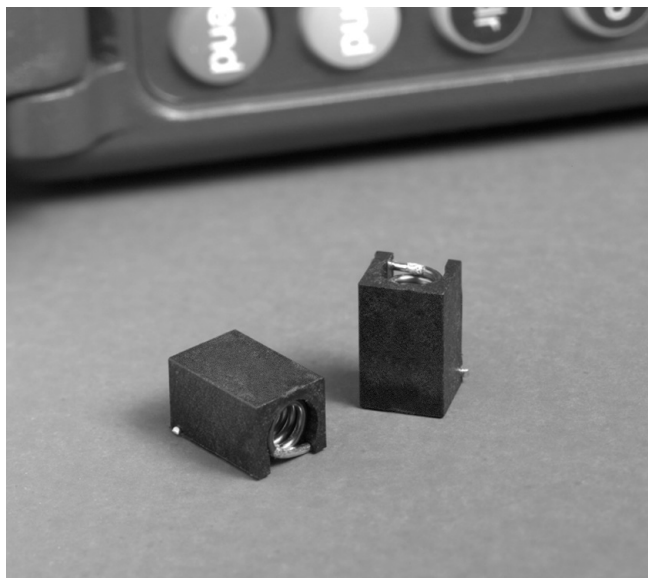




Air Core Inductors

For Linear Technology
LT8697 switching regulator



- Developed for Linear Technology LT8697 monolithic step-down switching regulator designed to power 5V USB applications.
- Tight DCR tolerance: $\pm 5\%$
- Air core inductors feature high Q and high current ratings

Weight 0.42 – 0.59 g

Terminations RoHS compliant tin-silver (96.5/3.5) over copper.

Ambient temperature -40°C to $+125^{\circ}\text{C}$ with I_{rms} current, $+125^{\circ}\text{C}$ to $+140^{\circ}\text{C}$ with derated current

Storage temperature Component: -40°C to $+140^{\circ}\text{C}$.
Tape and reel packaging: -40°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) $+5$ to $+70$ ppm/ $^{\circ}\text{C}$

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at $<30^{\circ}\text{C}$ / 85% relative humidity)

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

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

Part number ¹	Turns	Inductance ² $\pm 2\%$ (nH)	Q ³		SRF min ⁴ (GHz)	DCR $\pm 5\%$ ⁵ (mOhm)	I _{rms} ⁶ (A)
			typ	min			
NA5931-AL_	15	246	114	95	0.685	15.7	3.0
NA5932-AL_	16	307	114	95	0.660	21.8	3.0
NA5933-AL_	17	380	114	95	0.590	32.4	2.5
NA5934-AL_	18	422	114	95	0.540	34.3	2.5
NA5935-AL_	19	491	114	95	0.535	44.1	2.0
NA5936-AL_	20	538	104	87	0.490	47.2	2.0

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

NA5936-ALD

Packaging: **D** = 13" machine-ready reel. EIA-481 embossed plastic tape (800 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.

2. Inductance tested at 50 MHz on an Agilent/HP 4191A Impedance Analyzer or equivalent with a Coilcraft SMD-A fixture and correlation.

3. Q tested at 50 MHz on an Agilent/HP 4291A Impedance Analyzer or equivalent with a Coilcraft SMD-A fixture and correlation.

4. SRF tested on the Agilent/HP 8753D and a Coilcraft CCF1248 test fixture.

5. DCR tested on the Keithley 580 Micro Ohmmeter.

6. Current that causes a 15°C temperature rise from 25°C ambient.

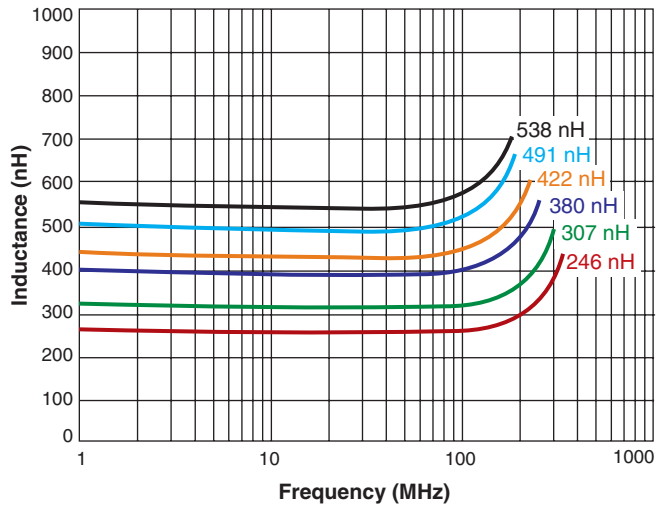
7. Electrical specifications at 25°C .

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

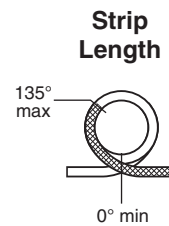
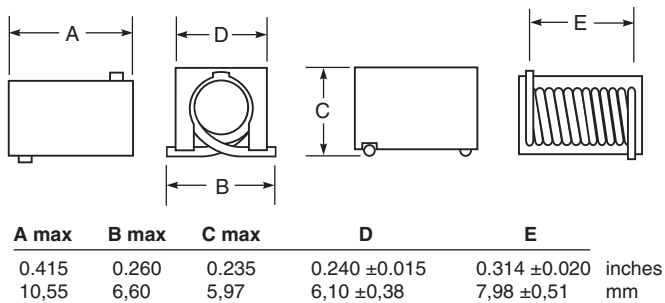
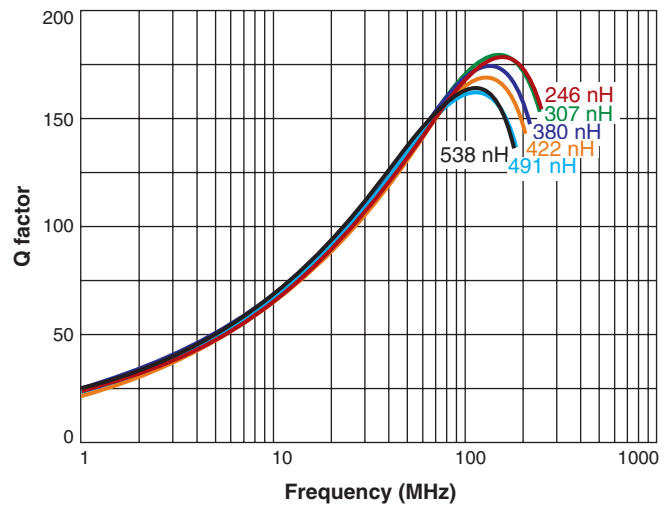


Air Core Inductors for Linear Technology LT8697

L vs Frequency



Q vs Frequency



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

Recommended Land Pattern

