

PRELIMINARY

Leach Resistant Chip Inductors LR336RAD

The LR336RAD inductors provide exceptional Q values, even at high frequencies. They have a ceramic body and wire wound construction to provide the highest SRFs, tight inductance tolerance and batch consistency.

These high Q 0805 size chip inductors feature a leach resistance base metalization.

Part number ¹	Inductance ² (nH)	Percent tolerance	Q min ³	SRF min ⁴ (GHz)	DCR max ⁵ (Ohms)	Imax (A)
LR336RAD2N5JLZ	2.5 @ 250 MHz	5	80 @ 1500 MHz	>5.00	0.020	1.6
LR336RAD5N6JLZ	5.6 @ 250 MHz	5	98 @ 1500 MHz	>5.00	0.035	1.6
LR336RAD6N2JLZ	6.2 @ 250 MHz	5	88 @ 1000 MHz	4.75	0.035	1.6
LR336RAD12NJLZ	12 @ 250 MHz	5	80 @ 1000 MHz	3.00	0.045	1.6
LR336RAD16N_LZ	16 @ 250 MHz	5,2	72 @ 500 MHz	2.95	0.060	1.5
LR336RAD18N_LZ	18 @ 250 MHz	5,2	75 @ 500 MHz	2.55	0.060	1.4
LR336RAD20N_LZ	20 @ 250 MHz	5,2	70 @ 500 MHz	2.05	0.055	1.4
LR336RAD27N_LZ	27 @ 250 MHz	5,2	75 @ 500 MHz	2.00	0.070	1.3
LR336RAD30N_LZ	30 @ 250 MHz	5,2	65 @ 500 MHz	1.95	0.095	1.2
LR336RAD39N_LZ	39 @ 250 MHz	5,2	65 @ 500 MHz	1.60	0.110	1.1
LR336RAD48N_LZ	48 @ 200 MHz	5,2	65 @ 500 MHz	1.40	0.095	1.2
LR336RAD51N_LZ	51 @ 200 MHz	5,2	65 @ 500 MHz	1.40	0.120	1.0

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

ML336RAD51NGLZ

Tolerance: G = 2% J = 5%

Testing: Z = COTS

H = Screening per Coilcraft CP-SA-10001

C = Custom screening (please specify when ordering)

- Inductance measured using a Coilcraft SMD-A fixture in an Agilent/HP 4286 impedance analyzer with Coilcraft-provided correlation pieces.
 - Q measured using an Agilent/HP 4291A with an Agilent/HP 16193 test fixture.
 - SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.
 - DCR measured on a Cambridge Technology micro-ohmmeter and a Coilcraft CCF840 test fixture.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Core material Ceramic

Terminations RoHS compliant silver-platinum-glass frit.

Ambient temperature -40°C to +125°C with I_{max} current, +125°C to +155°C with derated current

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

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

Enhanced crush-resistant packaging 2000 per 7" reel
Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.65 mm pocket depth

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



CRITICAL PRODUCTS & SERVICES

These parts are preproduction products for electrical evaluation only.
Specification subject to change without notice.

Document LR197-1 Revised 03/02/10

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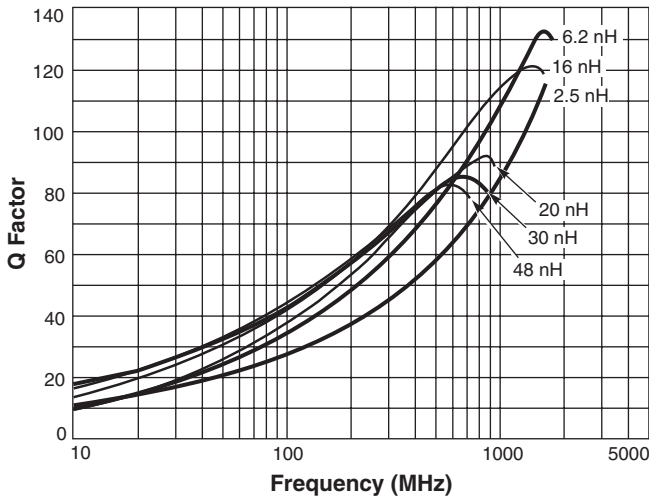
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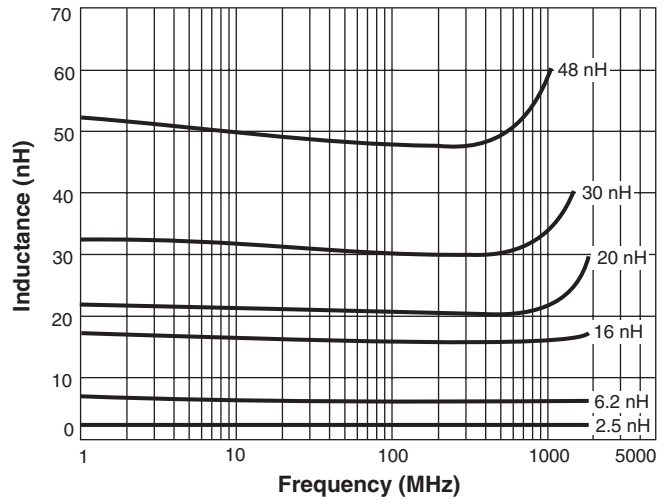
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LR336RAD Series (0805)

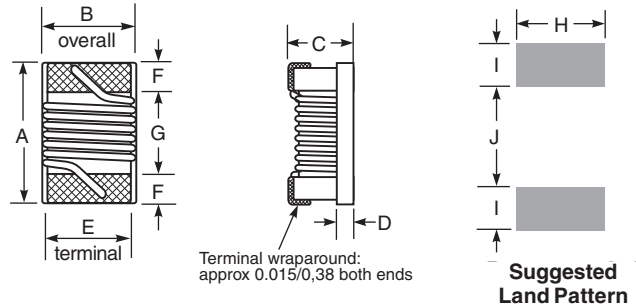
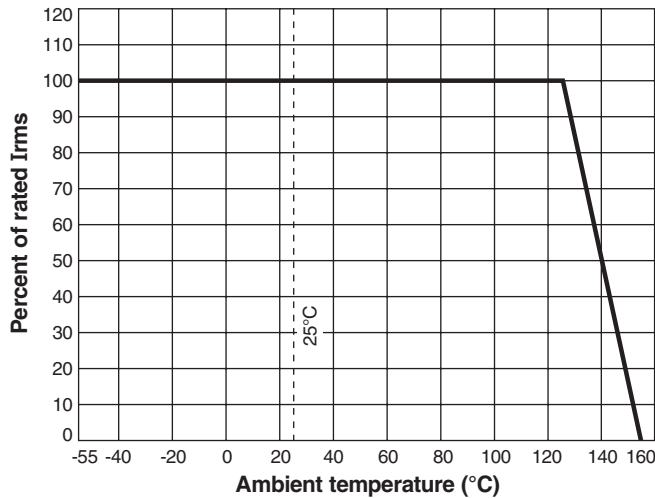
Typical Q vs Frequency



Typical L vs Frequency



Irms Derating



A	B	C	D	E	F	G	H	I	J
max	max	max	ref						
0.090	0.068	0.060	0.020	0.050	0.020	0.040	0.070	0.040	0.030
2,29	1,73	1,52	0,51	1,27	0,51	1,02	1,78	1,02	0,76