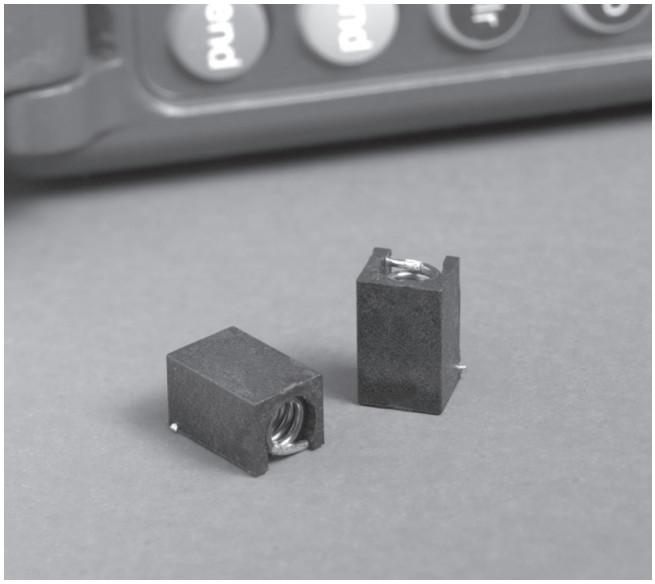
Maxi Spring™ Air Core Inductors



- Air core inductors feature higher Q, L and current ratings
- Rigid package provides a flat surface for pick and place
- Leads are locked in position for precise terminal spacing

Weight 0.42 – 0.59 g

Terminations RoHS compliant tin-silver (96.5/3.5) over copper. Other terminations available at additional cost.

Ambient temperature –40°C to +125°C with Irms 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) +5 to +70 ppm/°C

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

Failures in Time (FIT) / Mean Time Between Failures (MTBF) One per billion hours / one billion hours, calculated per Telcordia SR-332

Packaging 800/13″ reel Plastic tape: 24 mm wide, 0.3 mm thick, 12 mm pocket spacing, 6.1 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number[1]	Turns	Inductance[2] (nH)	Percent tolerance[3]	Q[2] typ	Q[2] min	Test freq. (MHz)	SRF min[4] (GHz)	DCR max[5] (mOhm)	Irms[6] (A)
132-09SM_L_	9	90	**5,2**	114	95	50	1.140	15	3.5
132-10SM_L_	10	111	**5,2**	104	87	50	1.020	15	3.5
132-11SM_L_	11	130	**5,2**	104	87	50	0.900	20	3.0
132-12SM_L_	12	169	**5,2**	114	95	50	0.875	25	3.0
132-13SM_L_	13	206	**5,2**	114	95	50	0.800	30	3.0
132-14SM_L_	14	222	**5,2**	110	92	50	0.730	35	3.0
132-15SM_L_	15	246	**5,2**	114	95	50	0.685	35	3.0
132-16SM_L_	16	307	**5,2**	114	95	50	0.660	35	3.0
132-17SM_L_	17	380	**5,2**	114	95	50	0.590	50	2.5
132-18SM_L_	18	422	**5,2**	114	95	50	0.540	60	2.5
132-19SM_L_	19	491	**5,2**	114	95	50	0.535	65	2.0
132-20SM_L_	20	538	**5,2**	104	87	50	0.490	90	2.0

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

132-20SMGLD

Termination: L = RoHS compliant tin-silver (96.5/3.5) over copper.
Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or **S** = non-RoHS tin-lead (63/37).
Tolerance: **G** = 2% **J** = 5%
Packaging: **D** = 13″ machine-ready reel. EIA-481 embossed plastic tape (800 parts per full reel).
B = Less than full reel. In tape, but not machine-ready. To have a leader and trailer added ($25 charge), use code letter D instead.

2. Inductance and Q tested at 50 MHz on an Agilent/HP 4291A with a 16193 fixture and correlation.
3. Tolerances in bold are stocked for immediate shipment.
4. SRF tested on the Agilent/HP 8753D and a Coilcraft CCF1248 test fixture.
5. DCR tested on the Cambridge Technology Model 510 Micro Ohmmeter.
6. Current that causes a 15°C temperature rise from 25°C ambient.
7. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

S-Parameter files
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SPICE models
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Document 185-1 Revised 01/11/11

Designer's Kit C319 contains 8 each of all 5% values.
Designer's Kit C319-2 contains 8 each of all 2% values.

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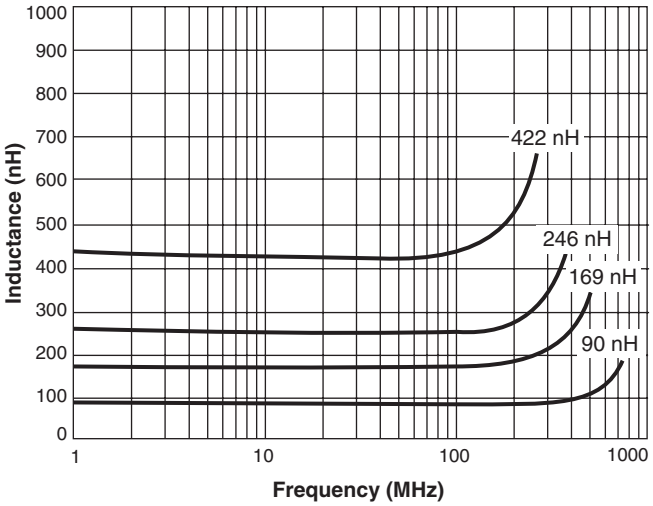
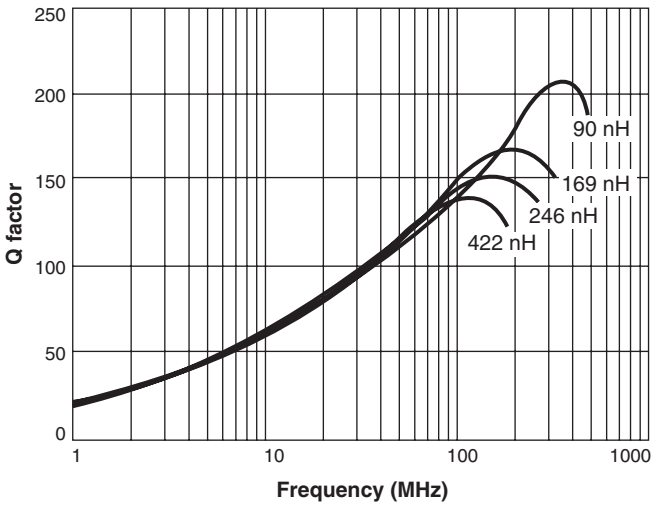
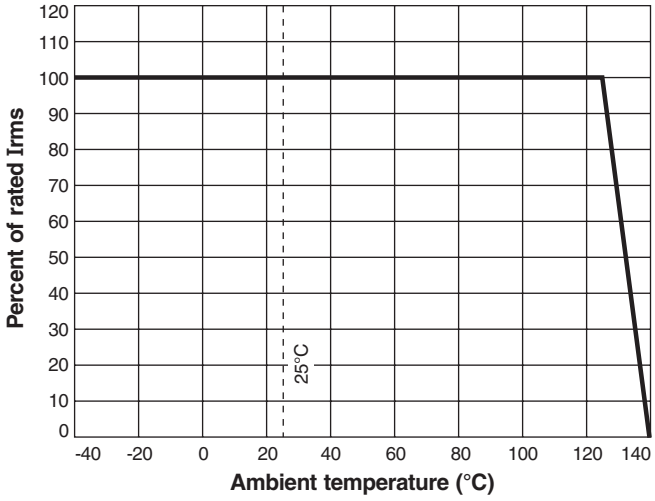
Typical L vs Frequency

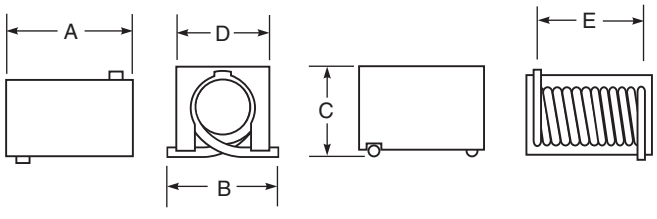


Typical Q vs Frequency



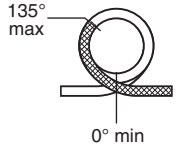
Typical Irms Derating



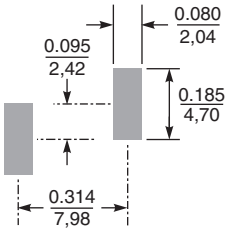


A max	B max	C max	D	E
0.415 10,55	0.260 6,60	0.235 5,97	0.240 ±0.015 6,10 ±0,38	0.314 ±0.020 7,98 ±0,51

Strip Length



Recommended Land Pattern



Dimensions are in inches / mm

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