



FEATURES

- RoHS compliant
- Toroidal construction minimizes EMI
- Compact size
- Surface mount
- UL94 V-0 package materials
- Pick & place compatible
- J-STD-020C reflow
- Backward compatible with Sn/Pb soldering systems

DESCRIPTION

The 4300 series is a range of surface mount dual-winding toroidal inductors designed for use in switching power supplies and DC/DC converters. These devices can also be used as common-mode chokes, as the windings have a 1:1 ratio. They are ideal for applications requiring low profile compact components in a surface mount package.

SELECTION GUIDE

| Order Code | Inductance (100kHz, 0.1V _{AC}) ¹ | DC Current ² | DC Resistance | SRF | Package Dimensions (Max.) | | Pad Dimensions | | Carrier Tape Dimensions | | Package Weight |
|---------------|--|-------------------------|---------------|-------------|---------------------------|---------|----------------|---------|-------------------------|---------|----------------|
| | ±15% μH | Max. A | Max. mΩ | Min. MHz | A mm | B mm | C mm | D mm | E mm | F mm | Typ. g |
| 43212C | 2.10 | 21 | 2.22 | 106 | 20.30 | 23.10 | 11.18 | 20.57 | 32.0 | 10.3 | 7.4 |
| 43402C | 4.00 | 22.4 | 3.10 | 69 | 25.40 | 28.20 | 15.75 | 25.65 | 36.0 | 10.6 | 12.5 |

ABSOLUTE MAXIMUM RATINGS

| | |
|---|--------------------|
| Isolation voltage (flash tested for 1 second), pins 1 & 2 | 500V _{DC} |
| Operating temperature range | -40°C to +125°C |
| Storage temperature range | -40°C to +130°C |

SOLDERING INFORMATION³

| | |
|----------------------------|--------------|
| Peak reflow temperature | 245°C |
| Pin finish | Pure tin dip |
| Moisture sensitivity level | 1 |

PACKAGING INFORMATION

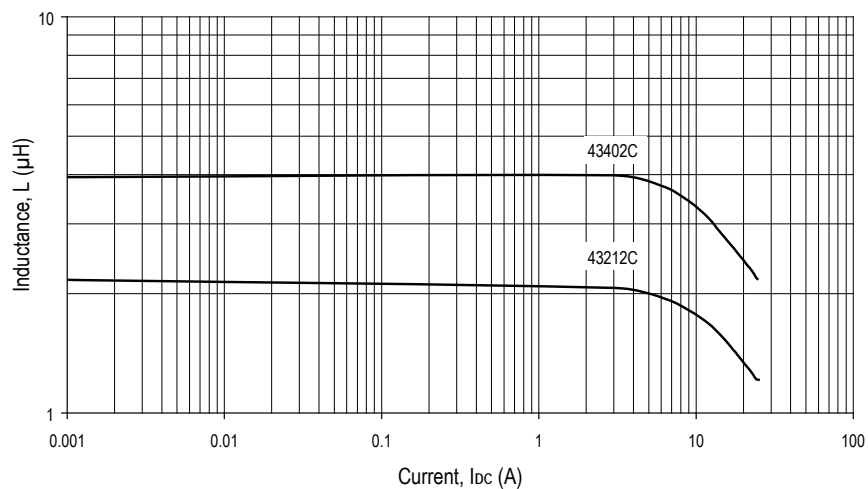
| | 43212C | 43402C |
|---|---------------|---------------|
| Tape & Reel (add suffix -R to part No. e.g. 43212C-R) | 180 per reel | 160 per reel |
| Box | 35 per box | 20 per box |

All specifications typical at T_A=25°C

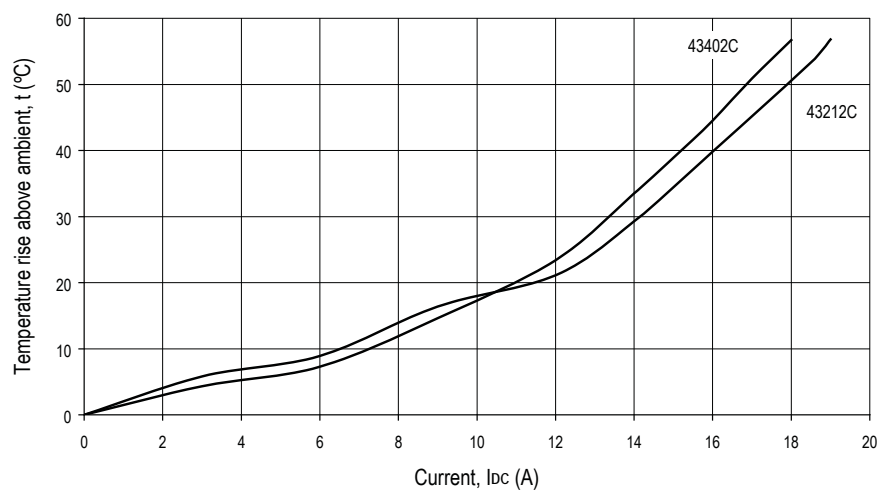
- 1 When connecting windings in series, inductance will be 4 times the figure shown.
- 2 With windings connected in parallel. Maximum DC current occurs when the temperature rise reaches 55°C.
- 3 For further information, please visit www.murata-ps.com/rohs



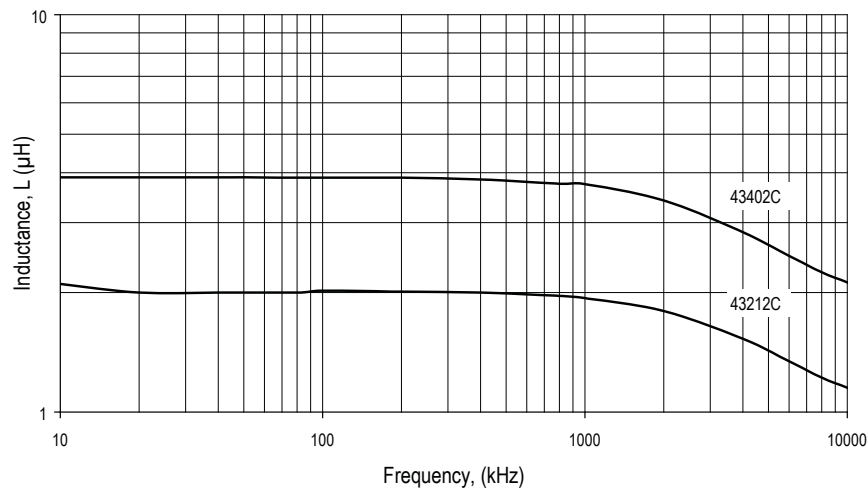
INDUCTANCE Vs CURRENT



TEMPERATURE Vs CURRENT



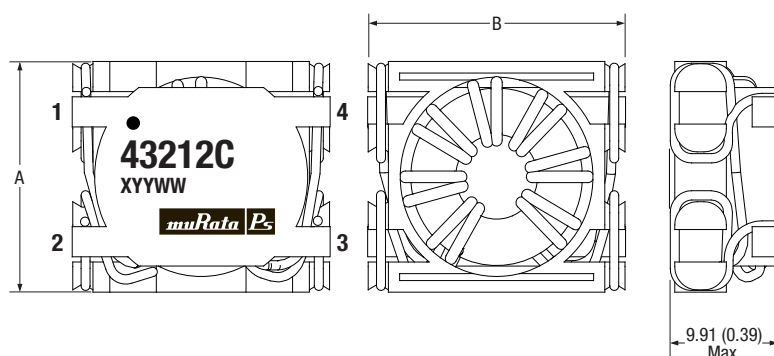
INDUCTANCE Vs FREQUENCY



PACKAGE SPECIFICATIONS

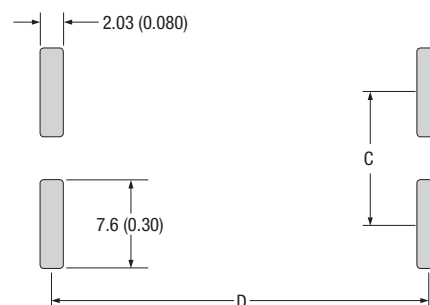
MECHANICAL DIMENSIONS

See Selection Guide for dimensions.



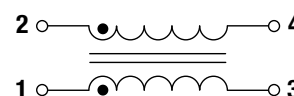
RECOMMENDED FOOTPRINT DETAILS

See Selection Guide for dimensions.



All dimensions in mm (inches).

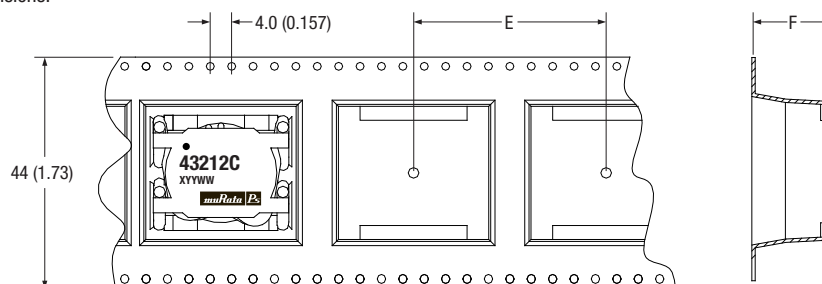
SCHEMATIC



TAPE & REEL SPECIFICATIONS

TAPE OUTLINE DIMENSIONS

See Selection Guide for dimensions.



All dimensions in mm (inches).
See Selection Guide for package quantities.