Murata Power Solutions

4300 Series

Dual Winding Toroidal Surface Mount Inductors



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, 0.1VAC)[1]	DC Current[2]	DC Resistance	SRF	Package Dimensions (Max.)		Pad Dimensions		Carrier Tape Dimensions		Package Weight
	±15%	Max.	Max.	Min.	A	B	C	D	E	F	Typ.
	µH	A	mΩ	MHz	mm	mm	mm	mm	mm	mm	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	500VDC
Operating temperature range	-40°C to +125°C
Storage temperature range	-40°C to +130°C

SOLDERING INFORMATION[3]

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

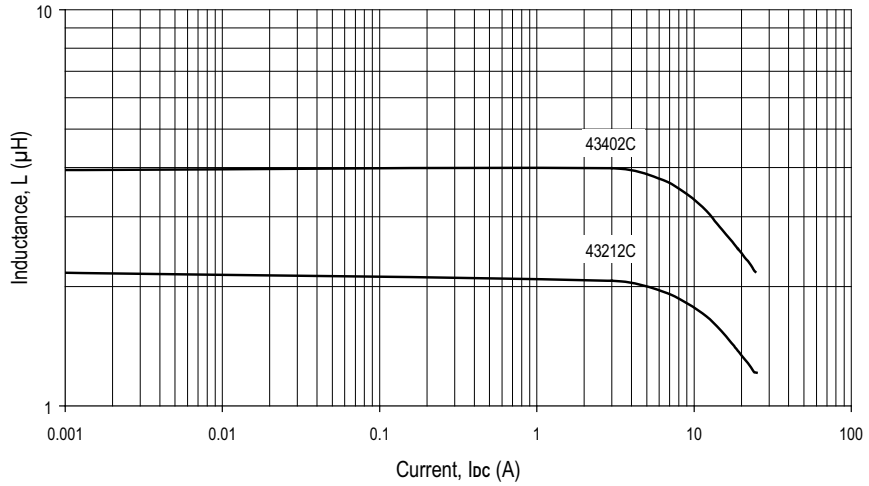
All specifications typical at T_A=25°C

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

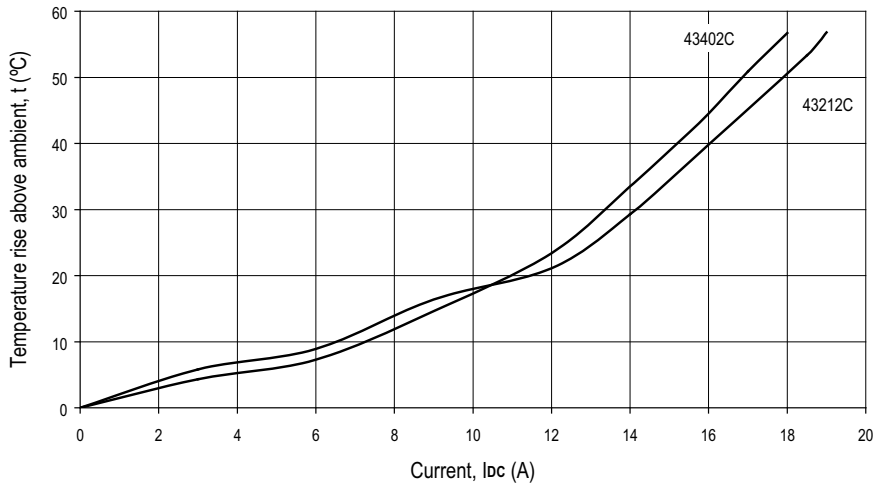
RoHS COMPLIANT 2002/95/EC

For full details go to www.murata-ps.com/rohs

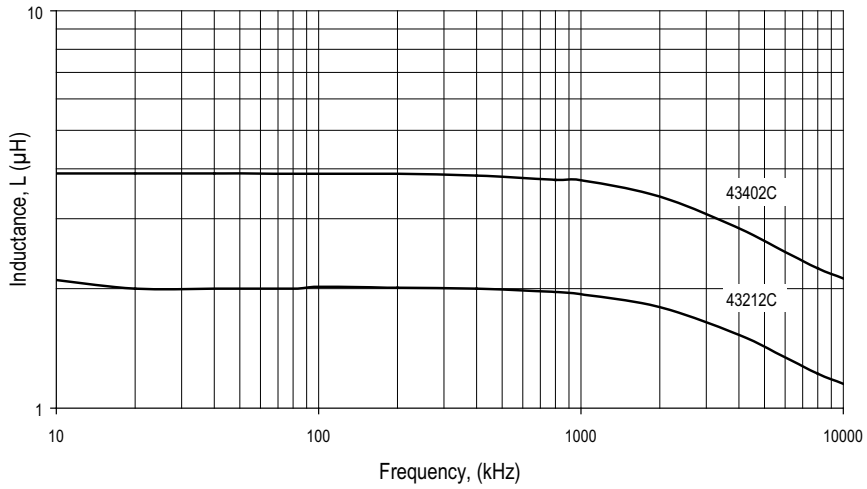
INDUCTANCE Vs CURRENT



TEMPERATURE Vs CURRENT



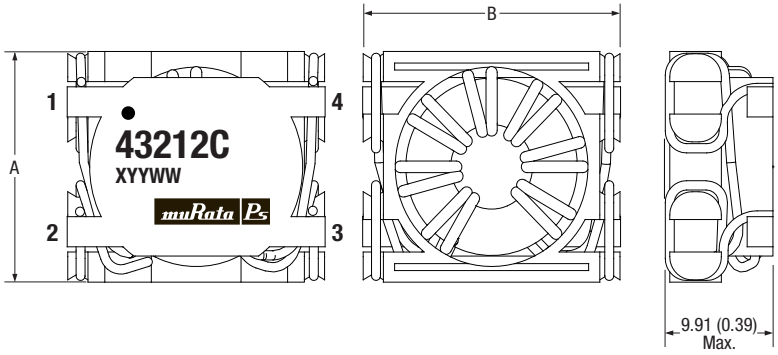
INDUCTANCE Vs FREQUENCY



PACKAGE SPECIFICATIONS

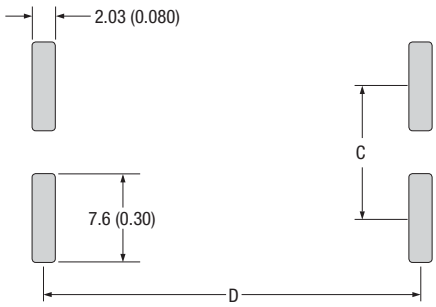
MECHANICAL DIMENSIONS

See Selection Guide for dimensions.



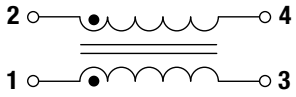
RECOMMENDED FOOTPRINT DETAILS

See Selection Guide for dimensions.



All dimensions in mm (inches).

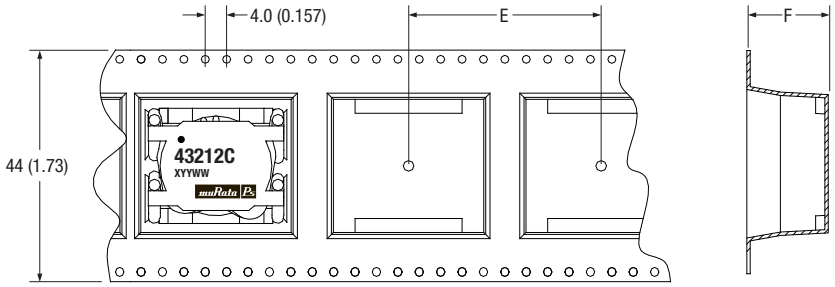
SCHEMATIC



TAPE & REEL SPECIFICATIONS

TAPE OUTLINE DIMENSIONS

See Selection Guide for dimensions.



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

Murata Power Solutions

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