

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.

6000A Series

Surface Mount Power Inductors

SELECTION GUIDE

Order Code	Inductance, L	Isat ⁴	DC Current ²	SRF	DC Resistance
	0.1V@100KHz (±10%)	Max.	Max.	Typ.	Max.
	μH	A	A	MHz	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

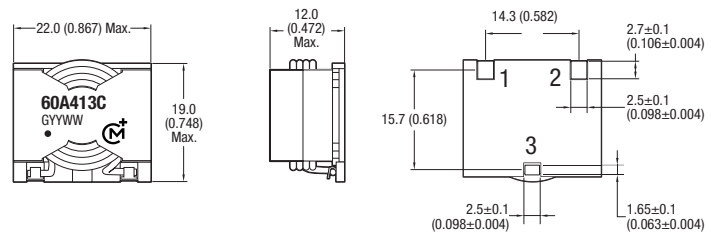
Operating free air temperature range	-40°C to 85°C
Storage temperature range	-40°C to 150°C

SOLDERING INFORMATION¹

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

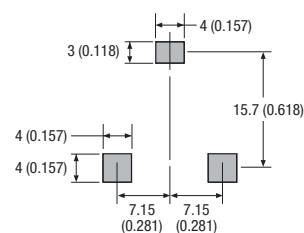
PACKAGE SPECIFICATIONS

Mechanical Dimensions⁵



Package weight: 12.7g 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.

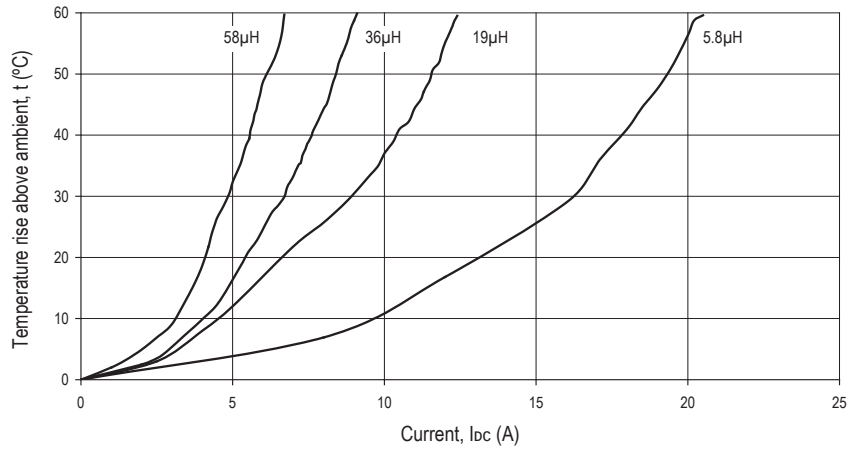
4 The instantaneous value when inductance drops to 80% of its normal value.

5 Terminal 3 is open-circuit and for mounting stability only.

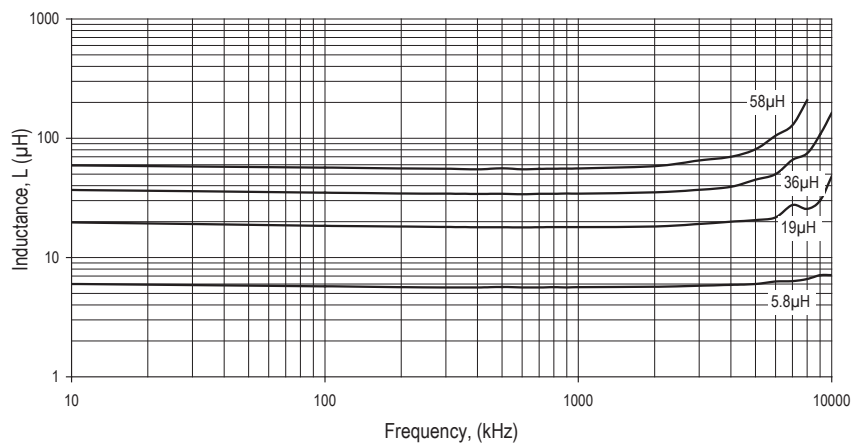


For full details go to
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TEMPERATURE Vs CURRENT

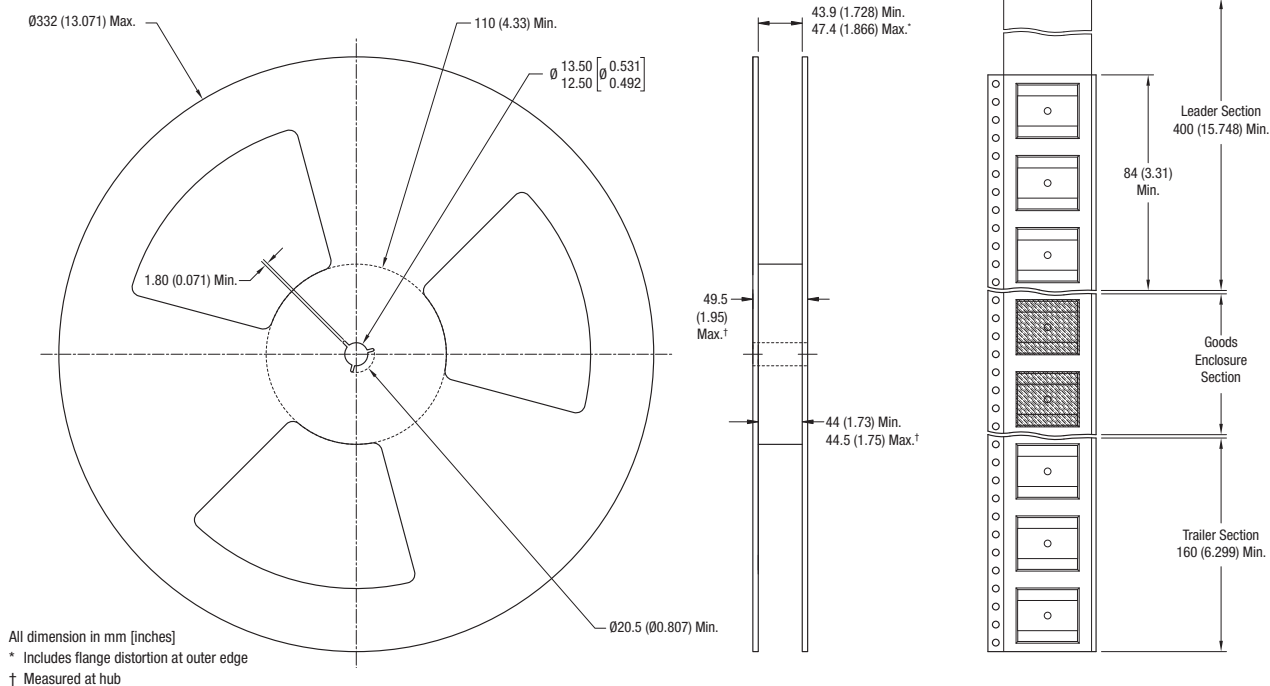


INDUCTANCE Vs FREQUENCY

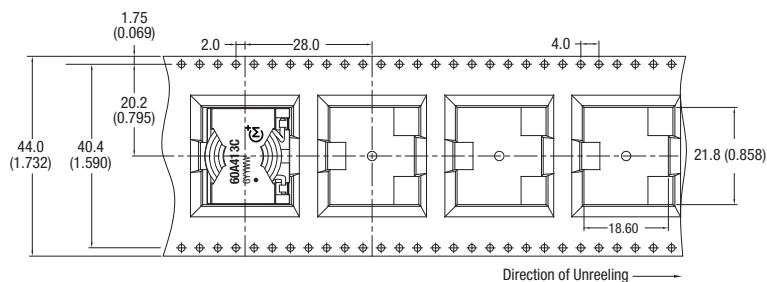


PACKAGE SPECIFICATIONS

Mechanical Dimensions



Tape Outline Dimensions



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

DISCLAIMER

Unless otherwise stated in the datasheet, all products are designed for standard commercial and industrial applications and NOT for safety-critical and/or life-critical applications.

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- Aerospace equipment
- Undersea equipment
- Power plant control equipment
- Medical equipment
- Transportation equipment (automobiles, trains, ships, etc.)
- Traffic signal equipment
- Disaster prevention / crime prevention equipment
- Data Processing equipment

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