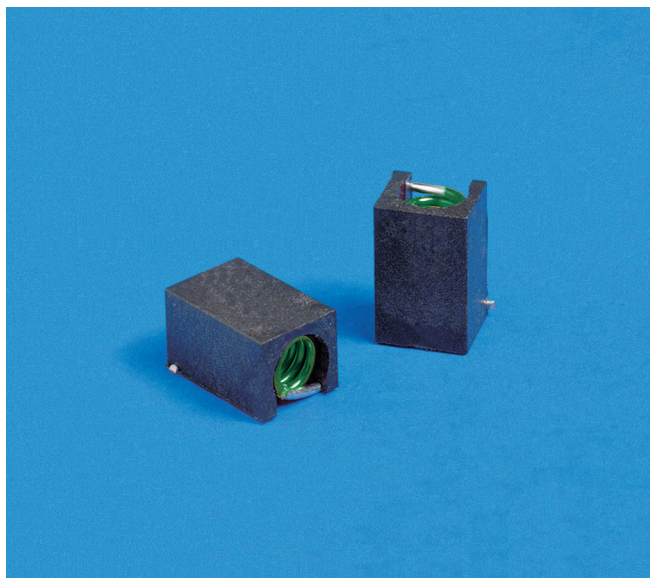


High-Reliability Air Core Inductors ML536RAT



- High Q over a wide range of frequencies
- High temperature materials allow operation in ambient temperatures up to 155°C.

Terminations Tin-silver over copper

Ambient temperature –55°C to +125°C with I_{max} current

Maximum part temperature +155°C (ambient + temp rise).

Storage temperature Component: –55°C to +155°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)

Enhanced crush-resistant packaging 800 per 13" reel
Plastic tape: 24 mm wide, 0.3 mm thick, 12 mm pocket spacing, 6.1 mm pocket depth

Part number ¹	Turns	Inductance ² (nH)	Percent tolerance	Q ³ min	SRF min ⁴ (GHz)	DCR max ⁵ (mOhm)	I _{max} (A)
ML536RAT90N_LZ	9	90	5,2	95	1.140	15	3.5
ML536RATR11_LZ	10	111	5,2	87	1.020	15	3.5
ML536RATR13_LZ	11	130	5,2	87	0.900	20	3.0
ML536RATR17_LZ	12	169	5,2	95	0.875	25	3.0
ML536RATR21_LZ	13	206	5,2	95	0.800	30	3.0
ML536RATR22_LZ	14	222	5,2	92	0.730	35	3.0
ML536RATR25_LZ	15	246	5,2	95	0.685	35	3.0
ML536RATR31_LZ	16	307	5,2	95	0.660	35	3.0
ML536RATR38_LZ	17	380	5,2	95	0.590	50	2.5
ML536RATR42_LZ	18	422	5,2	95	0.540	60	2.5
ML536RATR49_LZ	19	491	5,2	95	0.535	65	2.0
ML536RATR54_LZ	20	538	5,2	87	0.490	90	2.0

1. When ordering, please specify **tolerance** code:

ML536RATR54GLZ

Tolerance: G = 2% J = 5%

2. Inductance measured at 50 MHz on an Agilent/HP 4286A or equivalent with a Coilcraft SMD-A test fixture and correlation.
3. Q measured at 50 MHz on an Agilent/HP 4291A or equivalent with a 16193A test fixture or equivalent.
4. SRF measured on an Agilent/HP 8753ES or equivalent with a Coilcraft CCF1268 test fixture.
5. DCR measured on a Keithley 580 Micro-Ohmmeter or equivalent.
6. Electrical specifications at 25°C.

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



CRITICAL PRODUCTS & SERVICES

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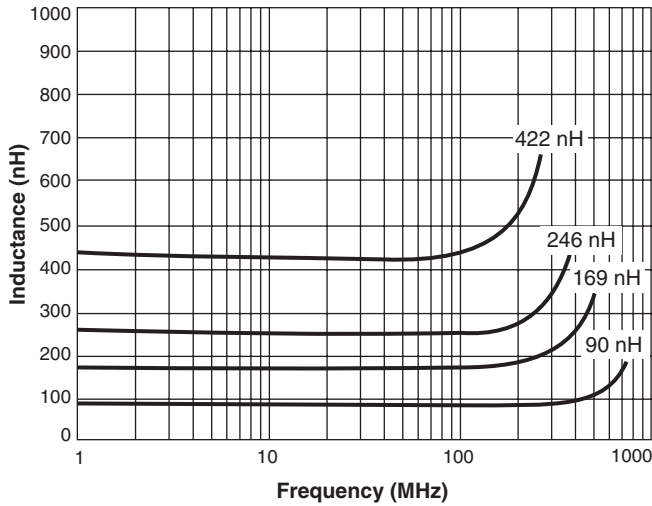
Document ML185-1 Revised 06/21/22

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.

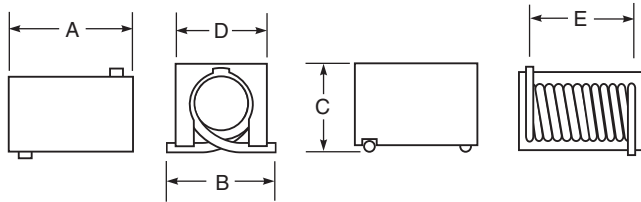
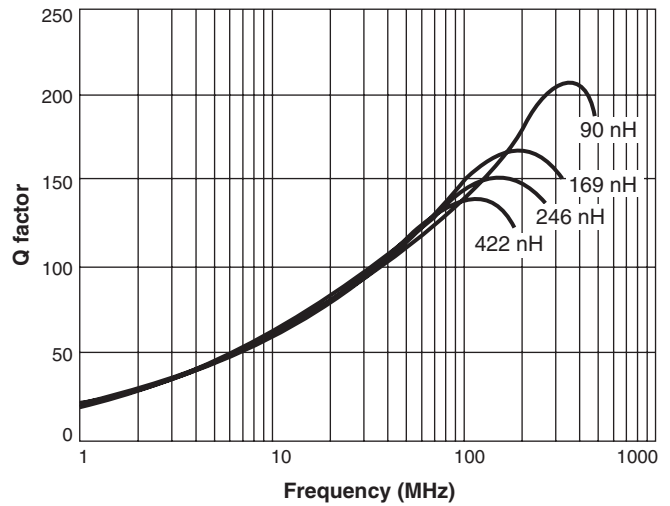
ML536RAT Series Air Core Inductors

S-Parameter files
ON OUR WEB SITE
SPICE models
ON OUR WEB SITE

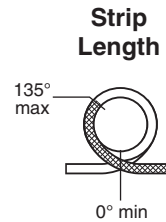
Typical L vs Frequency



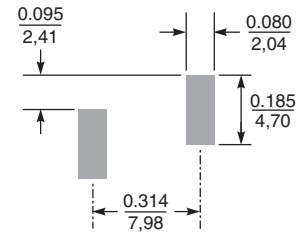
Typical Q vs Frequency



A max	B max	C max	D	E	
0.415	0.260	0.235	0.240 ± 0.015	0.314 ± 0.020	inches
10,55	6,60	5,97	6,10 ± 0,38	7,98 ± 0,51	mm



Suggested Land Pattern



Dimensions are in $\frac{\text{inches}}{\text{mm}}$