



FEATURES

- RoHS compliant
- 1.27μH to 17.6μH
- Up to 15.4A I_{DC}
- 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 4200 series is a range of surface mount toroidal inductors designed for use in switching power supplies and DC/DC converters. The parts are ideal for applications requiring low profile compact components in a surface mount package.

SELECTION GUIDE

Order Code	Inductance (100kHz, 0.1V _{AC})	DC Current ¹	DC Resistance	SRF	Package Dimensions (Max.)			Pad Dimensions		Carrier Tape Dimensions			Package Weight	Reel (Box) Quantity ³	
	±15%	Max.	Max.		Min.	A	B	C	D	E	F	G	H		Typ.
	μH	A	mΩ		MHz	mm	mm	mm	mm	mm	mm	mm	mm		g
42132C	1.27	14.3	2.5	244	15.70	9.4	15.37	12.70	11.18	20	24	9.5	3.5	300 (60)	
42212C	2.10	11.5	3.8	162	15.70	9.4	15.37	12.70	11.18	20	24	9.5	3.4		
42282C	2.84	13.9	3.5	116	17.00	9.9	17.00	14.48	12.45	24	32	10.5	5.0	250 (60)	
42422C	4.23	11.4	5.2	90	17.00	9.9	17.00	14.48	12.45	24	32	10.5	4.8		
42652C	6.5	12.4	6.0	57	18.80	9.9	18.80	16.26	14.20	24	32	10.7	6.8		
42842C	8.45	10.4	8.0	50	18.80	9.9	18.80	16.26	14.20	24	32	10.7	6.4		
42103C	10.2	15.4	6.0	38	23.88	9.9	23.88	21.08	17.78	32	44	1.08	12.3	180	
42183C	17.6	10.9	11.6	24	23.88	9.9	23.88	21.08	17.78	32	44	10.8	12.5	(35)	

ABSOLUTE MAXIMUM RATINGS

Operating temperature range	-40°C to +125°C
Storage temperature range	-40°C to +130°C

SOLDERING INFORMATION²

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

All specifications typical at T_A=25°C

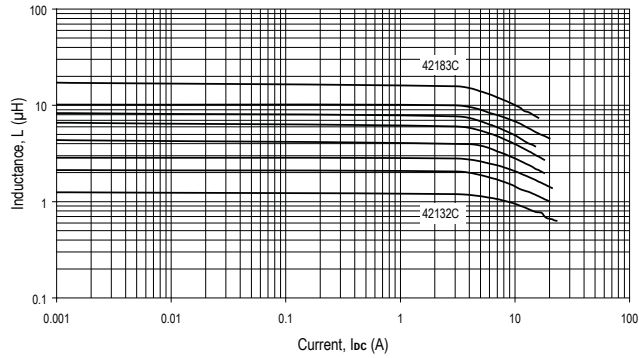
1 Maximum DC current occurs when the temperature rise reaches 55°C.

2 For further information, please visit www.murata-ps.com/rohs

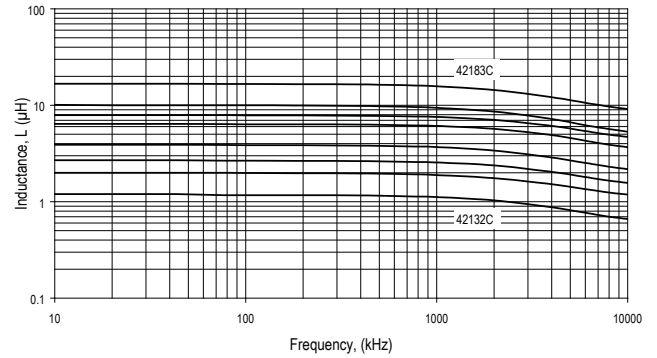
3 If components are required in tape & reel format, suffix order code with '-R', e.g. 42132C-R



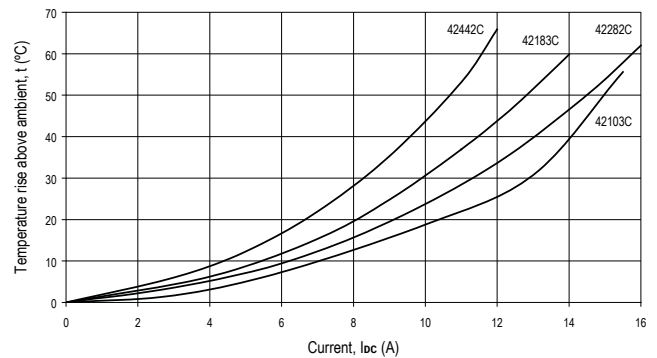
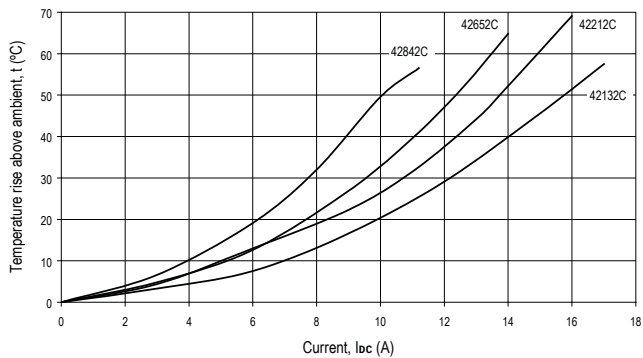
INDUCTANCE Vs CURRENT



INDUCTANCE Vs FREQUENCY



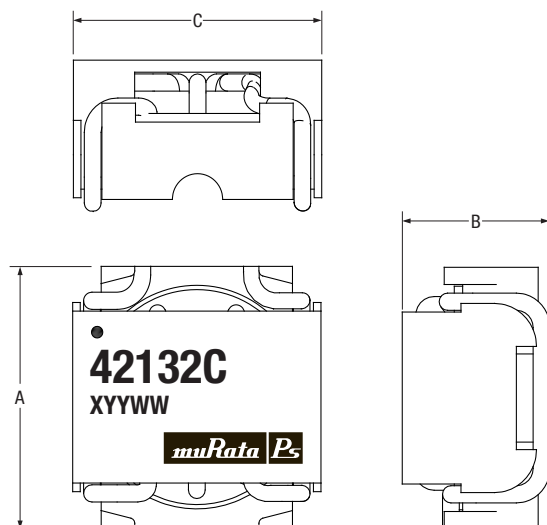
TEMPERATURE Vs CURRENT



PACKAGE SPECIFICATIONS

MECHANICAL DIMENSIONS

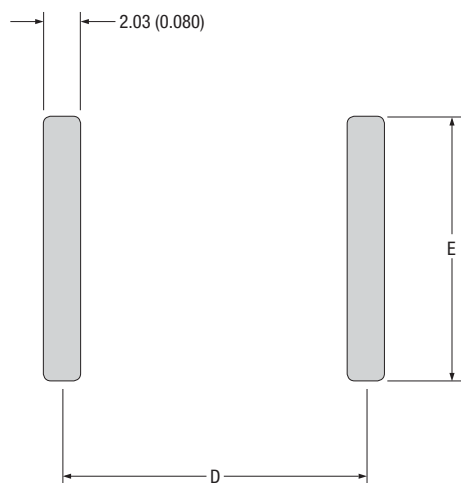
See Selection Guide for dimensions.



Package weight: See Selection Guide.

RECOMMENDED FOOTPRINT DETAILS

See Selection Guide for dimensions.

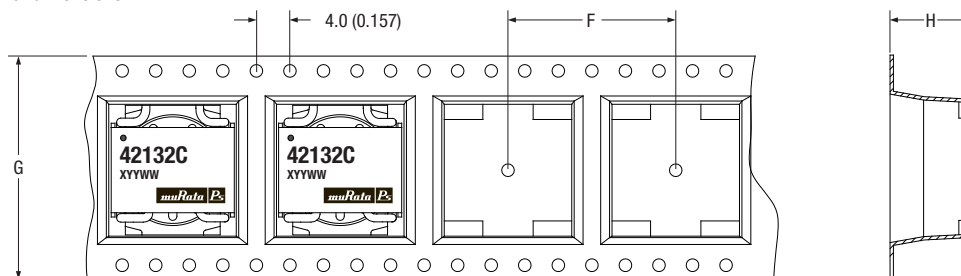


All dimensions in mm (inches).

TAPE & REEL SPECIFICATIONS

TAPE OUTLINE DIMENSIONS

See Selection Guide for dimensions.



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