

# Shielded Power Inductor CU8838-AL



- Soft saturation makes it ideal for VRD/VRM applications
- Special materials eliminate all thermal aging issues.

**Core material** Iron

**Core and winding loss** See [www.coilcraft.com/coreloss](http://www.coilcraft.com/coreloss)

**Terminations** RoHS tin-silver over copper.

**Weight** 4.9 g

**Ambient temperature** -40°C to +85°C with (40°C rise) Irms current.

**Maximum part temperature:** The part may be operated without damage as long its temperature (ambient + self-heating) does not exceed +125°C. [Derating](#)

**Storage temperature** Component: -40°C to +125°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

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

**Packaging** 500/13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 20 mm pocket spacing, 6.5 mm pocket depth

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

Part number <sup>1</sup>	Inductance <sup>2</sup> ±20% (µH)	DCR (mOhm)		SRF typ <sup>3</sup> (MHz)	Isat (A) <sup>4</sup>			Irms (A) <sup>5</sup>	
		typ	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
CU8838-AL_	1.0	1.75	2.0	100	27	45	63	18.5	26.0

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

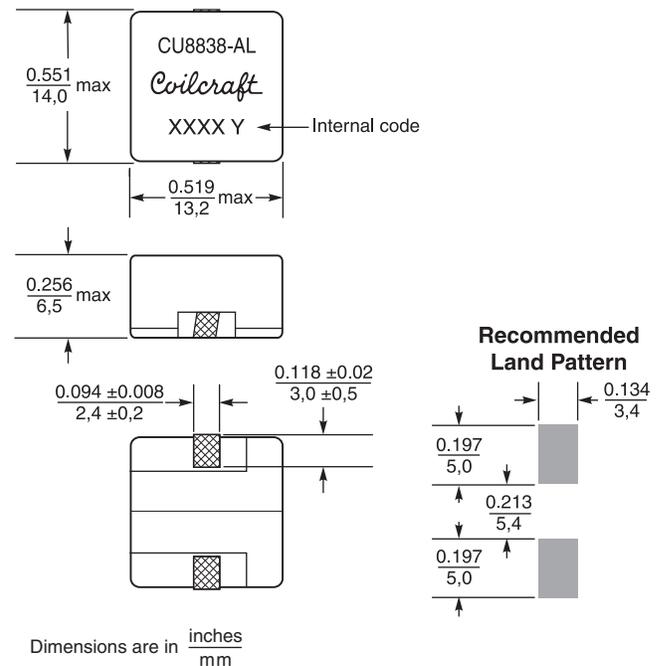
**CU8838-ALD**

**Packaging:** **D**= 13" machine-ready reel. EIA-481 embossed plastic tape (500 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.

- Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc using a Coilcraft SMD-A fixture in an Agilent/HP 4284A LCR meter.
- SRF measured using an Agilent/HP4291A impedance analyzer and a Coilcraft 16193 fixture.
- DC current at 25°C that causes the specified inductance drop from its value without current. [Click for temperature derating information.](#)
- Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. [Click for temperature derating information.](#)
- Electrical specifications at 25°C.

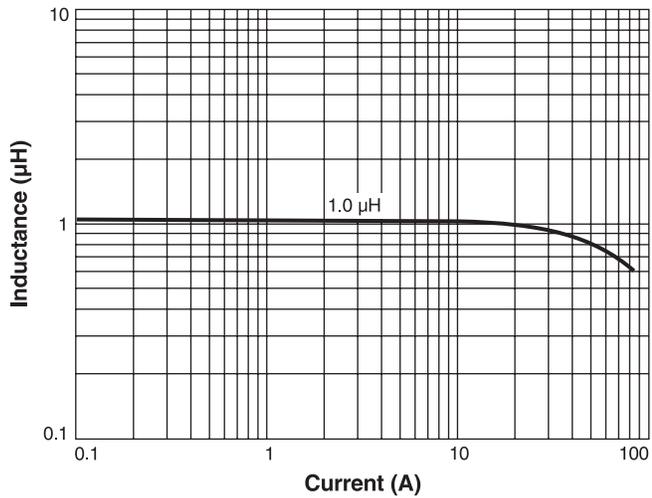
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.





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## L vs Current



Inductance vs current is unaffected by part temperature up to 125°C.

## L vs Frequency

