



FEATURES

- RoHS compliant¹
- Up to 10.5A I_{DC}
- 47μH to 680μH
- High energy storage, very low resistance
- UL 94V-0 packaging materials
- J-STD-020D.1 reflow
- Custom inductance values available

PRODUCT OVERVIEW

The 6000B series is a range of high-current, surface-mount power inductors. They are designed for use in power applications such as DC-DC converters, energy storage and input or output filtering. The products are supplied in tape and reel for high-volume, automated surface-mount assembly.

SELECTION GUIDE

| Order Code | Inductance, L | DC Current ² | SRF | DC Resistance |
|----------------|--------------------------|-------------------------|-------------|---------------|
| | 0.1V@100KHz (±15%) μH | Max. A | Typ. MHz | Max. mΩ |
| 60B473C | 47 | 10.5 | 7.45 | 13 |
| 60B683C | 68 | 9.0 | 6.07 | 17 |
| 60B104C | 100 | 7.5 | 4.98 | 25 |
| 60B154C | 150 | 6.0 | 3.90 | 38 |
| 60B224C | 220 | 5.0 | 3.21 | 50 |
| 60B334C | 330 | 4.0 | 2.66 | 80 |
| 60B474C | 470 | 3.5 | 2.15 | 100 |
| 60B684C | 680 | 3.0 | 1.59 | 135 |

ABSOLUTE MAXIMUM RATINGS

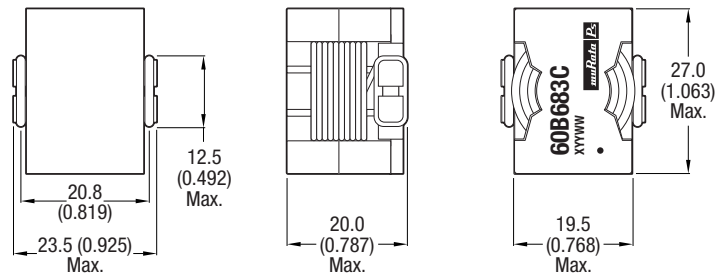
| | |
|--|----------------|
| Operating temperature range ³ | -40°C to 85°C |
| Storage temperature range | -40°C to 125°C |

SOLDERING INFORMATION¹

| | |
|---|----------|
| Peak reflow solder temperature | 245°C |
| Pin finish | Pure tin |
| Moisture sensitivity level ³ | 1 |

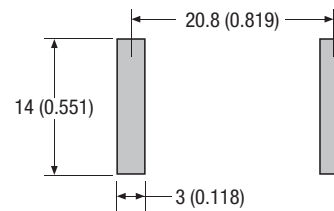
PACKAGE SPECIFICATIONS

Mechanical Dimensions



Package weight: 37g Typ.

Recommended Pad Layout



All dimensions in mm (inches)

Specifications typical at T_a = 25°C

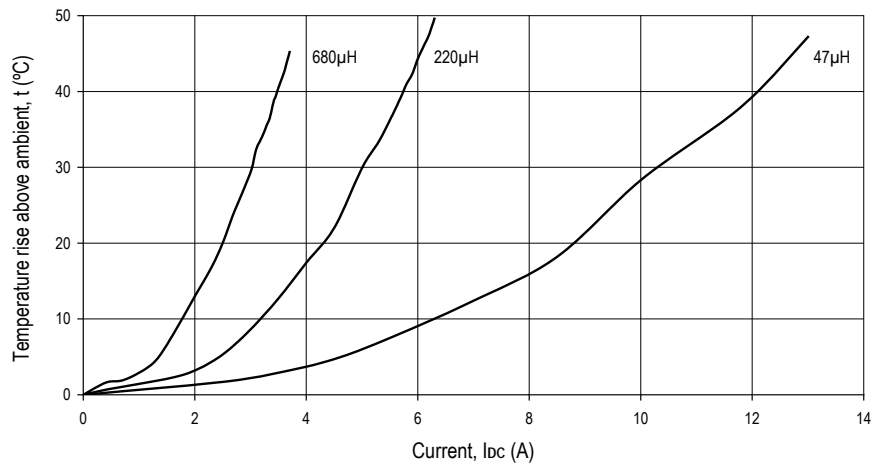
1 For further information, please visit www.murata-ps.com/rohs

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.

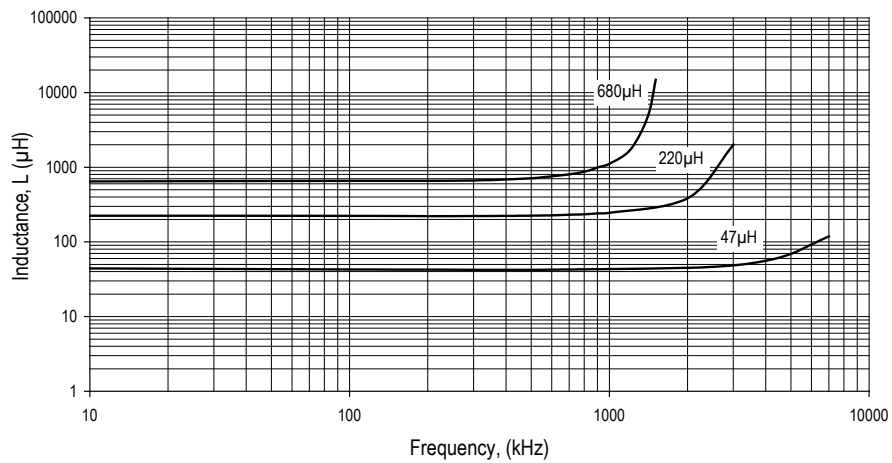
3 Representative samples of the product were subjected to the conditioning described in IPC/JEDEC J-STD-020D and passed electrical testing, package coplanarity and visual inspection which revealed no external cracks or changes in package body flatness.



TEMPERATURE Vs CURRENT

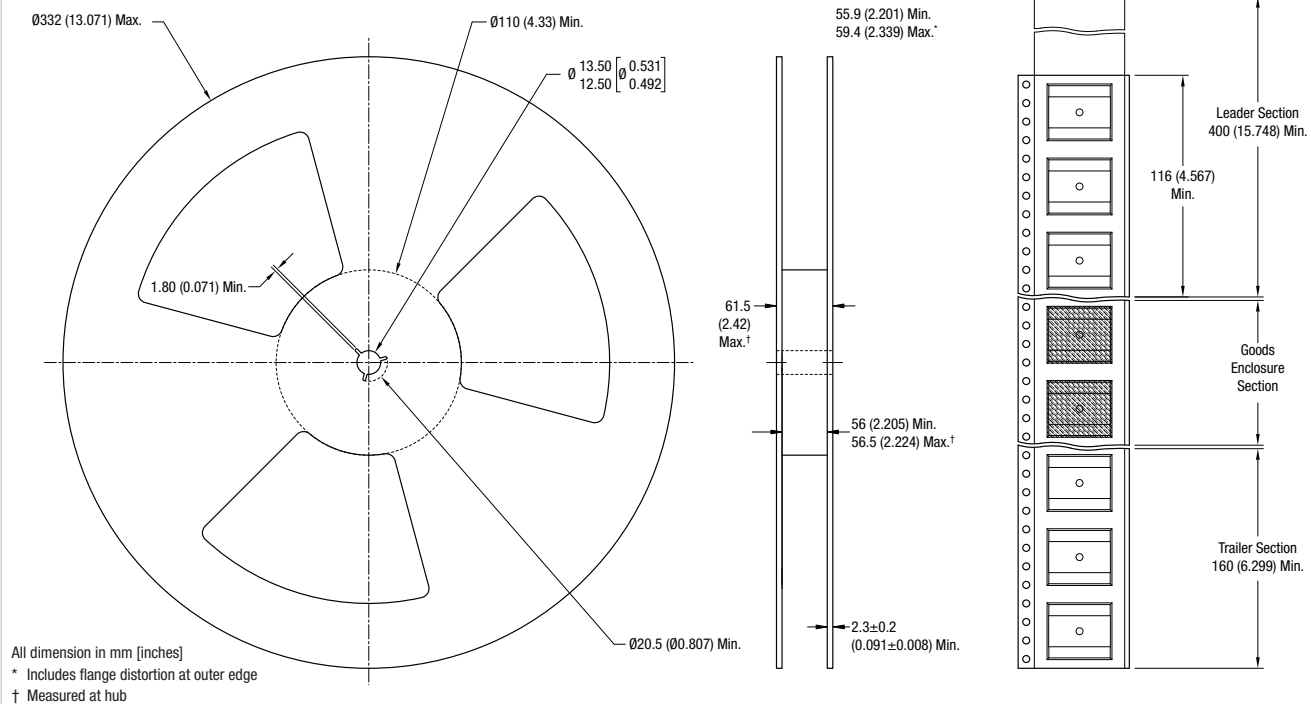


INDUCTANCE Vs FREQUENCY

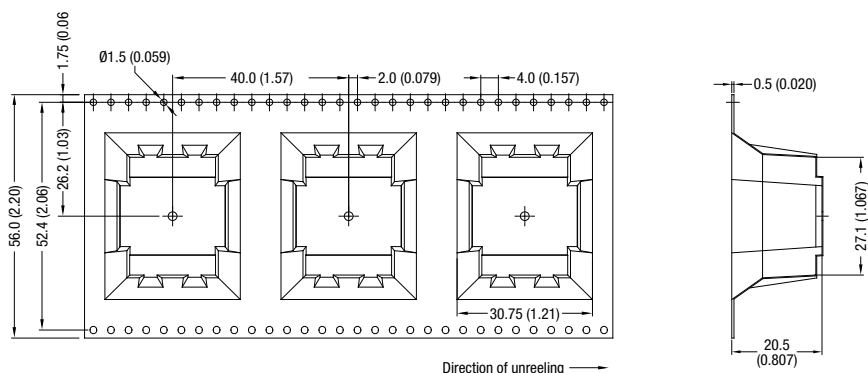


PACKAGE SPECIFICATIONS

Mechanical Dimensions



Tape Outline Dimensions



Reel quantity: 65
Unless otherwise stated, all dimensions in mm (inches).

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ISO 9001 and 14001 REGISTERED

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