

Leach Resistant Chip Inductors LR376RAA

The LR376RAA inductors feature high SRF and excellent Q values. Their ceramic cores make 1% tolerances practical and economical and ensure the utmost in thermal stability, predictability and consistency.

These 1206 size parts feature a leach-resistant base metalization.

Part number ¹	Inductance ² (nH)	Percent tolerance	Q min ³	SRF min ⁴ (MHz)	DCR max ⁵ (Ohms)	I _{max} (mA)
LR376RAA030JLZ	3.3 @ 100 MHz	5	29 @ 300 MHz	>5000	0.050	1000
LR376RAA060JLZ	6.8 @ 100 MHz	5	24 @ 300 MHz	4380	0.070	1000
LR376RAA100JLZ	10 @ 100 MHz	5	31 @ 300 MHz	3440	0.080	1000
LR376RAA120_LZ	12 @ 100 MHz	5,2	40 @ 300 MHz	2560	0.100	1000
LR376RAA150_LZ	15 @ 100 MHz	5,2	38 @ 300 MHz	2520	0.100	1000
LR376RAA180_LZ	18 @ 100 MHz	5,2	50 @ 300 MHz	2260	0.100	1000
LR376RAA220_LZ	22 @ 100 MHz	5,2	50 @ 300 MHz	2120	0.100	1000
LR376RAA270_LZ	27 @ 100 MHz	5,2	50 @ 300 MHz	1800	0.110	1000
LR376RAA330_LZ	33 @ 100 MHz	5,2	55 @ 300 MHz	1800	0.110	1000
LR376RAA390_LZ	39 @ 100 MHz	5,2	55 @ 300 MHz	1800	0.120	1000
LR376RAA470_LZ	47 @ 100 MHz	5,2	55 @ 300 MHz	1500	0.130	1000
LR376RAA560_LZ	56 @ 100 MHz	5,2,1	55 @ 300 MHz	1400	0.140	1000
LR376RAA680_LZ	68 @ 100 MHz	5,2,1	48 @ 150 MHz	1180	0.260	900
LR376RAA820_LZ	82 @ 100 MHz	5,2,1	52 @ 150 MHz	1120	0.210	900
LR376RAA101_LZ	100 @ 100 MHz	5,2,1	55 @ 150 MHz	1040	0.260	850
LR376RAA121_LZ	120 @ 100 MHz	5,2,1	53 @ 150 MHz	1040	0.260	800
LR376RAA151_LZ	150 @ 100 MHz	5,2,1	53 @ 150 MHz	920	0.310	750
LR376RAA181_LZ	180 @ 50 MHz	5,2,1	53 @ 150 MHz	780	0.430	700
LR376RAA221_LZ	220 @ 50 MHz	5,2,1	51 @ 150 MHz	700	0.500	670
LR376RAA271_LZ	270 @ 50 MHz	5,2,1	53 @ 150 MHz	630	0.560	630
LR376RAA331_LZ	330 @ 50 MHz	5,2,1	30 @ 35 MHz	570	0.620	590
LR376RAA391_LZ	390 @ 50 MHz	5,2,1	31 @ 35 MHz	540	0.750	530
LR376RAA471_LZ	470 @ 50 MHz	5,2,1	31 @ 35 MHz	500	1.30	490
LR376RAA561_LZ	560 @ 35 MHz	5,2,1	31 @ 35 MHz	440	1.34	460
LR376RAA621_LZ	620 @ 35 MHz	5,2,1	32 @ 35 MHz	440	1.60	400
LR376RAA681_LZ	680 @ 35 MHz	5,2,1	32 @ 35 MHz	410	1.58	430
LR376RAA751_LZ	750 @ 35 MHz	5,2,1	32 @ 35 MHz	400	2.20	350
LR376RAA821_LZ	820 @ 35 MHz	5,2,1	31 @ 35 MHz	370	1.82	400
LR376RAA911_LZ	910 @ 35 MHz	5,2,1	31 @ 35 MHz	350	2.85	330
LR376RAA102_LZ	1000 @ 35 MHz	5,2,1	32 @ 35 MHz	360	2.80	320
LR376RAA122_LZ	1200 @ 35 MHz	5,2,1	32 @ 35 MHz	320	3.20	300

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

LR376RAA122JLZ

Tolerance: **F** = 1% **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 4286A impedance analyzer or equivalent with Coilcraft-provided correlation pieces.

3. Q measured using an Agilent/HP 4291A impedance Analyzer 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 CCF858 fixture.

6. Electrical specifications at 25°C.

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



CRITICAL PRODUCTS & SERVICES

Specifications subject to change without notice.

Please check our website for latest information.

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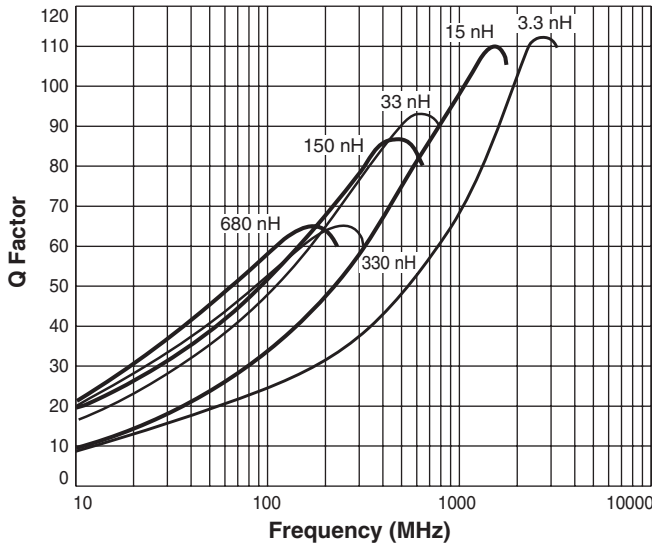
1102 Silver Lake Road
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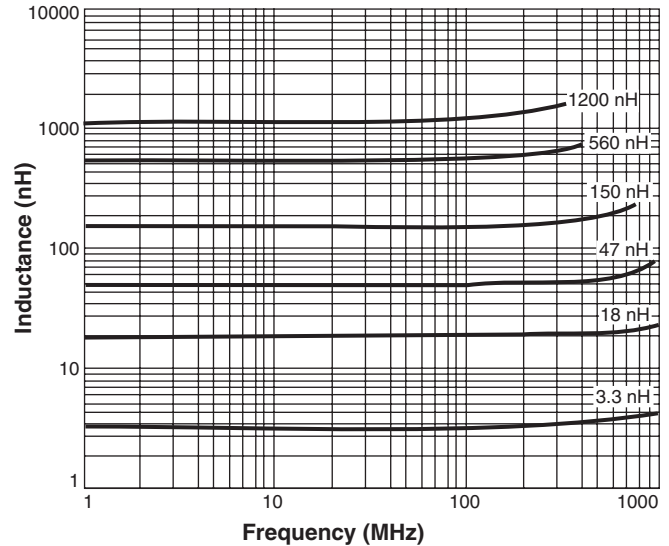
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LR376RAA Series (1206)

Typical Q vs Frequency



Typical L vs Frequency



Core material Ceramic

Terminations Silver-platinum-glass frit.

Weight: 19.5 – 23.0 mg

Ambient temperature -40°C to +125°C with I_{max} current,
+125°C to +140°C with derated current

Storage temperature Component: -40°C to +140°C.
Packaging: -40°C to +80°C

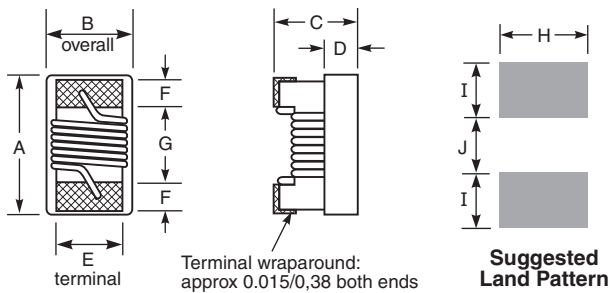
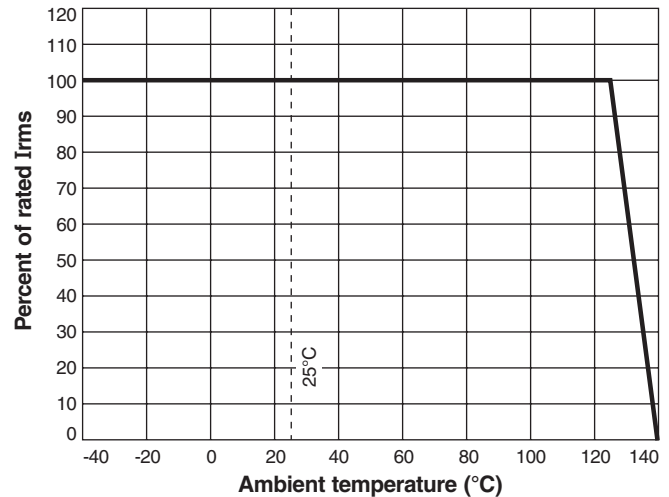
Resistance to soldering heat Max three 40 second reflows at
+260°C, parts cooled to room temperature between cycles

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 2000 per 7" reel
Plastic tape: 8 mm wide, 0.3 mm thick, 4 mm pocket spacing,
1.6 mm pocket depth

Current Derating



A max	B max	C max	D ref	E	F	G	H	I	J
0.140	0.085	0.060	0.020	0.056	0.020	0.080	0.076	0.040	0.070
3,56	2,16	1,52	0,51	1,42	0,51	2,03	1,93	1,02	1,78