



FEATURES

- Low-profile surface-mount design
- Inductance Range from 80nH to 200nH
- Rated current up to 57A_{pk}
- Materials meet UL94V-0
- Custom inductance values available
- RoHS compliant
- J-STD-020 D.1 reflow

PRODUCT OVERVIEW

The 3000A series are a range of high-current, surface-mount bead inductors, suited to a variety of applications. The products are designed for noise suppression in high-frequency, high-current switching power supplies, DC-DC converters, DC-AC inverters and VRMs.

SELECTION GUIDE

| Order Code | Inductance (1MHz, 0.1V) | | I _{DC} ³ | I _{SAT} (Typ.) ⁴ | | DC Resistance | |
|----------------|-------------------------|------------------------|------------------------------|--------------------------------------|-------|---------------|------|
| | ±20% | Typ. @ I _{DC} | | 25°C | 100°C | Typ. | Max. |
| | nH | nH | | A | A | mΩ | mΩ |
| 30800AC | 80 | 82 | 37 | 57 | 47 | 0.19 | 0.35 |
| 30101AC | 97 | 105 | 36 | 48 | 41 | 0.20 | 0.35 |
| 30151AC | 145 | 120 | 29 | 33 | 29 | 0.19 | 0.35 |
| 30201AC | 191 | 162 | 22 | 24 | 22 | 0.21 | 0.35 |

ABSOLUTE MAXIMUM RATINGS

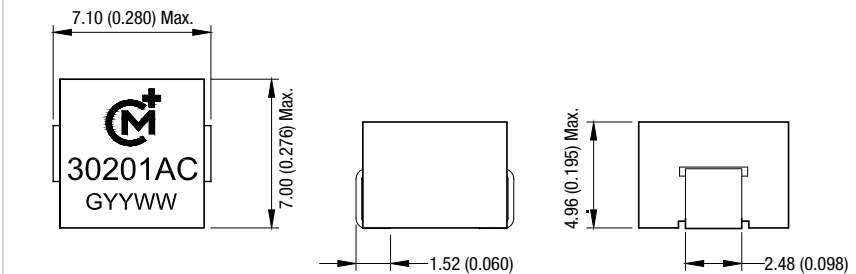
| | |
|-----------------------------|-----------------|
| Operating temperature range | -40°C to +130°C |
| Storage temperature range | -40°C to +155°C |

SOLDERING INFORMATION¹

| | |
|---|--------|
| Peak reflow solder temperature | 250°C |
| Pin finish | SAC305 |
| Moisture sensitivity level ² | 1 |

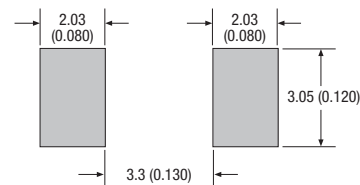
Mechanical Dimensions

Mechanical Dimensions



Weight Typ. = 0.94g

Recommended Pad Layout



Unless otherwise stated, all dimensions in mm (inches) ± 0.25 (0.010).

Specifications typical at T_A = 25°C

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

2 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.

3 I_{DC} is the value at which the inductance falls to 80% of its nominal value or when its temperature reaches 40°C, which ever is sooner.

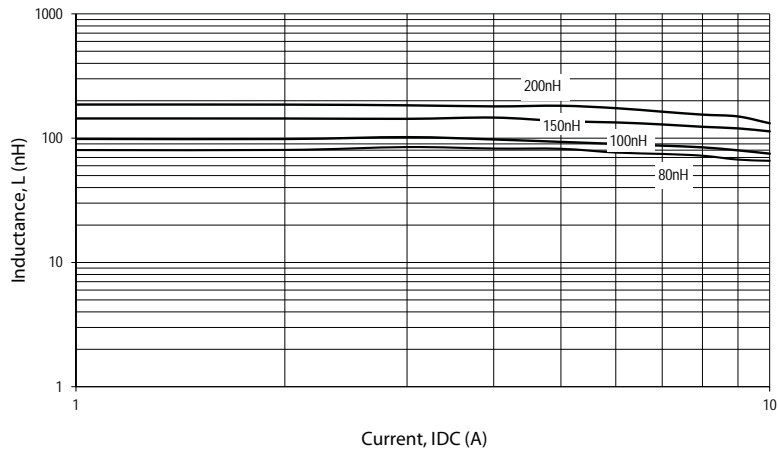
4 I_{SAT} is the value at which the inductance falls to 80% of its nominal value.



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

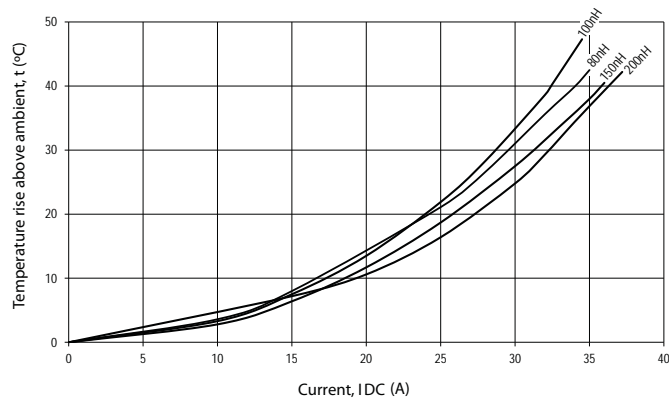
INDUCTANCE Vs CURRENT

3000A Series Inductance Vs Current



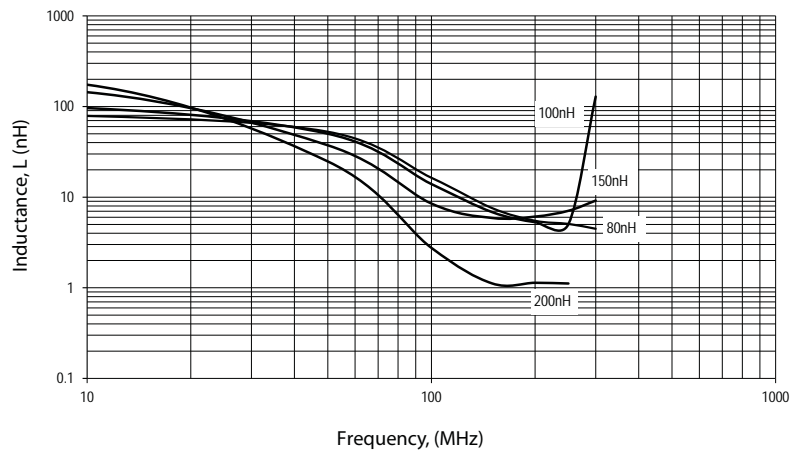
TEMPERATURE Vs CURRENT

3000A Temperature Vs Current



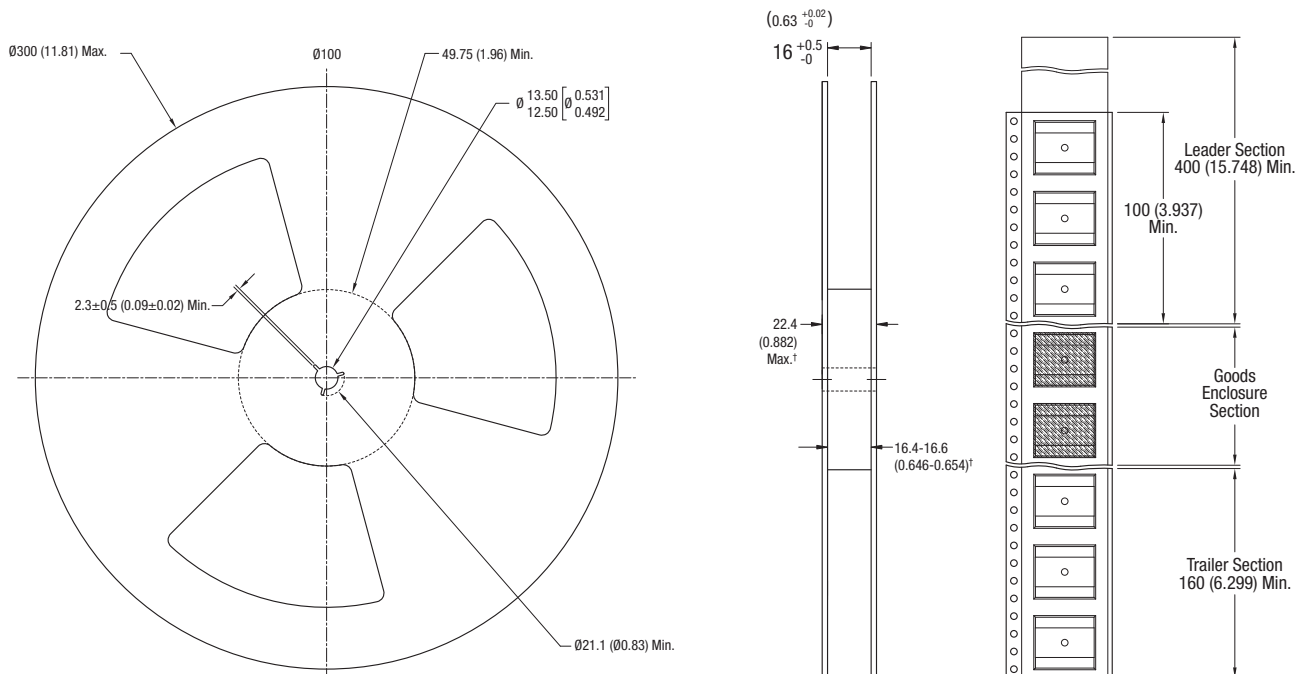
INDUCTANCE Vs FREQUENCY

3000A Series Inductance Vs Frequency

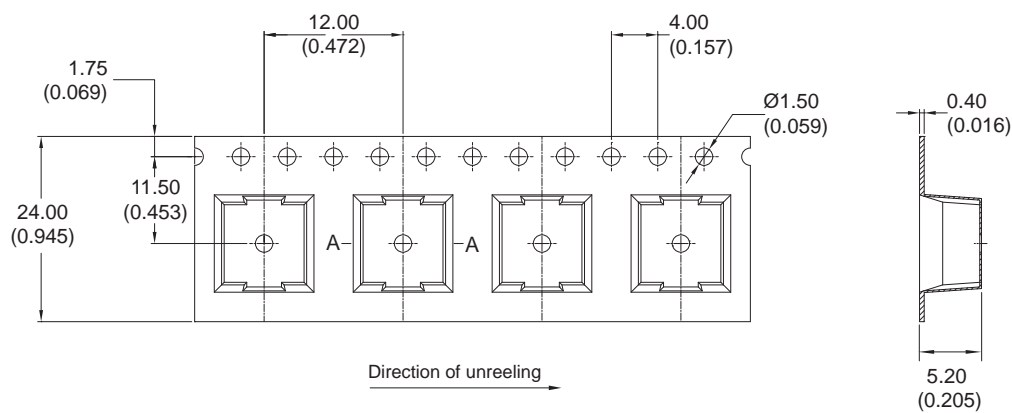


PACKAGE SPECIFICATIONS

Reel Dimensions



Reel Dimensions



Reel quantity: 1000

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ISO 9001 and 14001 REGISTERED

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