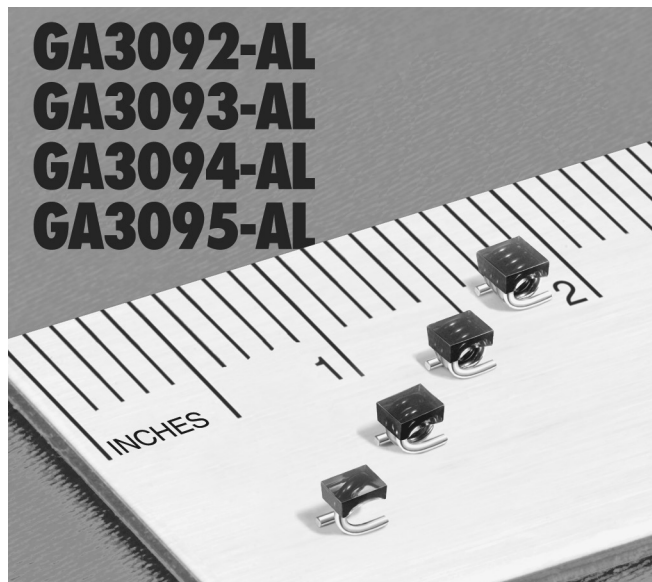




# High-Current Air Core Inductors



The use of heavy gauge wire allows these parts to have the lowest DCR and highest current ratings of our air-core inductors. They offer Q values of 100 or greater from 150 MHz to 1 GHz.

Request free evaluation samples by contacting Coilcraft or visiting [www.coilcraft.com](http://www.coilcraft.com).

Part number <sup>1</sup>	Inductance <sup>2</sup> ±5% (nH)	Q <sup>2</sup> typ	SRF typ <sup>3</sup> (GHz)	DCR max <sup>4</sup> (mOhm)	Irms <sup>5</sup> (A)	Wt (mg)
GA3092-AL_	3.7	100	17.5	2.0	7.0	150
GA3093-AL_	6.6	100	4.0	2.0	7.0	220
GA3094-AL_	12.0	140	2.4	2.0	7.0	280
GA3095-AL_	17.5	140	2.2	2.0	7.0	390

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

#### GA3095-ALC

**Packaging:** **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (250 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 C instead.

**D** = 13" machine-ready reel. EIA-481 embossed plastic tape (1000 parts per full reel). Factory order only, not stocked.

- L and Q measured at 150 MHz, 0.1 Vrms, 0 A using an Agilent/HP 4291A impedance analyzer with an Agilent/HP 16193A test fixture.
  - SRF measured using an Agilent/HP 8722ES network analyzer and a Coilcraft SMD-D test fixture.
  - DCR measured using a micro-ohmmeter.
  - Current that causes a 15°C temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

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

**Ambient temperature** -40°C to +125°C with Irms current

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

**Storage temperature** Component: -40°C to +140°C.  
Tape and reel 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)

**Mean Time Between Failures (MTBF)** 1 billion hours

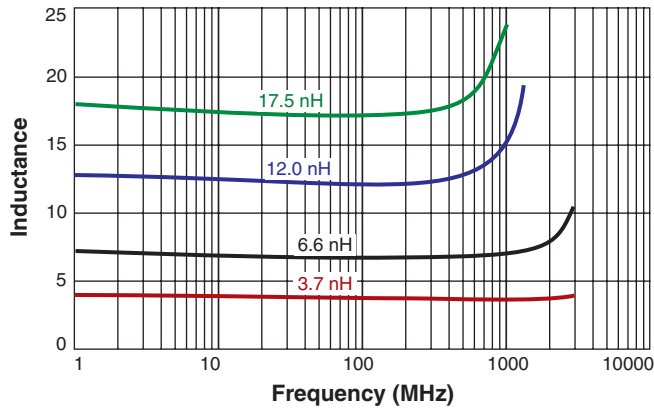
**Packaging** 250/7" reel; 1000/13" reel Plastic tape: 16 mm wide, 0.35 mm thick, 12 mm pocket spacing, 4.9 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

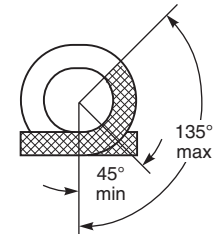
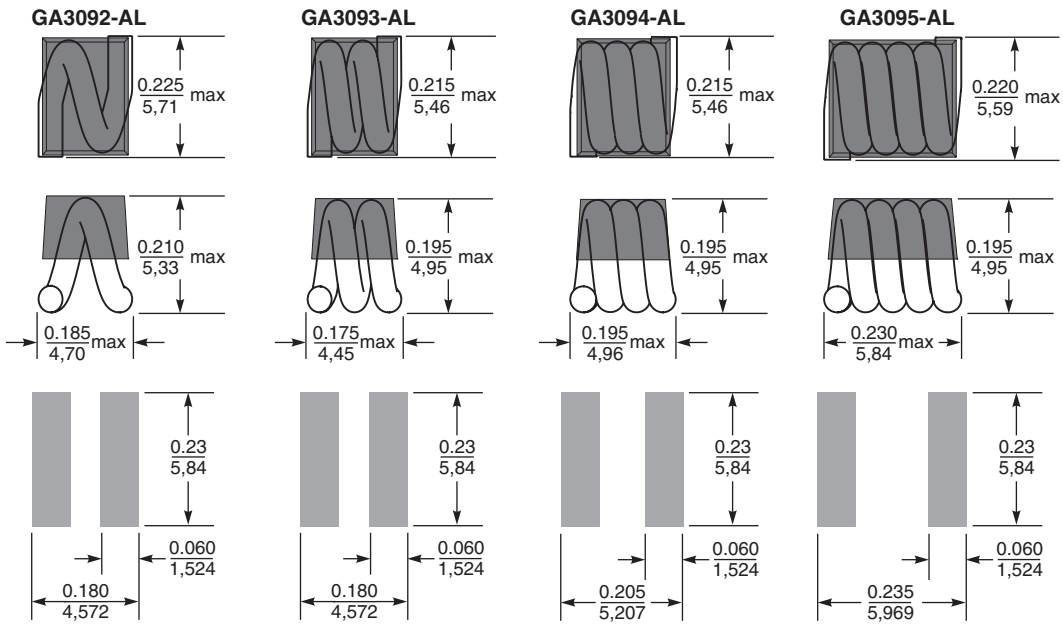
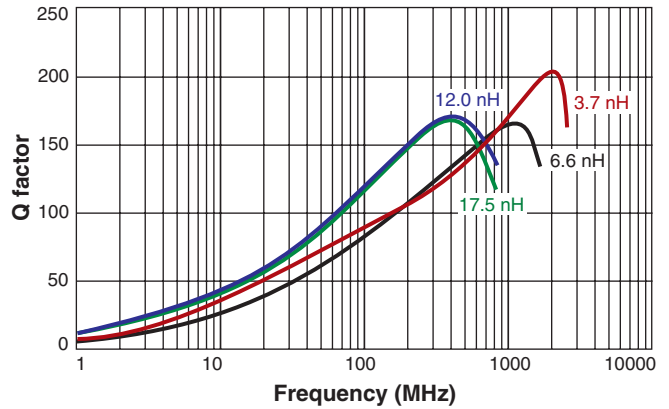


# High-Current Air Core Inductors

## L vs Frequency



## Q vs Frequency



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

### Recommended Land Patterns

### Soldered lead length



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