



## FEATURES

- Low-profile surface-mount design
- Inductance Range from 80nH to 200nH
- Rated current up to 57A<sub>pk</sub>
- 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 <sub>DC</sub> <sup>3</sup> Typ.	I <sub>SAT</sub> (Typ.) <sup>4</sup>		DC Resistance	
	±20% nH	Typ. @ I <sub>DC</sub> nH		25 °C A	100 °C A	Typ. mΩ	Max. mΩ
<b>30800AC</b>	80	82	37	57	47	0.19	0.35
<b>30101AC</b>	97	105	36	48	41	0.20	0.35
<b>30151AC</b>	145	120	29	33	29	0.19	0.35
<b>30201AC</b>	191	162	22	24	22	0.21	0.35

## ABSOLUTE MAXIMUM RATINGS

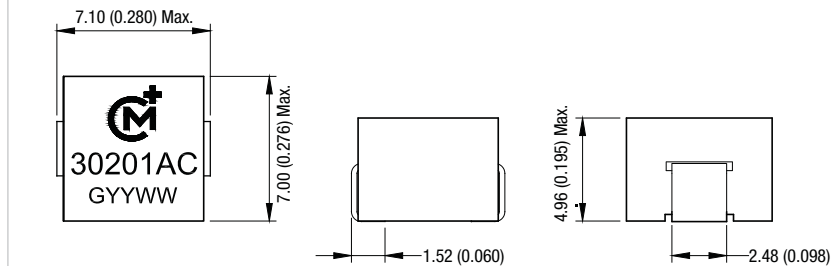
Operating temperature range	-40°C to +130°C
Storage temperature range	-40°C to +155°C

## SOLDERING INFORMATION<sup>1</sup>

Peak reflow solder temperature	250°C
Pin finish	SAC305
Moisture sensitivity level <sup>2</sup>	1

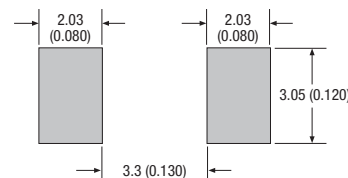
## Mechanical Dimensions

### 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<sub>a</sub> = 25°C

1 For further information, please visit [www.murata-ps.com/rohs](http://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.

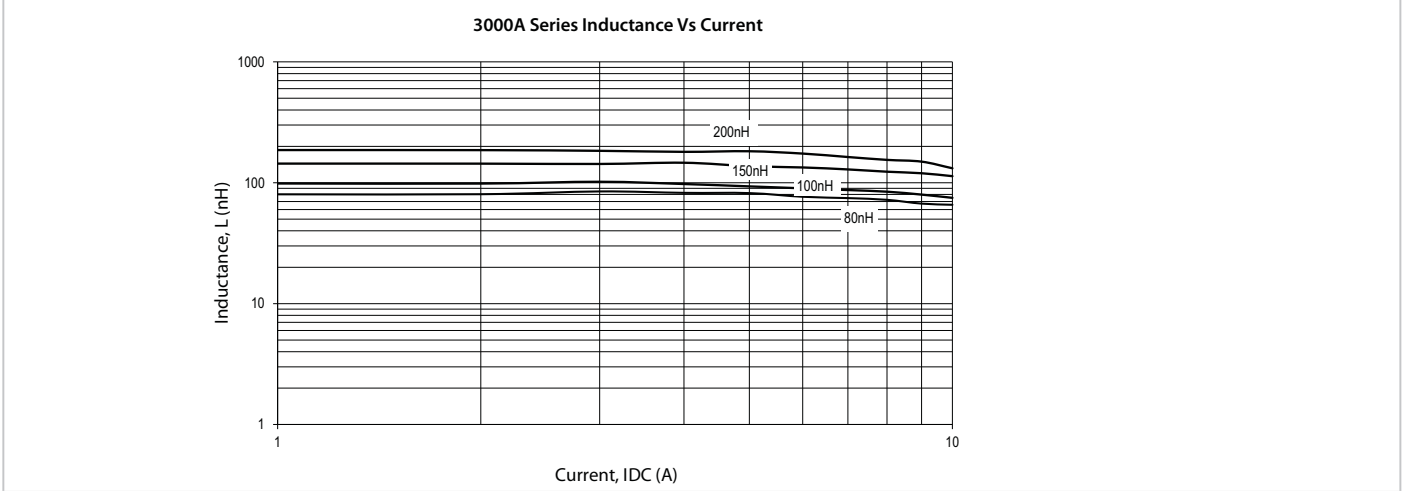
3 I<sub>DC</sub> is the value at which the inductance falls to 80% of its nominal value or when its temperature reaches 40°C, whichever is sooner.

4 I<sub>SAT</sub> is the value at which the inductance falls to 80% of its nominal value.

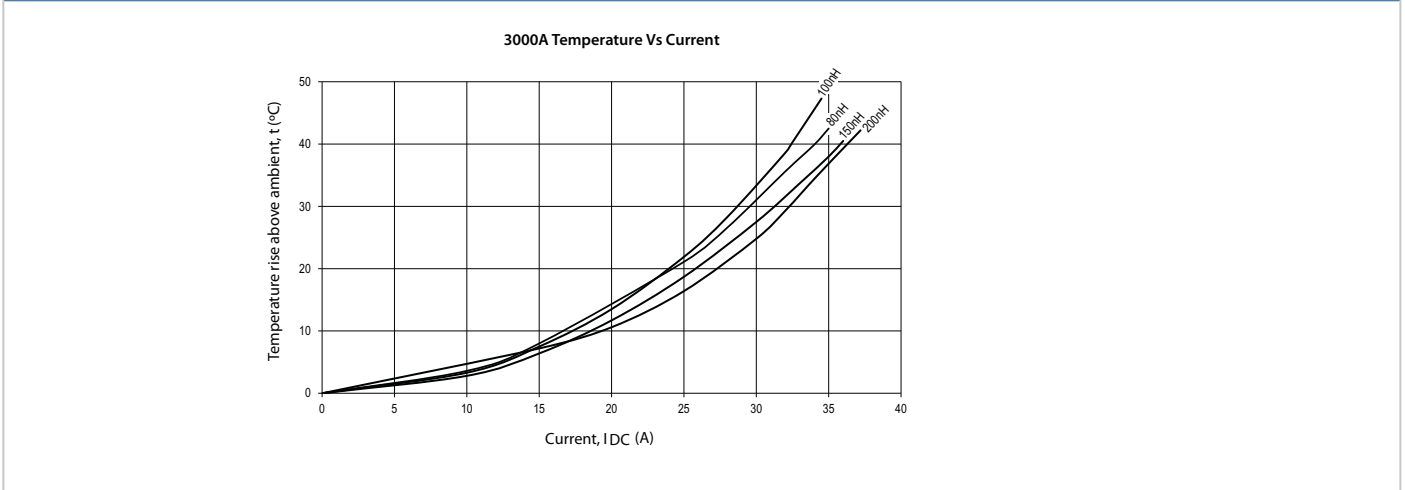


For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

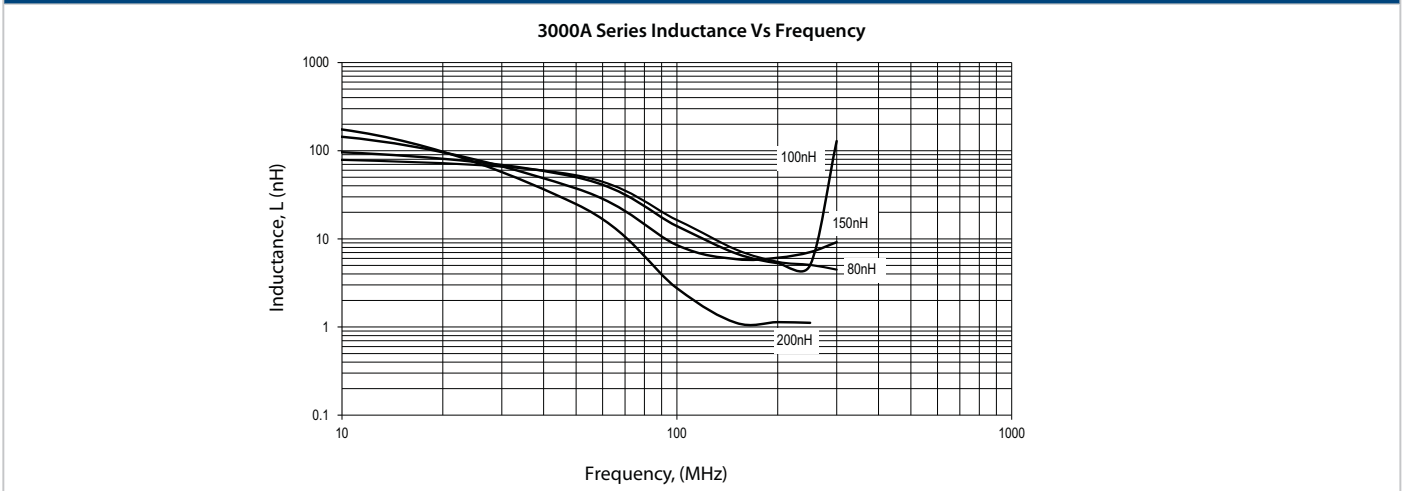
**INDUCTANCE Vs CURRENT**



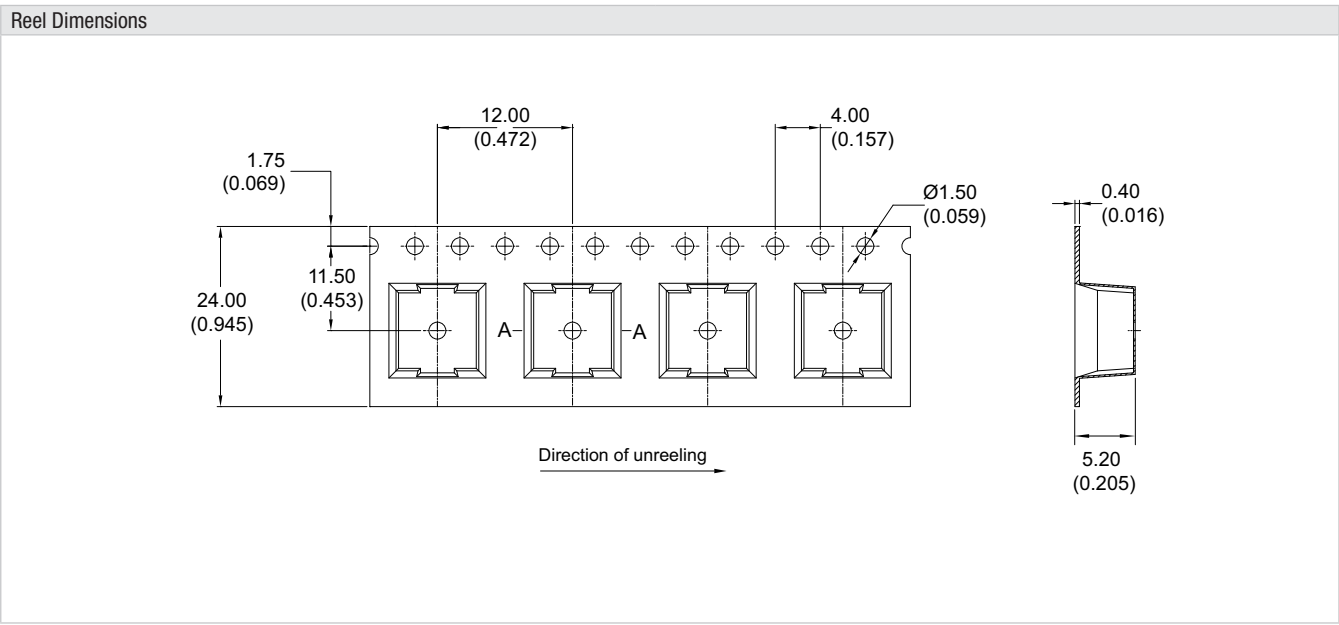
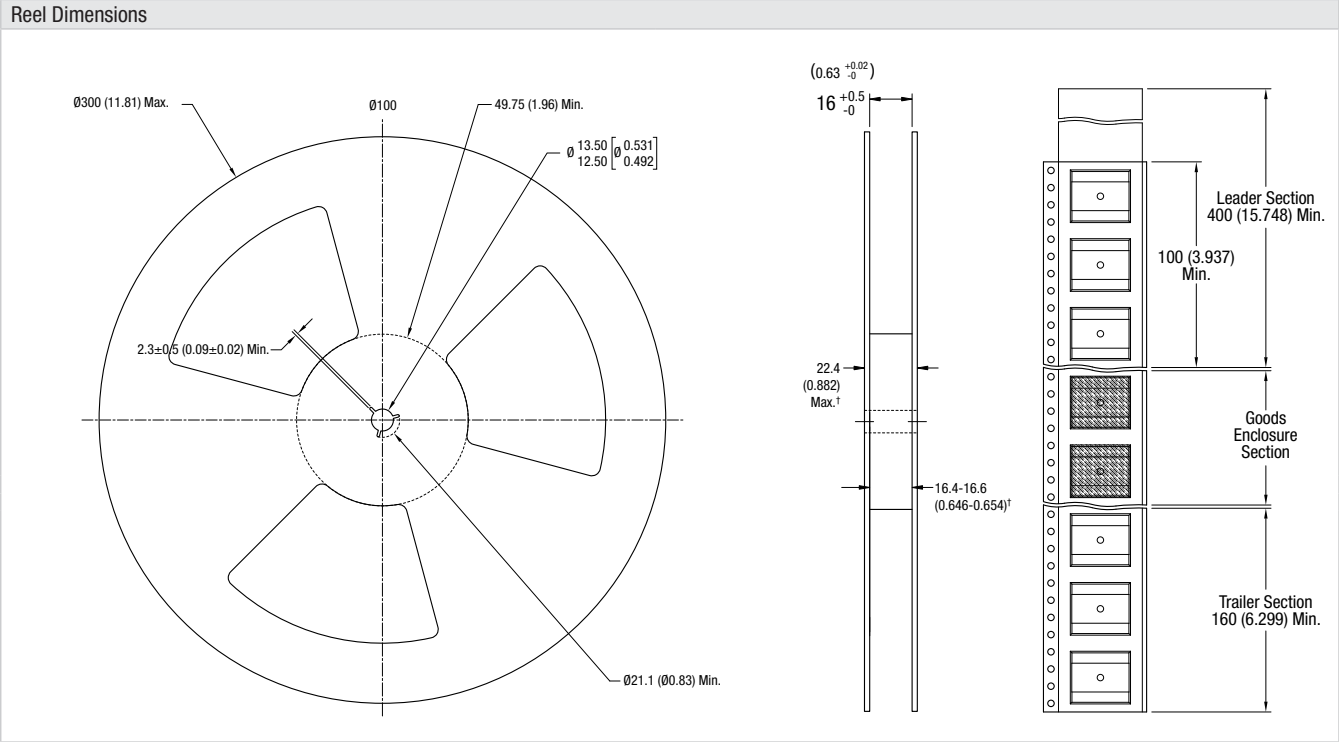
**TEMPERATURE Vs CURRENT**



**INDUCTANCE Vs FREQUENCY**



**PACKAGE SPECIFICATIONS**



Murata Power Solutions, Inc.  
11 Cabot Boulevard, Mansfield, MA 02048-1151 U.S.A.  
ISO 9001 and 14001 REGISTERED

Murata Power Solutions, Inc. makes no representation that the use of its products in the circuits described herein, or the use of other technical information contained herein, will not infringe upon existing or future patent rights. The descriptions contained herein do not imply the granting of licenses to make, use, or sell equipment constructed in accordance therewith. Specifications are subject to change without notice.  
© 2013 Murata Power Solutions, Inc.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Murata:](#)

[30101AC](#) [30151AC](#) [30201AC](#) [30800AC](#)