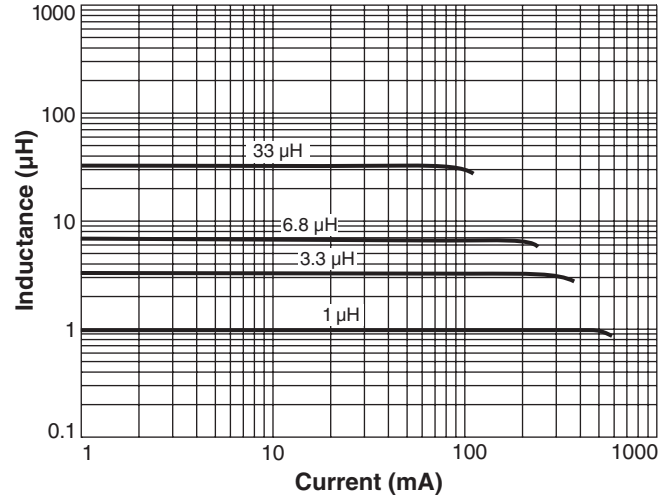


Power Chip Inductors - 0603PS Series

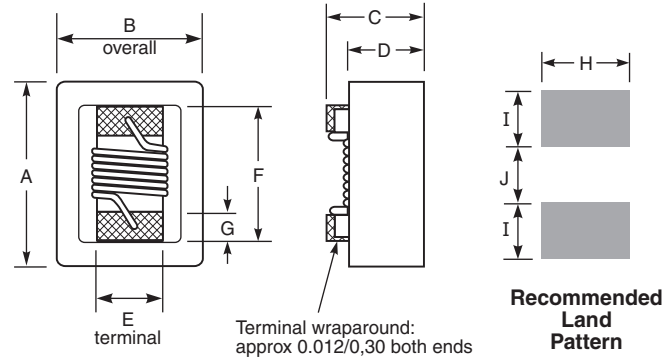
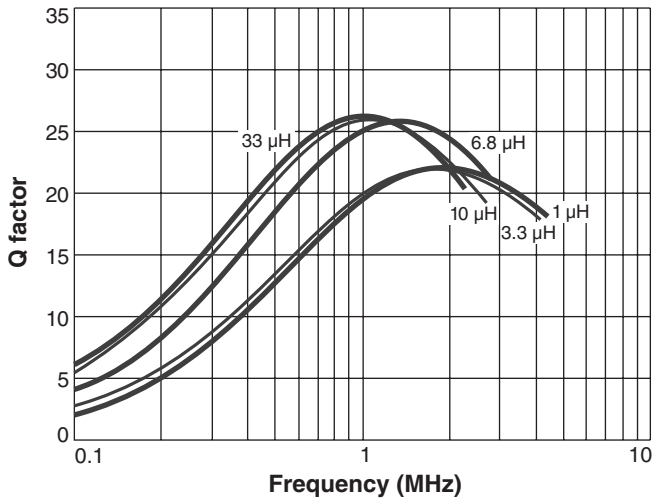
Typical L vs Frequency



Typical L vs Current

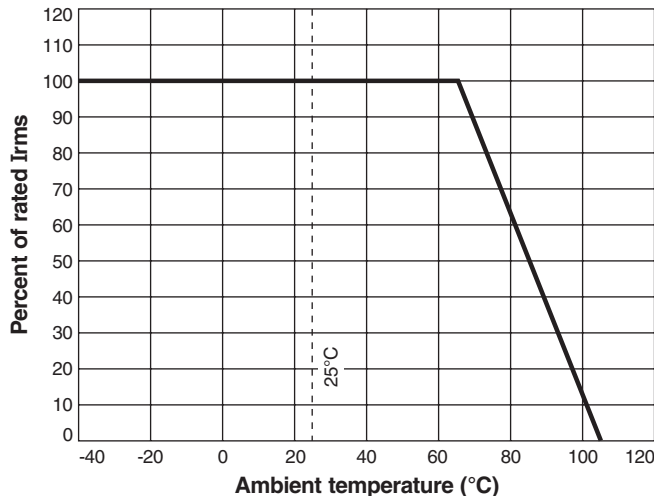


Typical Q vs Frequency



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



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