



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 | DC Current ² | DC Resistance |
|------------|---------------|-------------------------|---------------|
| | ±10% μH | Max. A | 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

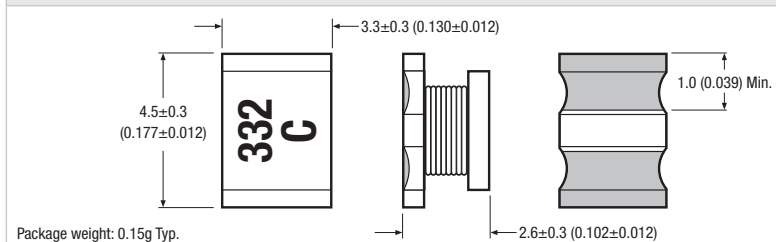
| | |
|--------------------------------------|----------------|
| Operating free air temperature range | -40°C to 125°C |
| Storage temperature range | -40°C to 150°C |

SOLDERING INFORMATION¹

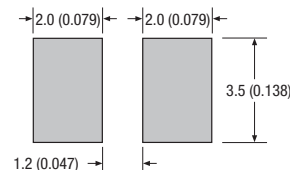
| | |
|--------------------------------|---------|
| Peak reflow solder temperature | 250°C |
| Pin finish | SAC 305 |
| Moisture sensitivity level | 1 |

PACKAGE SPECIFICATIONS

Mechanical Dimensions



Recommended Footprint Details



All dimensions in mm (inches)

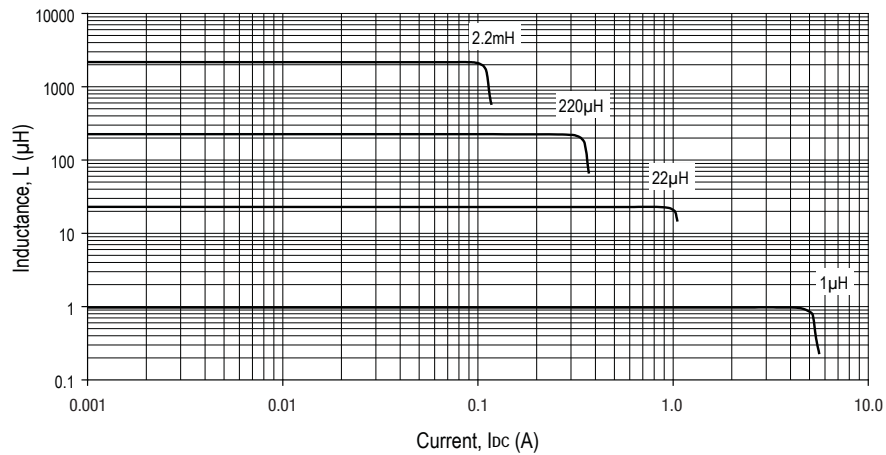
Specifications typical at T_a = 25°C

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

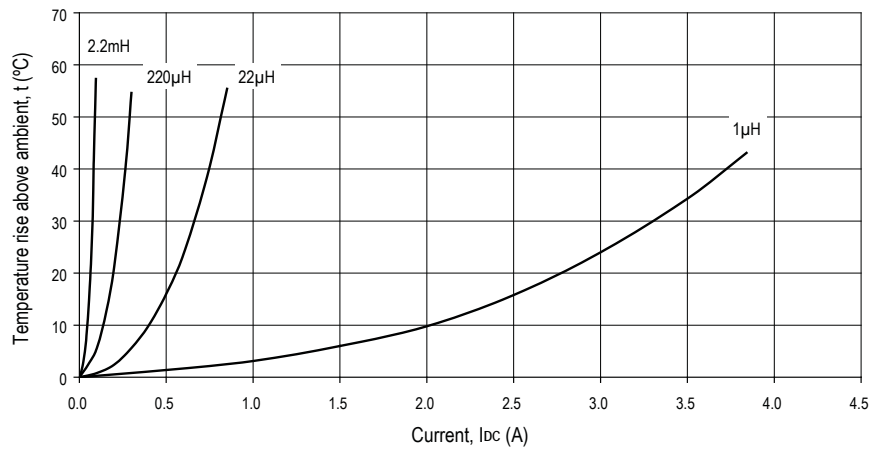
2 The maximum DC current is the value at which the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.



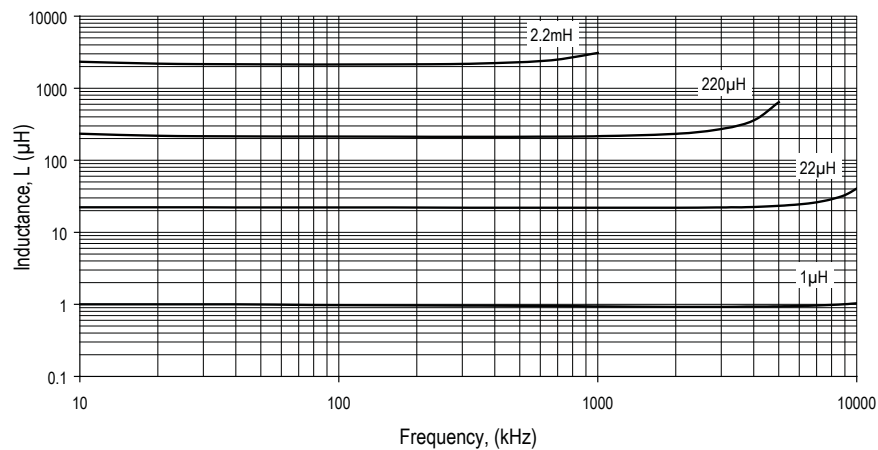
INDUCTANCE Vs CURRENT



TEMPERATURE Vs CURRENT

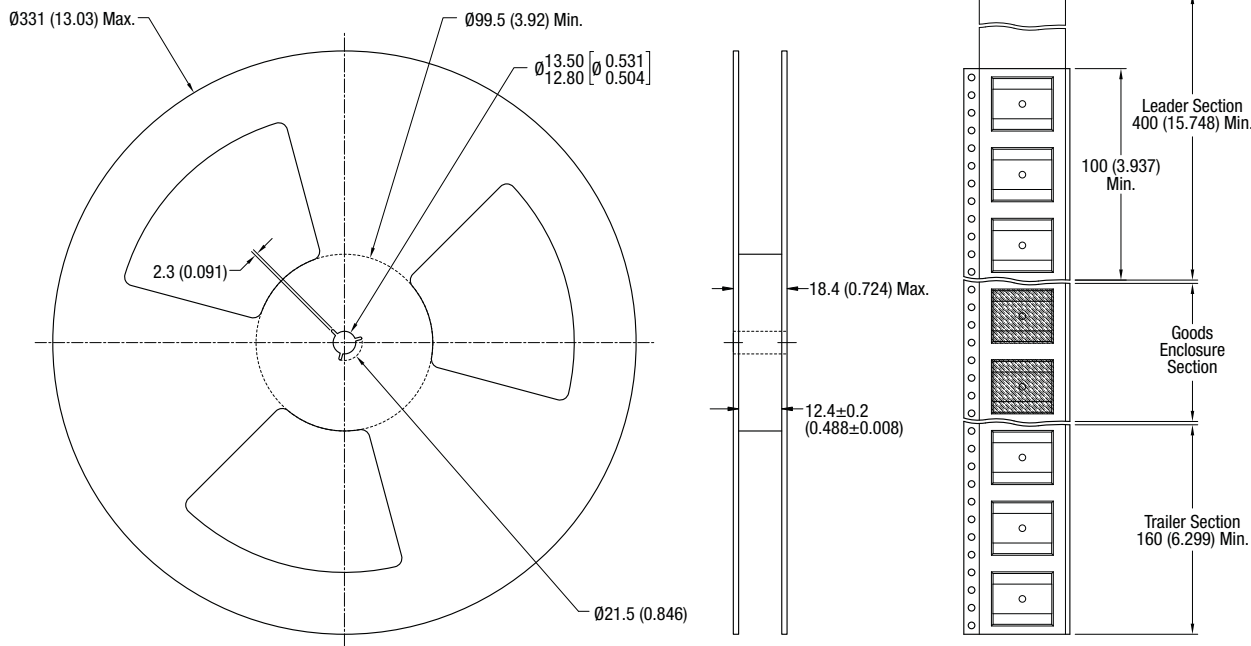


INDUCTANCE Vs FREQUENCY



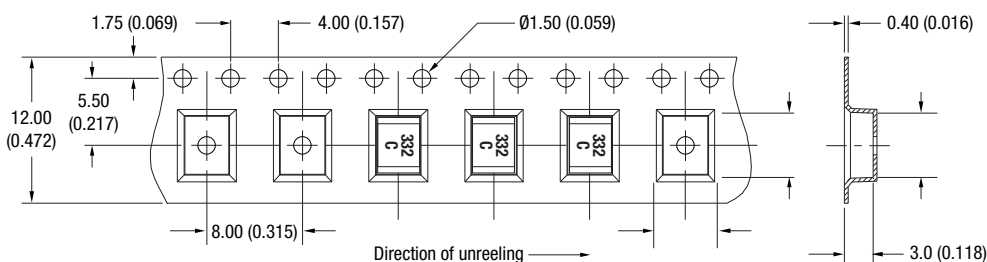
PACKAGE SPECIFICATIONS

Mechanical Dimensions



All dimension in mm [inches]

Tape Outline Dimensions



Reel quantity: 2000
Unless otherwise stated, all dimensions in mm (inches).

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