

## FEATURES

- RoHS compliant
- 1.27μH to 17.6μH
- Up to 15.4A I<sub>DC</sub>
- 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 <sub>AC</sub> )	DC Current <sup>1</sup>	DC Resistance	SRF	Package Dimensions (Max.)			Pad Dimensions			Carrier Tape Dimensions			Package Weight	Reel (Box) Quantity <sup>3</sup>			
					±15%			Max.			Max.					Typ.		
					μH	A	mΩ	MHz	mm	mm	mm	mm	mm			mm	mm	mm
<b>42132C</b>	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)				
<b>42212C</b>	2.10	11.5	3.8	162	15.70	9.4	15.37	12.70	11.18	20	24	9.5	3.4					
<b>42282C</b>	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)				
<b>42422C</b>	4.23	11.4	5.2	90	17.00	9.9	17.00	14.48	12.45	24	32	10.5	4.8					
<b>42652C</b>	6.5	12.4	6.0	57	18.80	9.9	18.80	16.26	14.20	24	32	10.7	6.8	180				
<b>42842C</b>	8.45	10.4	8.0	50	18.80	9.9	18.80	16.26	14.20	24	32	10.7	6.4					
<b>42103C</b>	10.2	15.4	6.0	38	23.88	9.9	23.88	21.08	17.78	32	44	1.08	12.3	(35)				
<b>42183C</b>	17.6	10.9	11.6	24	23.88	9.9	23.88	21.08	17.78	32	44	10.8	12.5					

## ABSOLUTE MAXIMUM RATINGS

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

## SOLDERING INFORMATION<sup>2</sup>

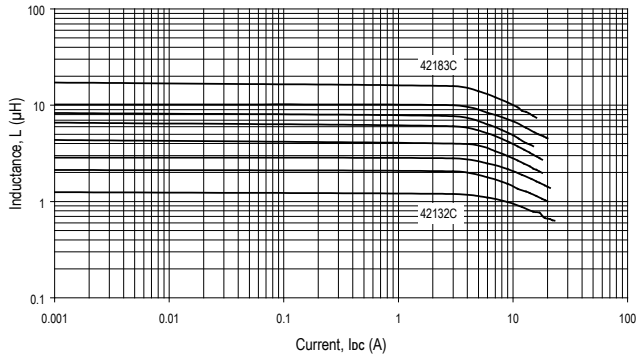
Peak reflow temperature	245°C
Pin finish	Pure tin dip
Moisture sensitivity level	1

All specifications typical at T<sub>A</sub>=25°C

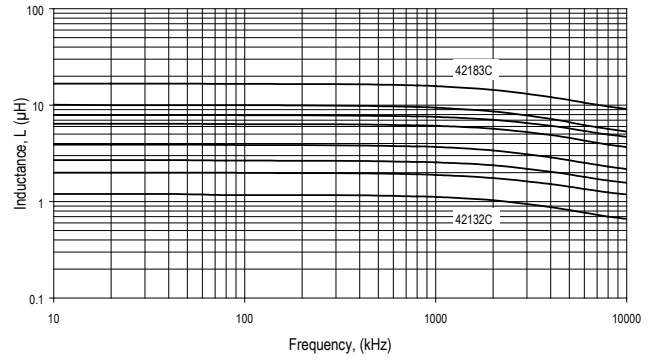
- 1 Maximum DC current occurs when the temperature rise reaches 55°C.
- 2 For further information, please visit [www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)
- 3 If components are required in tape & reel format, suffix order code with '-R', e.g. 42132C-R



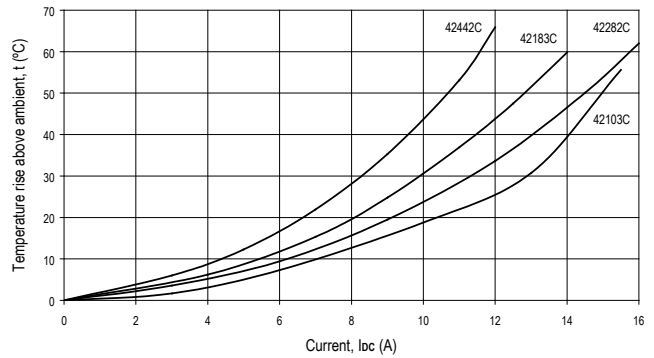
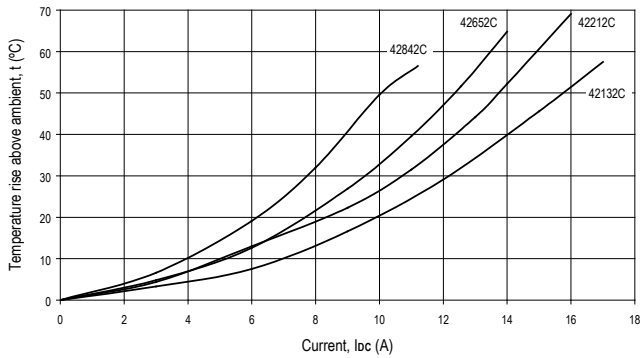
**INDUCTANCE Vs CURRENT**



**INDUCTANCE Vs FREQUENCY**



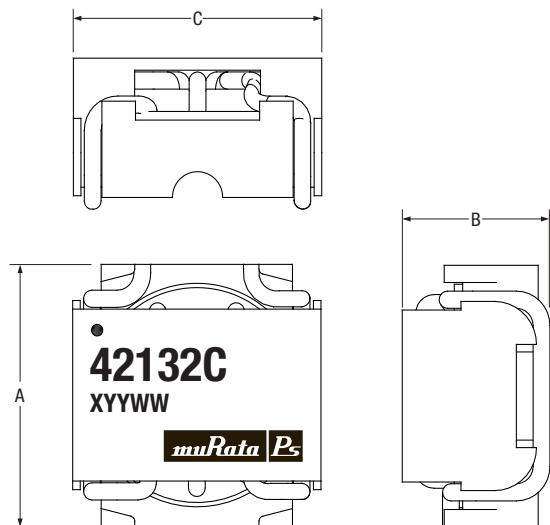
**TEMPERATURE Vs CURRENT**



**PACKAGE SPECIFICATIONS**

**MECHANICAL DIMENSIONS**

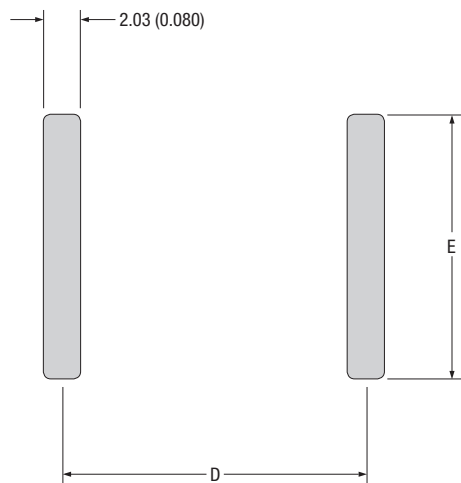
See Selection Guide for dimensions.



Package weight: See Selection Guide.

**RECOMMENDED FOOTPRINT DETAILS**

See Selection Guide for dimensions.

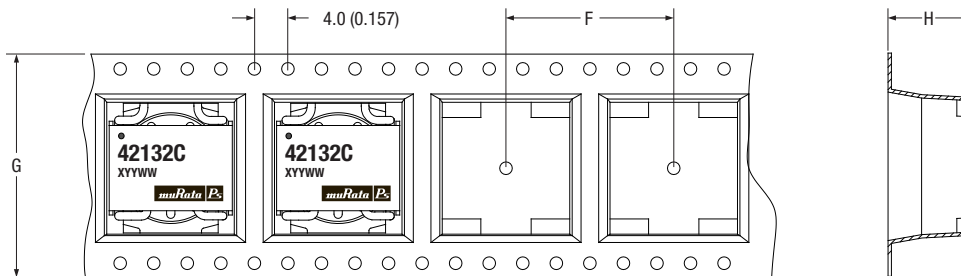


All dimensions in mm (inches).

**TAPE & REEL SPECIFICATIONS**

**TAPE OUTLINE DIMENSIONS**

See Selection Guide for dimensions.



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

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