



FEATURES

- RoHS compliant¹
- Up to 22A saturation current
- 5.8μH to 57.8μH
- High energy storage, low resistance
- UL 94V-0 packaging materials
- J-STD-020D.1 reflow
- Custom inductance values available

PRODUCT OVERVIEW

The 6000A 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 | Isat ⁴ | DC Current ² | SRF | DC Resistance |
|------------|--------------------------|-------------------|-------------------------|-------------|---------------|
| | 0.1V@100KHz (±10%) μH | Max. A | Max. A | Typ. MHz | Max. mΩ |
| 60A582C | 5.8 | 22 | 14.5 | 31 | 5 |
| 60A782C | 7.8 | 19 | 13.5 | 26 | 6 |
| 60A103C | 10.2 | 17 | 12.0 | 21 | 7 |
| 60A163C | 16.0 | 13 | 9.6 | 17 | 9 |
| 60A193C | 19.4 | 12 | 8.5 | 15 | 11 |
| 60A233C | 23.0 | 11 | 8.4 | 13 | 12 |
| 60A273C | 27.0 | 10 | 7.5 | 13 | 15 |
| 60A313C | 31.4 | 9.5 | 6.8 | 12 | 18 |
| 60A363C | 36.0 | 8.8 | 6.4 | 11 | 20 |
| 60A413C | 41.0 | 8.4 | 5.6 | 10 | 26 |
| 60A583C | 57.8 | 6.2 | 4.9 | 8 | 36 |

ABSOLUTE MAXIMUM RATINGS

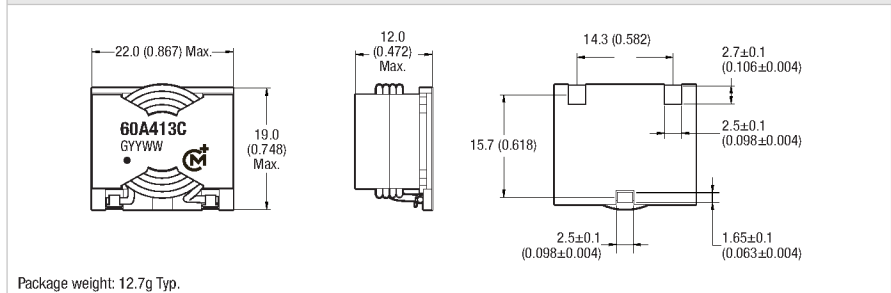
| | |
|--|----------------|
| Operating temperature range ³ | -40°C to 85°C |
| Storage temperature range | -40°C to 150°C |

SOLDERING INFORMATION¹

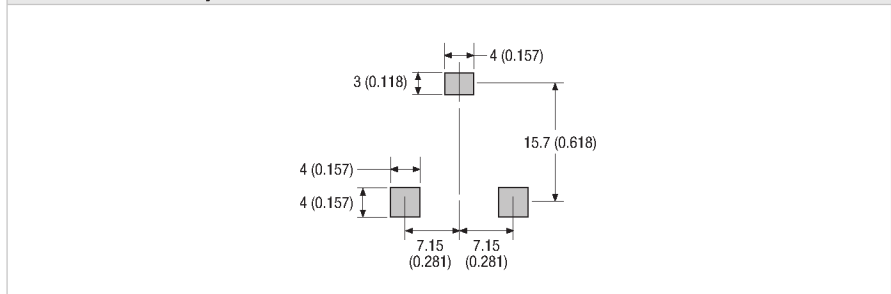
| | |
|---|----------|
| Peak reflow solder temperature | 245°C |
| Pin finish | Pure tin |
| Moisture sensitivity level ³ | 1 |

PACKAGE SPECIFICATIONS

Mechanical Dimensions



Recommended Pad Layout



All dimensions in mm (inches)

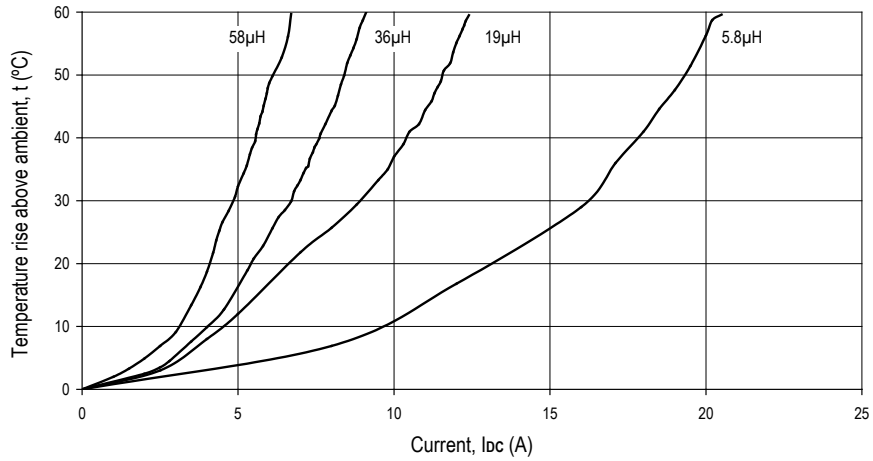
Specifications typical at $T_A = 25^\circ\text{C}$

- 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.
- 4 The instantaneous value when inductance drops to 80% of its normal value.

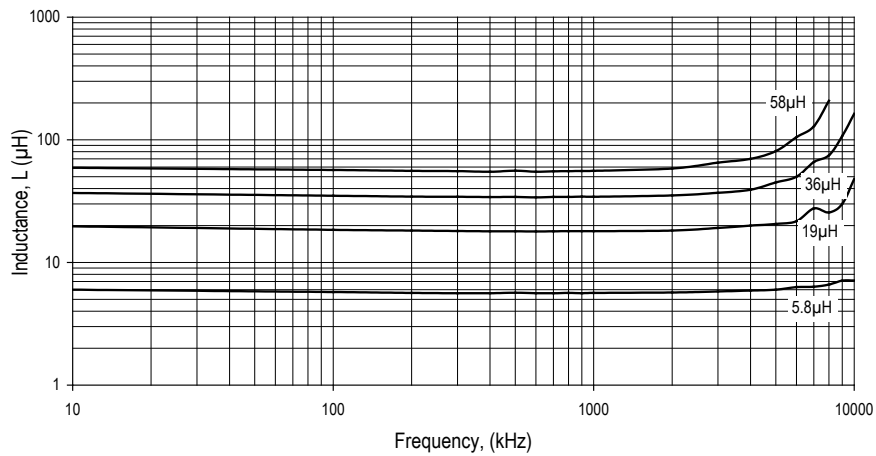


For full details go to
www.murata-ps.com/rohs

TEMPERATURE Vs CURRENT

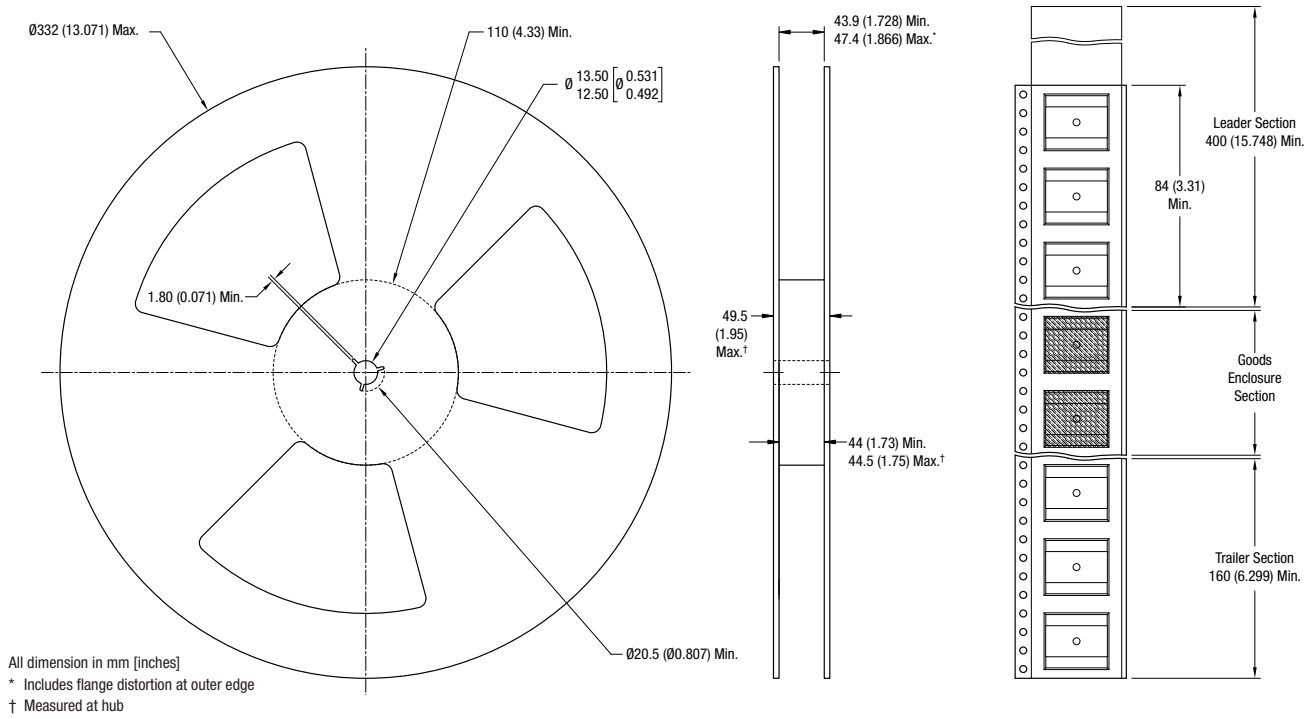


INDUCTANCE Vs FREQUENCY

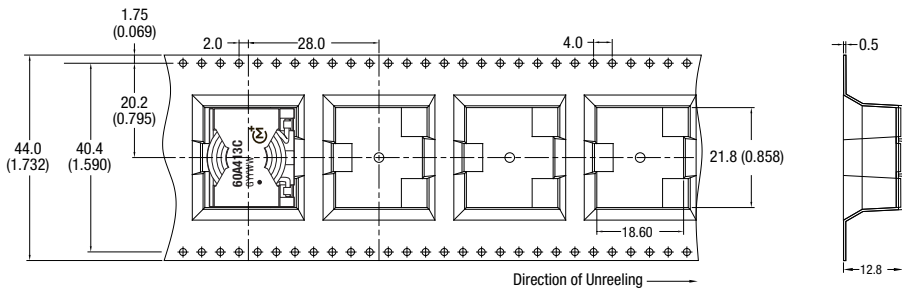


PACKAGE SPECIFICATIONS

Mechanical Dimensions



Tape Outline Dimensions



Reel quantity: 200
Unless otherwise stated, all dimensions in mm (inches).

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ISO 9001 and 14001 REGISTERED

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