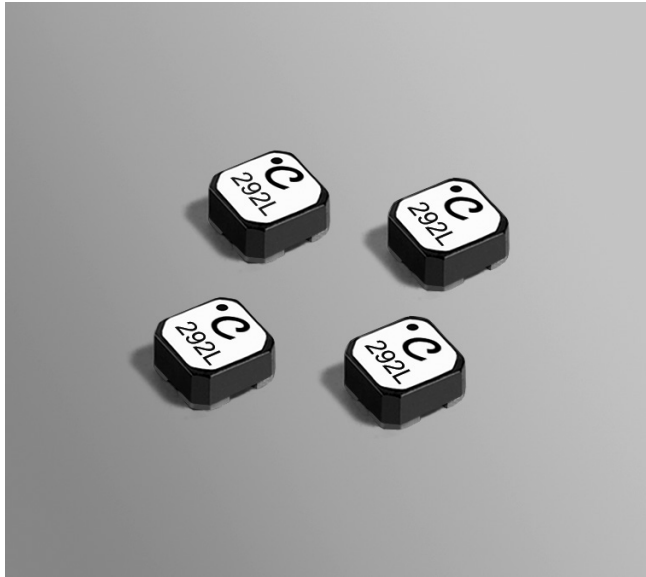


Coupled Inductor - UA7868-AE



- Developed for use in Intel's 3rd Gen 3D RealSense camera.
- 1 : 11 turns ratio

Core material Ferrite

Weight 52 mg

Environmental RoHS compliant, halogen free

Terminations RoHS compliant silver-palladium-platinum-glass frit.

Ambient temperature -40°C to +85°C with Irms current, +85°C to +125°C with derated current

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

Tape and reel packaging: -40°C to +80°C

Winding to winding isolation 300 Vrms

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 1000/7" reel; 3500/13" reel Plastic tape: 12 mm wide, 0.26 mm thick, 8 mm pocket spacing, 1.65 mm pocket depth

Recommended pick and place nozzle OD: 3 mm; ID: ≤ 1.5 mm

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

Part number ¹	Inductance ² ± 20% (µH)	Turns ratio	DCR max (Ohms)		SRF typ ³ (MHz)	Coupling coefficient typ	Volt-time product ⁴ (V-µsec)	Isat ⁵ (A)
			L1	L2				
UA7868-AE_	2.9	1 : 11	1.6	17.8	6.3	>0.98	1.97	0.68

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

UA7868-AEC

Packaging: **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (1000 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (3500 parts per full reel).

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 C.

2. Inductance is for the primary (L1), measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent.

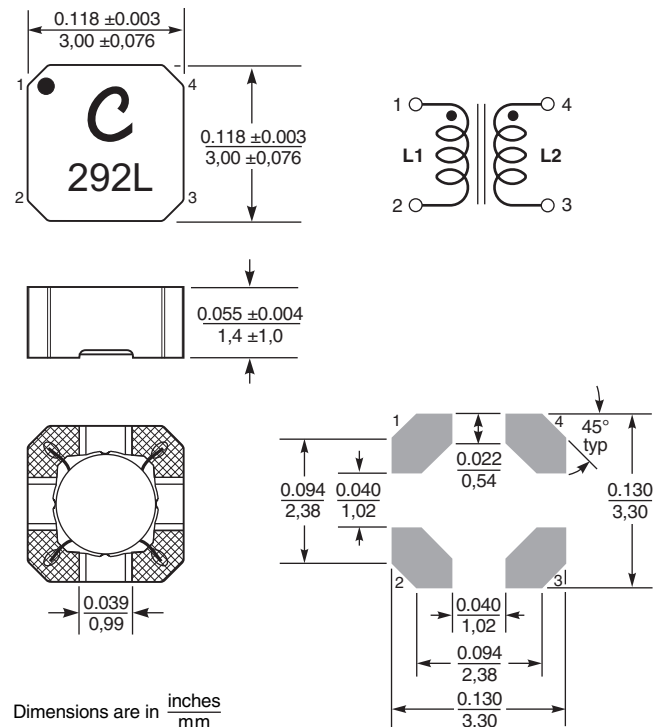
3. SRF measured using an Agilent/HP 4191A or equivalent.

4. Volt-time product is calculated as Inductance × Isat.

5. DC current applied to L1, at which the inductance drops 10% from its value without current.

5. Electrical specifications at 25°C.

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

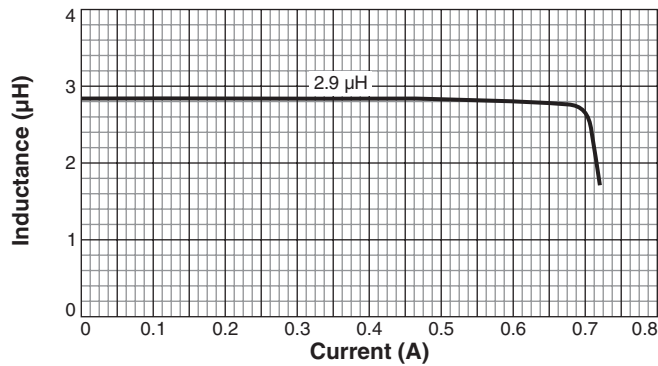


Dimensions are in $\frac{\text{inches}}{\text{mm}}$



Coupled Inductor – UA7868-AE

L vs Current



L vs Frequency

