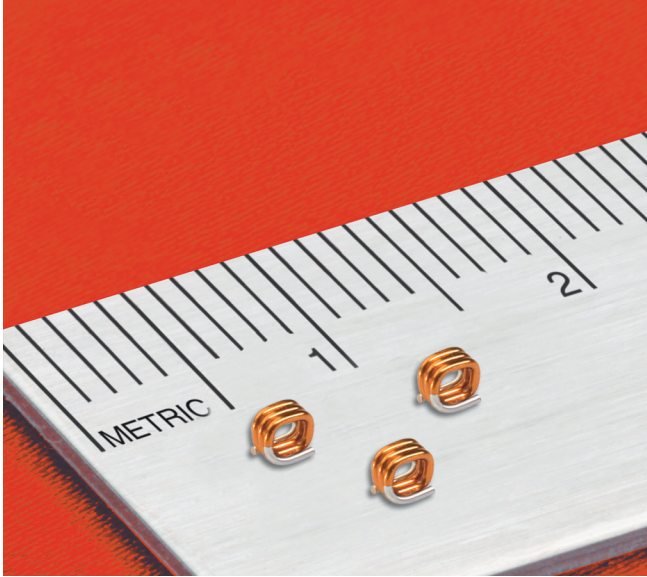


240°C Air Core Inductors AT392RAS



- Excellent Q factors – up to 130
- Current handling as high as 4.0 Amps!
- 5 inductance values from 8.1 to 27.3 nH
- Flat top and bottom for reliable pick and place and mechanical stability
- Special materials allow operation in ambient temperatures as low as -60°C and up to 240°C.
- Passes NASA low outgassing specifications

Terminations Tin-lead (63/37) over copper

Ambient temperature -60°C to +185°C with I_{max} current, +185°C to +240°C with derated current

Storage temperature Component: -60°C to +240°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) +5 to +70 ppm/°C

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

Part number ¹	Inductance ² (nH)	% tol	Q ³ min	SRF min ⁴ (GHz)	DCR max (mOhm)	I _{max} (A)
AT392RAS8N1_SZ	8.1	5,2	100	4.0	6.0	4.0
AT392RAS12N_SZ	12.1	5,2	100	3.4	7.0	4.0
AT392RAS17N_SZ	16.6	5,2	100	2.9	8.0	4.0
AT392RAS22N_SZ	21.5	5,2	100	2.6	9.0	4.0
AT392RAS27N_SZ	27.3	5,2	100	2.3	10.0	4.0

1. Please specify **tolerance** and **testing** codes:

AT392RAS27NGSZ

Tolerance: G = 2%, J = 5%

Testing: Z = COTS

H = Screening per Coilcraft CP-SA-10001

N = Screening per Coilcraft CP-SA-10003

2. Inductance measured at 400 MHz, 0.1 V_{rms}, 0 A using an Agilent/HP 4287A LCR meter or equivalent with a Coilcraft SMD-A test fixture and Coilcraft-provided correlation pieces.

3. Q measured at 400 MHz using an Agilent/HP 4291A impedance analyzer or equivalent.

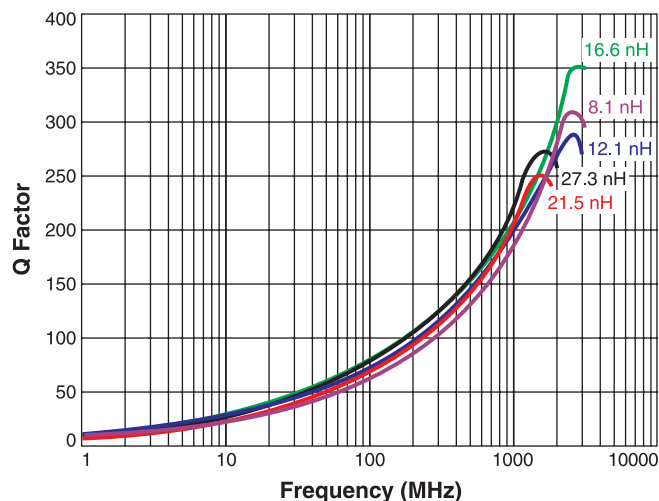
4. SRF measured using an Agilent/HP 8753 network analyzer or equivalent and a Coilcraft CCF1295 test fixture.

5. Electrical specifications at 25°C.

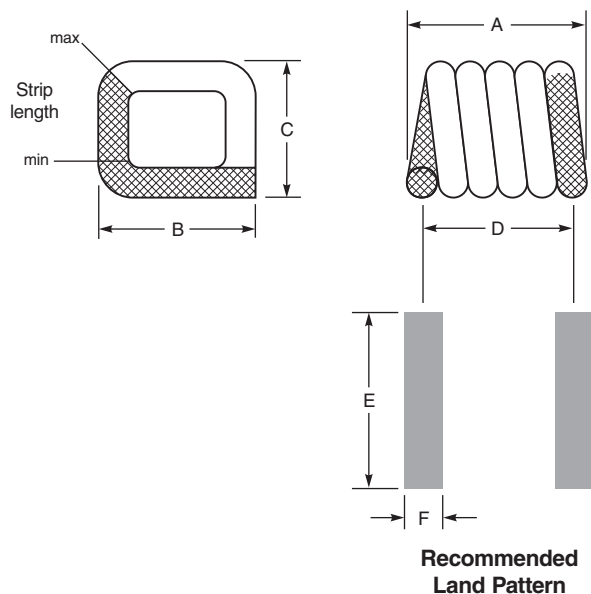
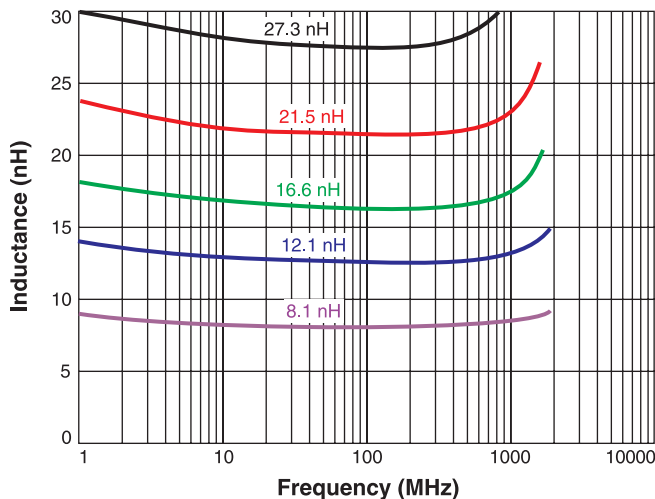
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

AT392RAS Series Air Core Inductors

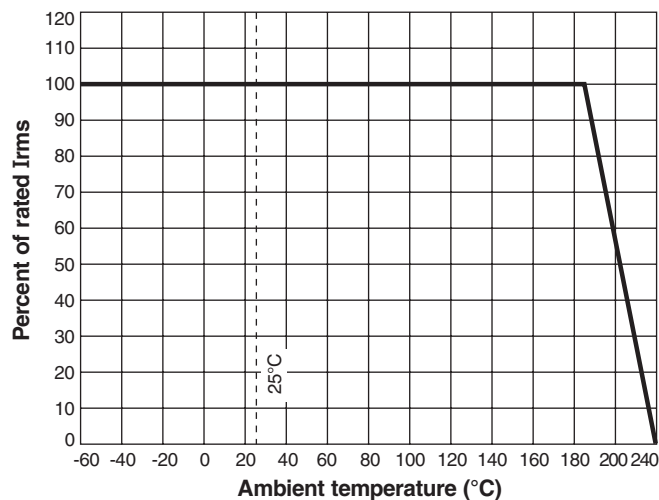
Q vs Frequency



L vs Frequency



Irms Derating



Packaging 2000/7" reel; 7500/13" reel
 Plastic tape: 12 mm wide, 0.254 mm thick, 4 mm pocket spacing

Part number	A	B	C	D	E	F	Weight (mg)	Tape pocket depth (mm)
AT392RAS8N1	1,473 ±0,152	2,134 ±0,152	1,829 ±0,152	1,12	2,8	0,64	12,8	2,01
AT392RAS12N	1,854 ±0,152	2,134 ±0,152	1,829 ±0,152	1,45	2,8	0,64	16,9	1,96
AT392RAS17N	2,210 ±0,152	2,134 ±0,152	1,829 ±0,152	1,83	2,8	0,64	21,1	2,01
AT392RAS22N	2,565 ±0,152	2,134 ±0,152	1,829 ±0,152	2,18	2,8	0,64	24,7	1,98
AT392RAS27N	2,972 ±0,152	2,134 ±0,152	1,829 ±0,152	2,57	2,8	0,64	28,7	1,01

All dimensions are in mm.