Murata Power Solutions

8400 Series

Miniature Surface Mount Power Inductors



FEATURES

- RoHS compliant
- Up to 2.8A I_{DC}
- 1.0µH to 2.2mH
- Low R_{DC}
- Small footprint
- Ultra-low profile
- UL 94V-0 packaging materials
- J-STD-020C reflow
- Custom inductance values available

PRODUCT OVERVIEW

The 8400 series is a range of miniature, surface-mount, I-core power inductors. They are designed for use in power applications with restricted PCB space and height, such as ExpressCard™ technology, handheld devices, DC-DC converters and notebook computers. The products are supplied in tape and reel for high-volume, automated surface-mount assembly.

SELECTION GUIDE

Order Code	Inductance, L ±10% µH	DC Current[2] Max. A	DC Resistance Max. Ω
84102C	1.0±20%	2.80	0.08
84132C	1.3±20%	2.50	0.08
84222C	2.2±20%	2.00	0.09
84332C	3.3±20%	1.50	0.12
84472C	4.7±20%	1.30	0.15
84682C	6.8±20%	1.05	0.20
84103C	10	0.95	0.24
84153C	15	0.75	0.45
84223C	22	0.60	0.60
84333C	33	0.55	0.86
84473C	47	0.42	1.1
84683C	68	0.38	1.6
84104C	100	0.30	2.0
84154C	150	0.25	3.2
84224C	220	0.20	4.6
84334C	330	0.17	6.5
84474C	470	0.14	8.5
84684C	680	0.12	11.5
84105C	1000	0.09	18.0
84155C	1500	0.08	27.0
84225C	2200	0.05	45

ABSOLUTE MAXIMUM RATINGS

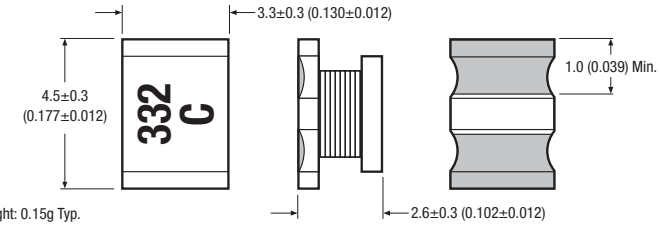
Operating free air temperature range	-40°C to 125°C
Storage temperature range	-40°C to 150°C

SOLDERING INFORMATION[1]

Peak reflow solder temperature	250°C
Pin finish	SAC 305
Moisture sensitivity level	1

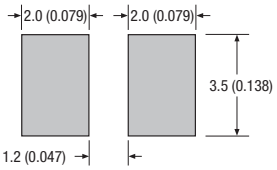
PACKAGE SPECIFICATIONS

Mechanical Dimensions



Package weight: 0.15g Typ.

Recommended Footprint Details



All dimensions in mm (inches)

Specifications typical at T_A = 25°C

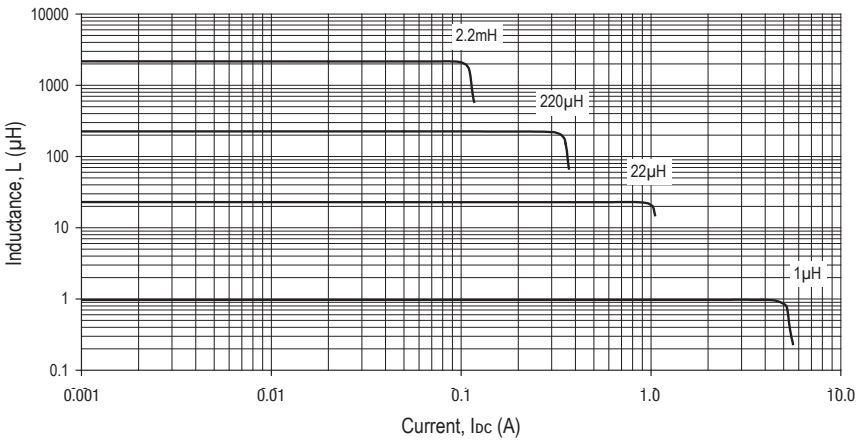
1 For further information, please visit www.murata-ps.com/rohs

2 The maximum DC current is the value at which the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

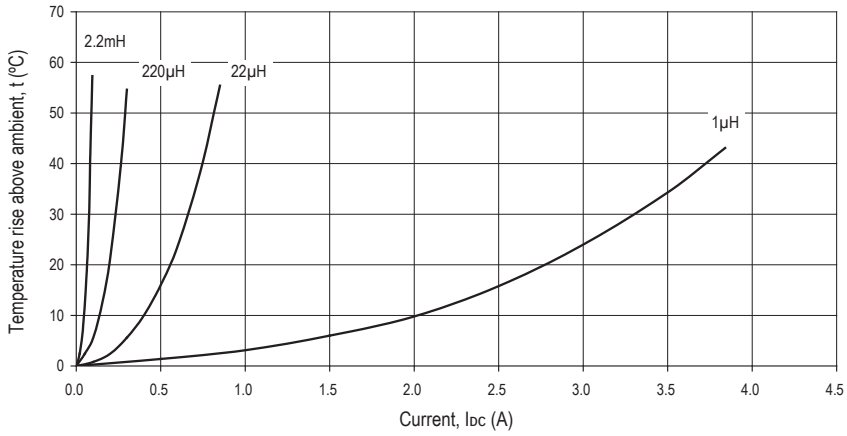
RoHS COMPLIANT

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

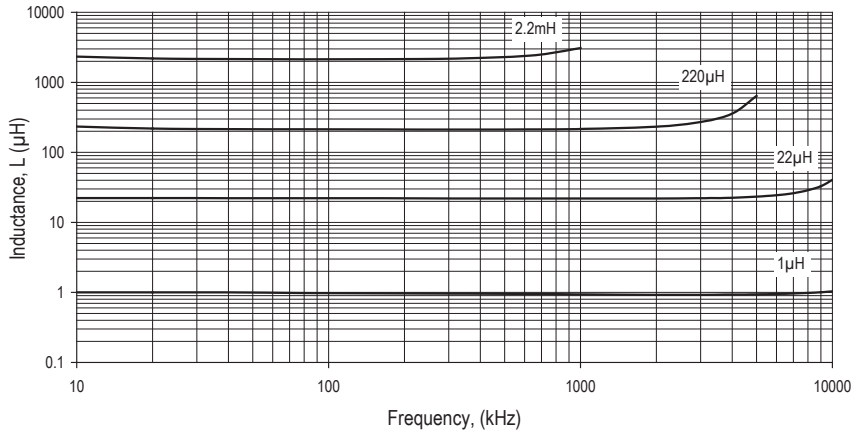
INDUCTANCE Vs CURRENT



TEMPERATURE Vs CURRENT

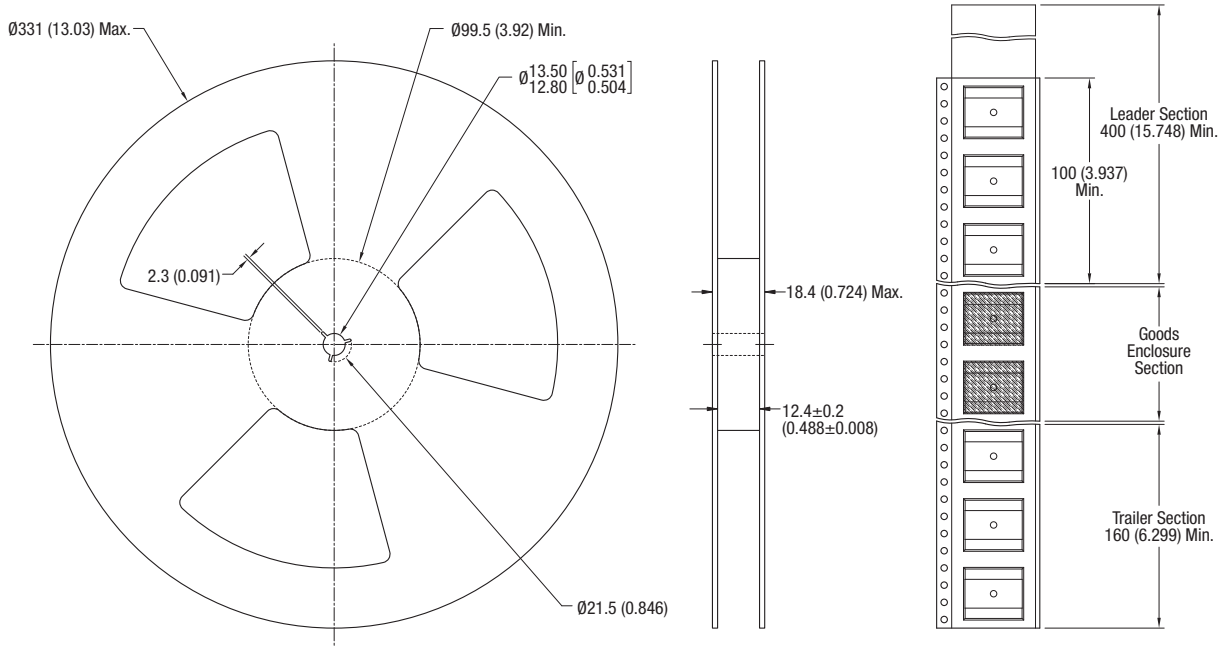


INDUCTANCE Vs FREQUENCY



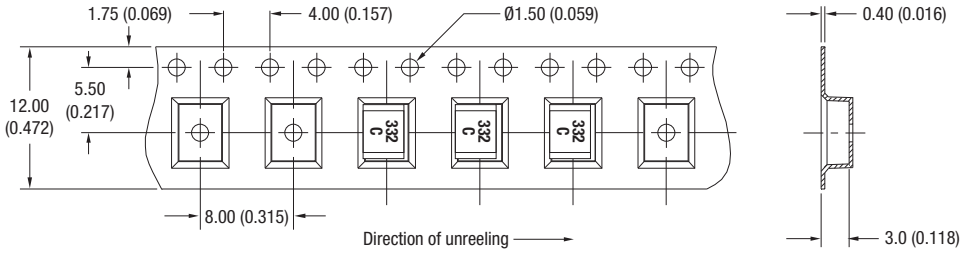
PACKAGE SPECIFICATIONS

Mechanical Dimensions



All dimension in mm [inches]

Tape Outline Dimensions



Reel quantity: 2000

Unless otherwise stated, all dimensions in mm (inches).

This product is subject to the following operating requirements and the Life and Safety Critical Application Sales Policy:

Refer to: http://www.murata-ps.com/requirements/

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