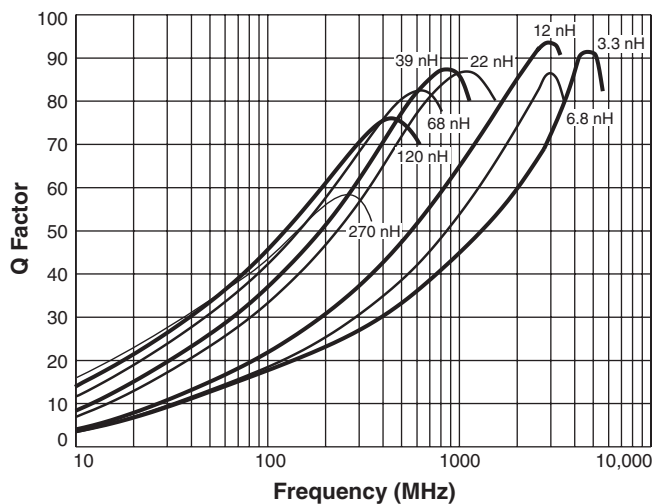


NEW!

Outgassing Compliant Chip Inductors AR336RAA

The AR336RAA inductors provide exceptional Q values, even at high frequencies. They have a ceramic body and wire wound construction to provide the highest SRFs available in 0805 size.

Typical Q vs Frequency



Core material Ceramic

Terminations Tin-lead (63/37) over tin over nickel over silver-platinum-glass frit. Other terminations are also available.

Ambient temperature -55°C to $+125^{\circ}\text{C}$ with I_{max} current

Maximum part temperature $+155^{\circ}\text{C}$ (ambient + temp rise).

Storage temperature Component: -55°C to $+155^{\circ}\text{C}$.
Tape and reel packaging: -55°C to $+80^{\circ}\text{C}$

Resistance to soldering heat Max three 40 second reflows at $+260^{\circ}\text{C}$, parts cooled to room temperature between cycles

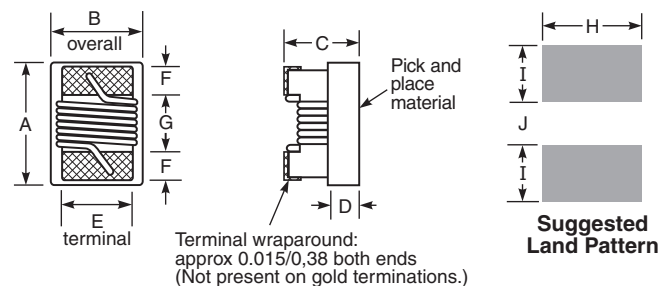
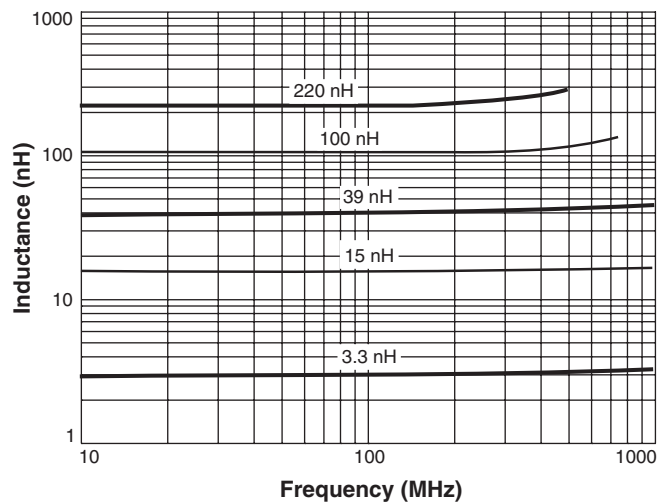
Temperature Coefficient of Inductance (TCL) $+25$ to $+155$ ppm/ $^{\circ}\text{C}$

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at $<30^{\circ}\text{C}$ / 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

This robust version of Coilcraft's standard 0805CS series features high temperature materials that pass NASA low outgassing specifications and allow operation in an ambient temperature range of -55°C to 155°C . The standard tin-lead (Sn-Pb) terminations over leach-resistant base metalization ensures the best possible board adhesion.

Typical L vs Frequency



A max	B max	C max	D ref	E	F	G	H	I	J	
0.090	0.068	0.060	0.020	0.050	0.017	0.046	0.070	0.040	0.030	inches
2,29	1,73	1,52	0,51	1,27	0,43	1,17	1,78	1,02	0,76	mm

Note: Dimensions are before solder application. For maximum overall dimensions including solder, add 0.0025 in / 0,064 mm to **B** and 0.006 in / 0,15 mm to **A** and **C**.

Coilcraft **CPS**
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Document AR100-1 Revised 06/20/23

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

AR336RAA Series (0805)

Part number ¹	Inductance ² (nH)	Percent tolerance	Q min ³	SRF min ⁴ (MHz)	DCR max ⁵ (Ohms)	I _{max} (mA)
AR336RAA020JPZ	2.8@ 250 MHz	5	57@ 1000 MHz	5000	0.06	800
AR336RAA3N0JPZ	3.0@ 250 MHz	5	61@ 1000 MHz	5000	0.06	800
AR336RAA030JPZ	3.3@ 250 MHz	5	48@ 1000 MHz	5000	0.08	600
AR336RAA050JPZ	5.6@ 250 MHz	5	75@ 1000 MHz	4760	0.08	600
AR336RAA060JPZ	6.8@ 250 MHz	5	54@ 1000 MHz	4440	0.11	600
AR336RAA070JPZ	7.5@ 250 MHz	5	56@ 1000 MHz	3840	0.14	600
AR336RAA080_PZ	8.2@ 250 MHz	5,2	63@ 1000 MHz	3560	0.12	600
AR336RAA100_PZ	10@ 250 MHz	5,2,1	57@ 500 MHz	3460	0.10	600
AR336RAA120_PZ	12@ 250 MHz	5,2,1	46@ 500 MHz	3180	0.15	600
AR336RAA150_PZ	15@ 250 MHz	5,2,1	41@ 500 MHz	2560	0.17	600
AR336RAA180_PZ	18@ 250 MHz	5,2,1	48@ 500 MHz	2480	0.20	600
AR336RAA220_PZ	22@ 250 MHz	5,2,1	59@ 500 MHz	2080	0.22	500
AR336RAA240_PZ	24@ 250 MHz	5,2,1	59@ 500 MHz	1920	0.22	500
AR336RAA270_PZ	27@ 250 MHz	5,2,1	56@ 500 MHz	2060	0.25	500
AR336RAA330_PZ	33@ 250 MHz	5,2,1	64@ 500 MHz	1720	0.27	500
AR336RAA360_PZ	36@ 250 MHz	5,2,1	57@ 500 MHz	1520	0.27	500
AR336RAA390_PZ	39@ 250 MHz	5,2,1	44@ 250 MHz	1600	0.29	500
AR336RAA430_PZ	43@ 200 MHz	5,2,1	45@ 250 MHz	1440	0.34	500
AR336RAA470_PZ	47@ 200 MHz	5,2,1	44@ 250 MHz	1360	0.31	470
AR336RAA560_PZ	56@ 200 MHz	5,2,1	49@ 250 MHz	1280	0.34	460
AR336RAA680_PZ	68@ 200 MHz	5,2,1	52@ 250 MHz	1200	0.38	440
AR336RAA820_PZ	82@ 150 MHz	5,2,1	51@ 250 MHz	1060	0.42	400
AR336RAA910_PZ	91@ 150 MHz	5,2,1	49@ 250 MHz	1060	0.48	390
AR336RAA101_PZ	100@ 150 MHz	5,2,1	54@ 250 MHz	1000	0.46	390
AR336RAA111_PZ	110@ 150 MHz	5,2,1	38@ 250 MHz	880	0.48	390
AR336RAA121_PZ	120@ 150 MHz	5,2,1	52@ 250 MHz	880	0.51	380
AR336RAA151_PZ	150@ 100 MHz	5,2,1	33@ 100 MHz	730	0.56	340
AR336RAA181_PZ	180@ 100 MHz	5,2,1	37@ 100 MHz	730	0.64	340
AR336RAA221_PZ	220@ 100 MHz	5,2,1	36@ 100 MHz	650	0.70	330
AR336RAA241_PZ ⁶	240@ 100 MHz	5,2,1	36@ 100 MHz	610	1.00	270
AR336RAA271_PZ ⁶	270@ 100 MHz	5,2,1	36@ 100 MHz	580	1.00	260
AR336RAA331_PZ ⁶	330@ 100 MHz	5,2,1	36@ 100 MHz	520	1.40	230
AR336RAA391_PZ ⁶	390@ 100 MHz	5,2,1	34@ 100 MHz	480	1.50	210
AR336RAA471_PZ ⁶	470@ 50 MHz	5,2,1	24@ 50 MHz	300	1.76	230
AR336RAA561_PZ ⁶	560@ 25 MHz	5,2,1	21@ 50 MHz	260	1.90	210
AR336RAA681_PZ ⁶	680@ 25 MHz	5,2,1	21@ 50 MHz	220	2.20	190
AR336RAA821_PZ ⁶	820@ 25 MHz	5,2,1	23@ 50 MHz	240	2.35	170

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

AR336RAA821GPZ

Tolerance: F = 1% G = 2% J = 5%

Termination: P = Tin-lead (63/37) over tin over nickel over silver-platinum-glass frit

C = Tin-lead (63/37) over gold over nickel over moly-mag

S = Tin-lead (63/37) over leach-resistant silver-platinum-glass frit

A = Gold over nickel over moly-mag

L = Silver-palladium-platinum-glass frit

Screening: Z = Unscreened

H = Coilcraft CP-SA-10001 Group A

1 = EEE-INST-002 (Family 3) Level 1

2 = EEE-INST-002 (Family 3) Level 2

3 = EEE-INST-002 (Family 3) Level 3

4 = MIL-STD-981 (Family 50) Class B

5 = MIL-STD-981 (Family 50) Class S

F = ESCC3201 (F4 operational life performed at 90°C)

• Screening performed to the document's latest revision.

• Lot qualification (Group B) available.

• Custom testing also available.

• Country of origin restrictions available; prefix option G or F.

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 with an Agilent/HP 16197A test fixture or equivalents.

4. SRF measured on an Agilent 8753ES or equivalent with a Coilcraft CCF1297 test fixture.

5. DCR measured on a Keithley micro-ohmmeter or equivalent and a Coilcraft CCF858 test fixture.

6. Part is not compliant with MIL-STD-981 Family 50, Class S due to wire gauge.

7. Electrical specifications at 25°C.

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

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CRITICAL PRODUCTS & SERVICES

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Document AR100-2 Revised 06/20/23

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