Leach Resistant Chip Inductors LR450RAA

- Higher SRF values than 1812 size parts with ferrite cores
- 5% tolerances for all values
- 19 inductance values from 1.0 to 33 µH

These 1812 size parts feature a leach-resistant base metalization.

Part number[1]	Inductance[2] (µH)	Percent tolerance	Q min[3]	SRF min[4] (MHz)	DCR max[5] (Ohms)	Imax (mA)
LR450RAA102JLZ	1.0 @ 7.9 MHz	5	59 @ 50 MHz	260	1.1	530
LR450RAA122JLZ	1.2 @ 7.9 MHz	5	54 @ 50 MHz	230	1.2	480
LR450RAA152_LZ	1.5 @ 7.9 MHz	5,2	57 @ 50 MHz	210	1.6	430
LR450RAA182JLZ	1.8 @ 7.9 MHz	5	57 @ 50 MHz	190	2.0	380
LR450RAA222JLZ	2.2 @ 7.9 MHz	5	52 @ 50 MHz	170	2.2	340
LR450RAA272JLZ	2.7 @ 7.9 MHz	5	53 @ 50 MHz	160	3.2	300
LR450RAA332JLZ	3.3 @ 7.9 MHz	5	53 @ 50 MHz	145	3.8	270
LR450RAA392_LZ	3.9 @ 7.9 MHz	5,2	53 @ 50 MHz	130	5.0	240
LR450RAA472JLZ	4.7 @ 7.9 MHz	5	32 @ 10 MHz	115	5.4	230
LR450RAA562JLZ	5.6 @ 7.9 MHz	5	32 @ 10 MHz	100	5.7	220
LR450RAA682JLZ	6.8 @ 7.9 MHz	5	32 @ 10 MHz	90	6.6	210
LR450RAA822JLZ	8.2 @ 7.9 MHz	5	32 @ 10 MHz	80	7.0	200
LR450RAA103JLZ	10.0 @ 7.9 MHz	5	32 @ 10 MHz	70	7.7	190
LR450RAA123JLZ	12.0 @ 2.5 MHz	5	26 @ 5 MHz	60	8.7	180
LR450RAA153JLZ	15.0 @ 2.5 MHz	5	26 @ 5 MHz	50	9.6	170
LR450RAA183JLZ	18.0 @ 2.5 MHz	5	28 @ 5 MHz	40	10.5	155
LR450RAA223_LZ	22.0 @ 2.5 MHz	5,2	28 @ 5 MHz	40	11.5	155
LR450RAA273JLZ	27.0 @ 2.5 MHz	5	28 @ 5 MHz	30	12.5	150
LR450RAA333_LZ	33.0 @ 2.5 MHz	5,2	24 @ 2.5 MHz	20	13.5	145

1. When ordering, please specify **tolerance** and **testing** codes:

LR450RAA333JLZ

Tolerance: **G** = 2% **J** = 5%
Testing: **Z** = COTS
H = Screening per Coilcraft CP-SA-10001
C = Custom screening (please specify when ordering)

2. Inductance measured using a Coilcraft SMD-A fixture in an Agilent/HP 4286 impedance analyzer or equivalent with Coilcraft-provided correlation pieces.
3. Q measured at the same frequency as inductance using an Agilent/HP 4291A with an Agilent/HP 16197 test fixture or equivalents.
4. SRF measured using an Agilent/HP 8753ES network analyzer or equivalent and a Coilcraft SMD-D test fixture.
5. DCR measured on a Keithley 580 micro-ohmmeter or equivalent and a Coilcraft CCF859 test fixture.
6. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Core material Ceramic

Terminations Silver-platinum-glass frit

Weight: 109 – 128 mg

Ambient temperature –40°C to +125°C with Imax current, +125°C to +140°C with derated current

Storage temperature Component: –40°C to +140°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) +25 to +155 ppm/°C

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

Enhanced crush-resistant packaging 600 per 7″ reel
Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 3.7 mm pocket depth

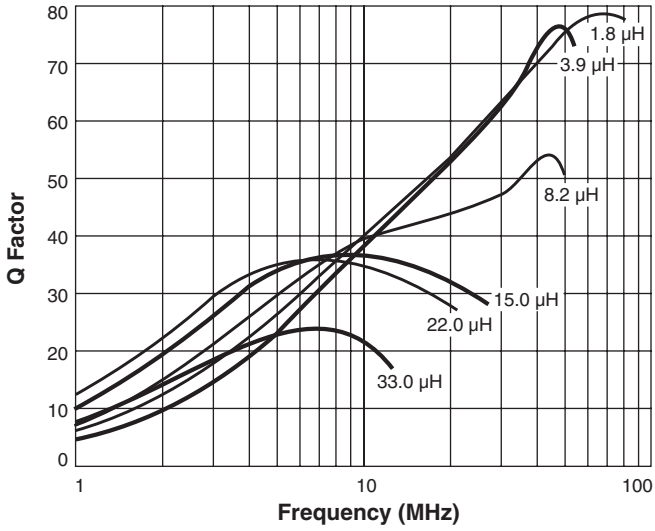
Coilcraft CPS
CRITICAL PRODUCTS & SERVICES

Document LR105-1 Revised 05/13/10

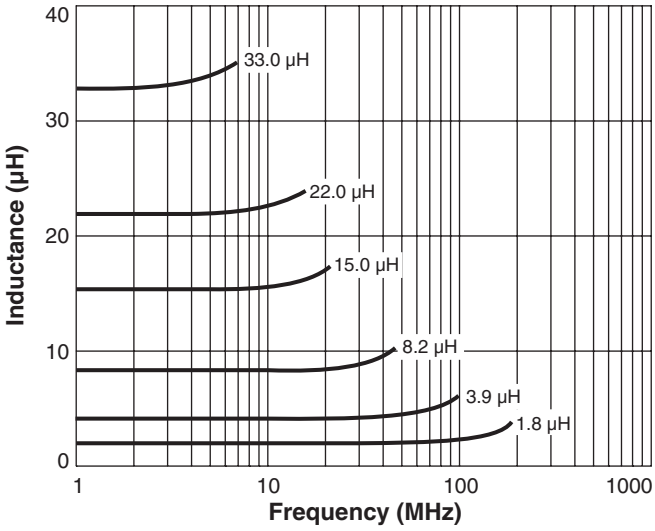
1102 Silver Lake Road
Cary IL 60013
Phone 800-981-0363
Fax 847-639-1508
E-mail cps@coilcraft.com
Web www.coilcraft-cps.com

LR450RAA Series (1812)

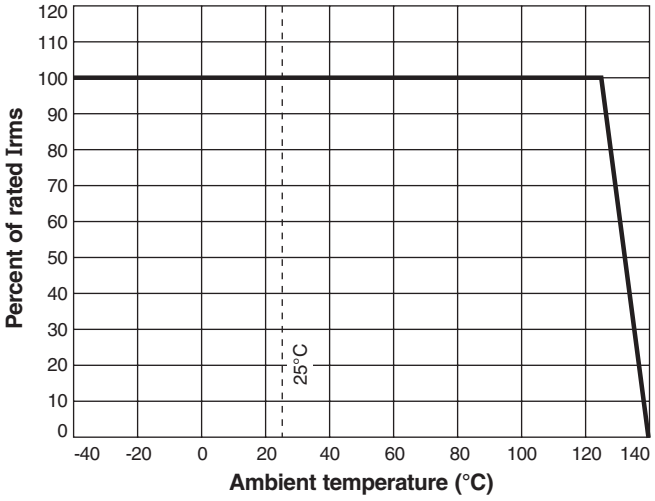
Typical Q vs Frequency

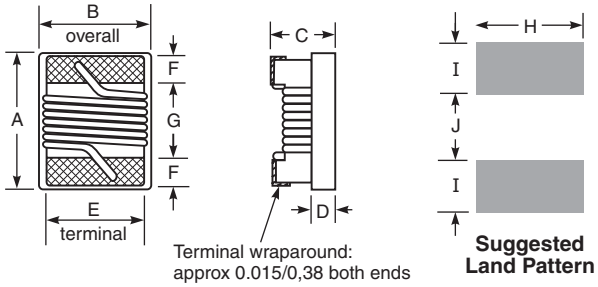


Typical L vs Frequency



Current Derating





A max	B max	C max	D ref	E	F	G	H	I	J
0.195	0.150	0.135	0.070	0.100	0.025	0.128	0.120	0.045	0.118
4,95	3,81	3,43	1,78	2,54	0,64	3,25	3,05	1,14	3,00

Coilcraft CPS
CRITICAL PRODUCTS & SERVICES

Specifications subject to change without notice.
Please check our website for latest information. Document LR105-2 Revised 05/13/10

1102 Silver Lake Road
Cary IL 60013
Phone 800-981-0363
Fax 847-639-1508
E-mail cps@coilcraft.com
Web www.coilcraft-cps.com