NEW!

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°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°C with Irms (40°C) current
Maximum part temperature: +165°C (Ambient + temperature rise)
Storage temperature: Component: −40°C to +165°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)
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

Part number | Inductance ±10% (μH) | DCR max (mOhms) | SRF typ (MHz) | Isat (A) | Irms (A) |
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UA8013-AL | L1 | 7.0 | 6.6 | 40 | 12.0 | 12.5 | 13.2 | 6.5 | 9.0 |
UA8014-AL | L1 | 10.0 | 6.6 | 28 | 8.7 | 9.1 | 9.4 | 6.5 | 9.0 |

1. When ordering, please specify packaging code:
   - **UA8013-AL**
     - **Packaging:**
       - D = 13″ machine-ready reel. EIA-481 embossed plastic tape.
       - B = Less than full reel. In tape, but not machine ready.
       - To have a leader and trailer added ($25 charge), use code letter D instead.
   - 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.
Class-D Dual Inductor – UA801x-AL

L vs Current

![Graph showing Inductance vs Current for UA8013-AL and UA8014-AL](image)

- **Inductance (µH) vs Current (A)**
  - **UA8013-AL**
  - **UA8014-AL**

**Recommended Land Pattern**

- **Dimensions are in inches/mm**

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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.