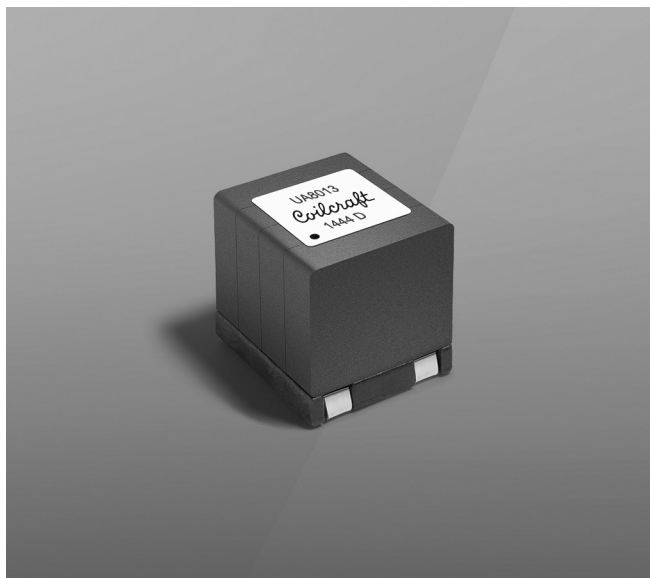


Dual Inductor for Class-D UA801x-AL



- Developed for Texas Instruments TPA3220, TPA3244 & TPA3245
- Dual inductors for use in Class-D output filters
- A single shielded package contains both coils.
- Very low coupling coefficient ($k < 0.001$) between the two inductors
- AEC-200 Grade 1 qualified (-40°C to $+125^{\circ}\text{C}$ ambient)
- Designed for 100 Watts into 4 Ohm load

Core material Ferrite

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

Weight 12.3 g

Ambient temperature -40°C to $+125^{\circ}\text{C}$ with Irms (40°C) current

Maximum part temperature $+165^{\circ}\text{C}$ (Ambient + temperature rise)

Storage temperature Component: -40°C to $+165^{\circ}\text{C}$.

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

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

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Tape and reel packaging 150/13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 16.1 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 | Inductance ² $\pm 10\%$ (μH) | DCR max ³ (mOhms) | SRF typ ⁴ (MHz) | Isat (A) ⁵ | | | Irms (A) ⁶ | | |
|--------------------------|---|---------------------------------|-------------------------------|-----------------------|----------|----------|-----------------------|-----------|-----|
| | | | | 10% drop | 20% drop | 30% drop | 20°C rise | 40°C rise | |
| UA8013-AL_ | L1 | 7.0 | 6.6 | 40 | 12.0 | 12.5 | 13.2 | 6.5 | 9.0 |
| | L2 | 7.0 | 6.6 | 40 | 12.0 | 12.5 | 13.2 | | |
| UA8014-AL_ | L1 | 10.0 | 6.6 | 28 | 8.7 | 9.1 | 9.4 | 6.5 | 9.0 |
| | L2 | 10.0 | 6.6 | 28 | 8.7 | 9.1 | 9.4 | | |

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

UA8013-ALD
↓

Packaging: **D** = 13" machine-ready reel. EIA-481 embossed plastic tape. 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, 1.0 Vrms, 0 Adc using an Agilent/HP 4284A impedance analyzer.
- DCR is for each winding, measured on a micro-ohmmeter.
- SRF measured using Agilent/HP 8753D network analyzer.
- DC current (typical) at which the inductance drops the specified amount from its value without current.
- Current applied to windings at the same time that causes the specified temperature rise from 25°C ambient.
- Electrical specifications at 25°C .

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



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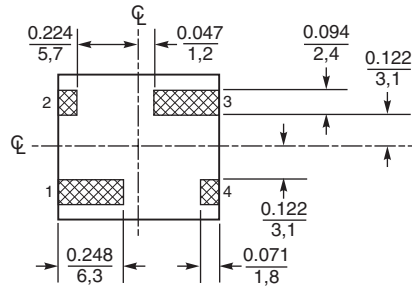
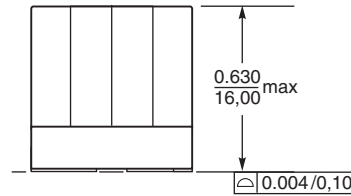
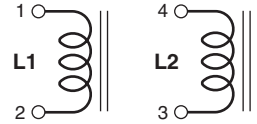
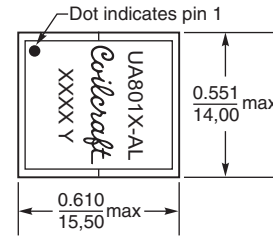
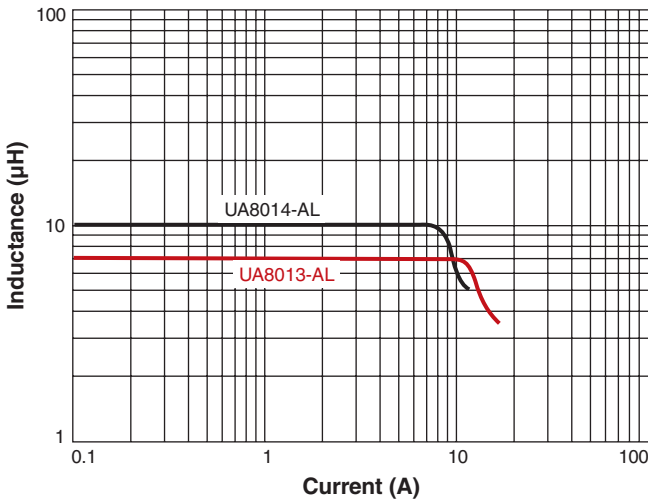
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This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

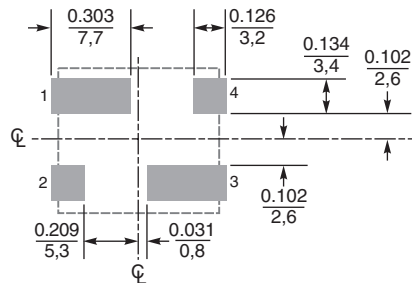


Class-D Dual Inductor – UA801x-AL

L vs Current



Recommended Land Pattern



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