NEW!

Outgassing Compliant Chip Inductors AR413RAM

- Ferrite construction provides lowest DCR and highest current rating of our 1008 size inductors.
- Available in 14 inductance values from 0.9 to 10 µH, all at 10% tolerance.

This robust version of Coilcraft's standard 1008AF series features high temperature materials that allow operation in ambient temperatures up to 140°C. The leach-resistant base metalization with tin-lead (Sn-Pb) terminations ensures the best possible board adhesion.

Part number[1]	Inductance[2] ±10% (µH)	Q min[3]	SRF min[4] (MHz)	DCR max[5] (Ohms)	Isat[6] (A)	Imax (A)
AR413RAM901KPZ	0.9	12	415	0.120	1.4	0.76
AR413RAM112KPZ	1.1	11	376	0.130	1.3	0.72
AR413RAM132KPZ	1.3	8	198	0.145	1.2	0.64
AR413RAM152KPZ	1.5	11	135	0.155	1.1	0.62
AR413RAM192KPZ	1.9	14	126	0.180	1.0	0.60
AR413RAM222KPZ	2.2	12	106	0.186	0.95	0.58
AR413RAM272KPZ	2.7	11	70	0.210	0.80	0.57
AR413RAM332KPZ	3.3	11	59	0.240	0.75	0.53
AR413RAM392KPZ	3.9	12	55	0.260	0.70	0.50
AR413RAM472KPZ	4.7	13	48	0.450	0.70	0.36
AR413RAM582KPZ	5.8	12	37	0.320	0.55	0.45
AR413RAM682KPZ	6.8	12	33	0.330	0.50	0.42
AR413RAM822KPZ	8.2	13	29	0.340	0.50	0.42
AR413RAM103KPZ	10	14	22	0.460	0.45	0.36

1. When ordering, please specify **termination** and **screening** codes:

AR413RAM103KPZ

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.
- Country of origin restrictions available; prefix options G or F.

2. Inductance measured at 2.5 MHz using Coilcraft SMD-A fixture in an Agilent/HP 4286A impedance analyzer or equivalent with Coilcraft-provided correlation pieces.
3. Q measured at 2.5 MHz 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 with a Coilcraft CCF1502 test fixture.
5. DCR measured on a Keithley 580 micro-ohmmeter or equivalent and a Coilcraft CCF859 test fixture.
6. DC current at which the inductance drops 10% (typ.) from its value without current.
7. Electrical specifications at 25°C.

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

Core material Ferrite

Terminations Tin-lead (63/37) over silver-platinum-glass frit

Weight 27 – 35 mg

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

Maximum part temperature +140°C (ambient + temp rise).

Storage temperature Component: –55°C to +140°C.
Tape and reel 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) +100 to +350 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, 2.0 mm pocket depth

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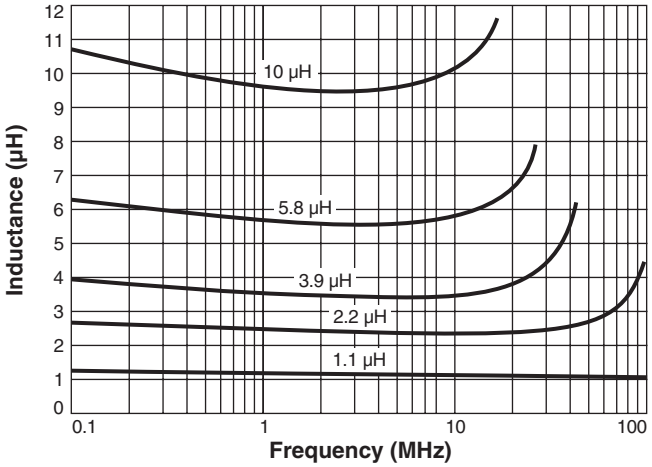
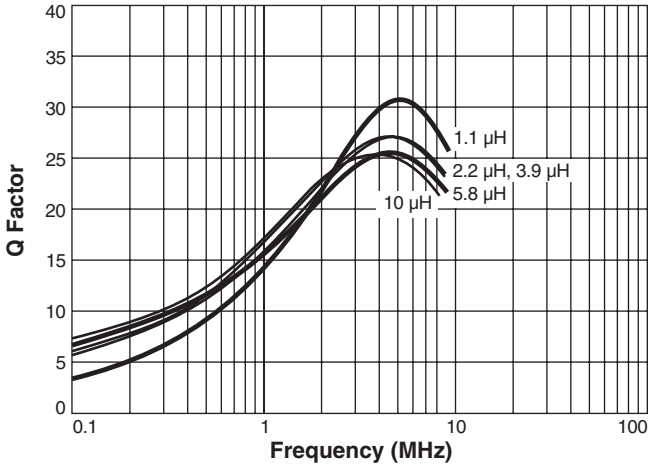
AR413RAM Series (1008)

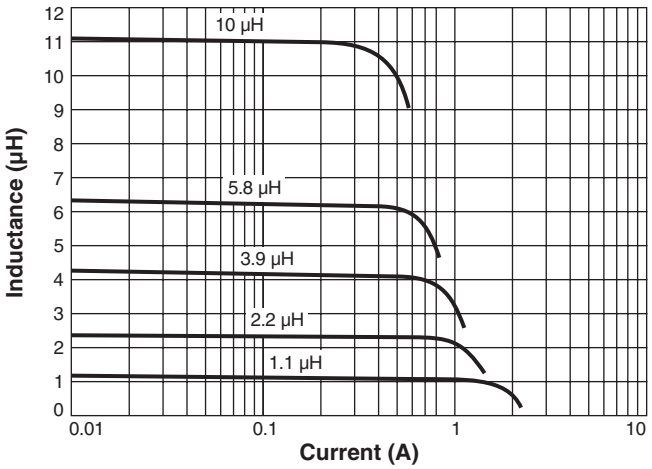
Typical L vs Frequency



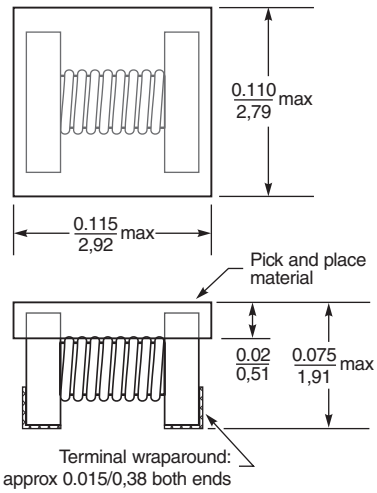
Typical Q vs Frequency



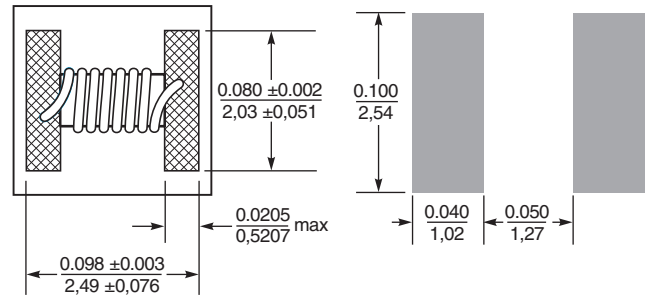
Typical L vs Current



Dimensions are in inches / mm



Suggested Land Pattern



Note: Dimensions are before solder application. For maximum overall dimensions including solder, add 0.0025 in / 0.064 mm to the width and 0.006 in / 0.15 mm to length and height.

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