



## FEATURES

- Low-profile surface-mount design
- Inductance Range from 85nH to 220nH
- Rated current up to 78A<sub>pk</sub>
- Materials meet UL94V-0
- Custom inductance values available
- RoHS compliant
- J-STD-020 D.1 reflow

## PRODUCT OVERVIEW

The 3000B 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.

# 3000B Series

Surface Mount Power Inductor

## SELECTION GUIDE

Order Code	Inductance (1MHz, 0.1V)		I <sub>DC</sub> <sup>3</sup>	I <sub>SAT</sub> (Typ.) <sup>4</sup>		DC Resistance	
	±20%	Typ. @ I <sub>DC</sub>		25°C	100°C	Typ.	Max.
	nH	nH	A	A	A	mΩ	mΩ
<b>30850BC</b>	85	84	37	78	71	0.29	0.42
<b>30101BC</b>	100	102	37	66	58	0.29	0.42
<b>30121BC</b>	114	112	37	59	50	0.29	0.42
<b>30151BC</b>	154	143	37	43	38	0.29	0.42
<b>30221BC</b>	200	169	29	32	29	0.29	0.42

## ABSOLUTE MAXIMUM RATINGS

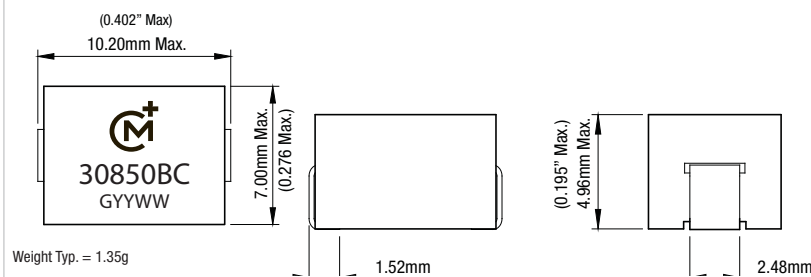
Operating temperature range	-40°C to +130°C
Storage temperature range	-40°C to +155°C

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

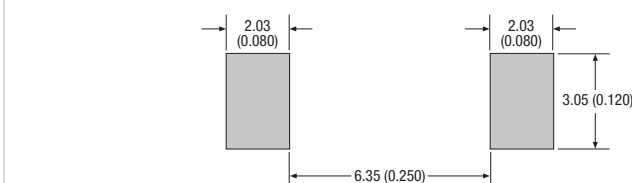
Peak reflow solder temperature	245°C
Pin finish	SAC305
Moisture sensitivity level <sup>2</sup>	1

## Mechanical Dimensions

### Mechanical Dimensions



### 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.

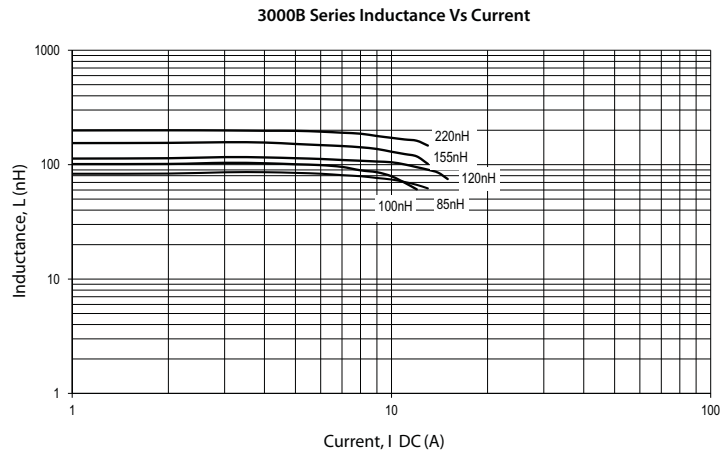
3 I<sub>DC</sub> is the value at which the inductance falls to 80% of its nominal value or when its temperature reaches 40°C, whichever is sooner.

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

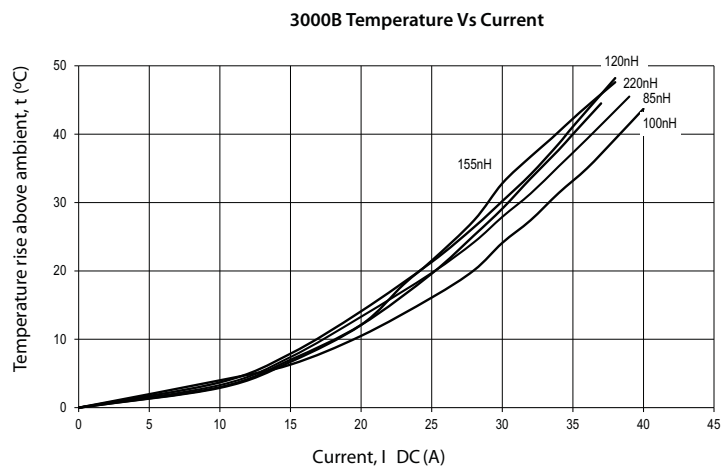


For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

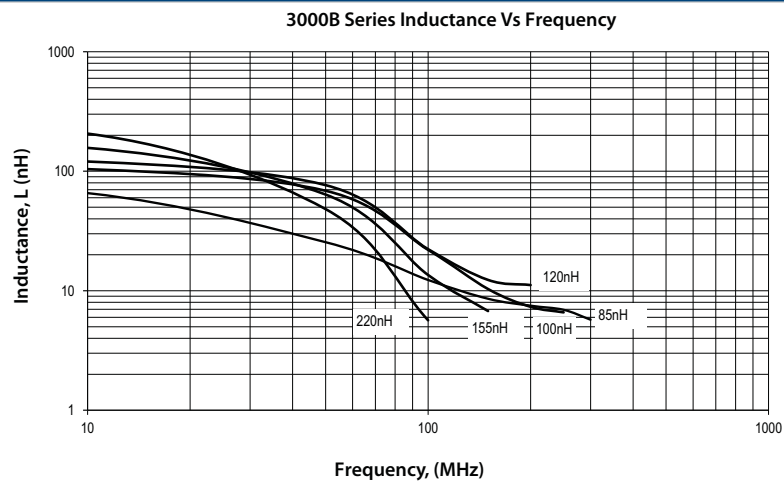
**INDUCTANCE Vs CURRENT**



**TEMPERATURE Vs CURRENT**

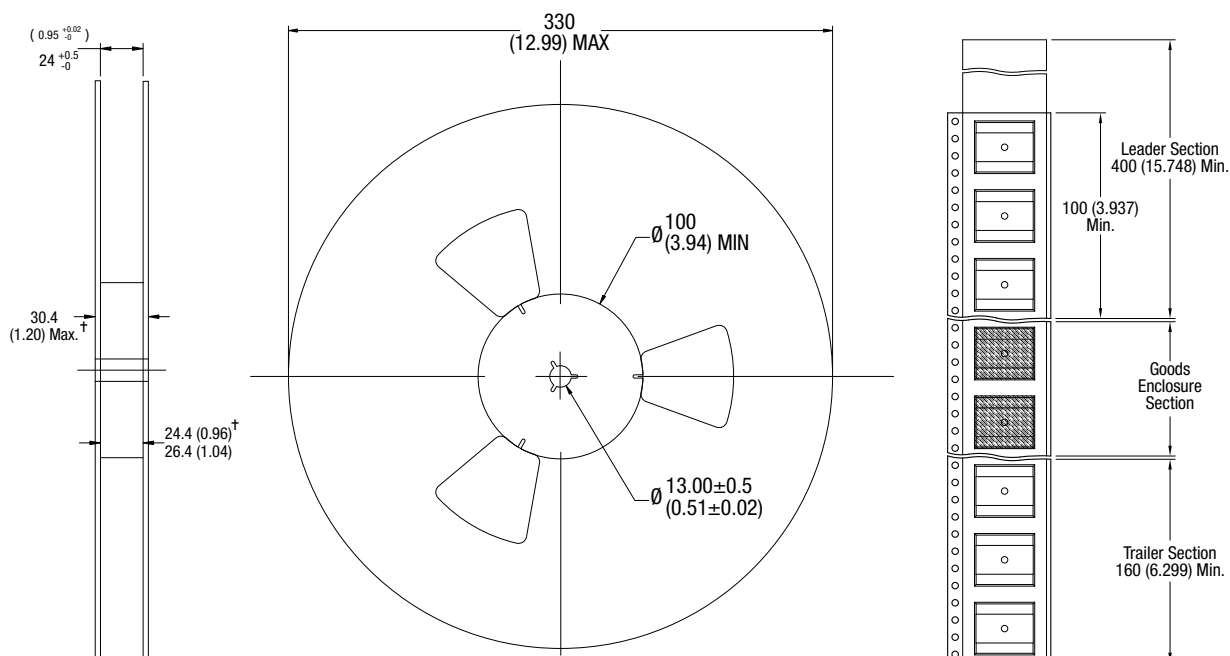


**INDUCTANCE Vs FREQUENCY**

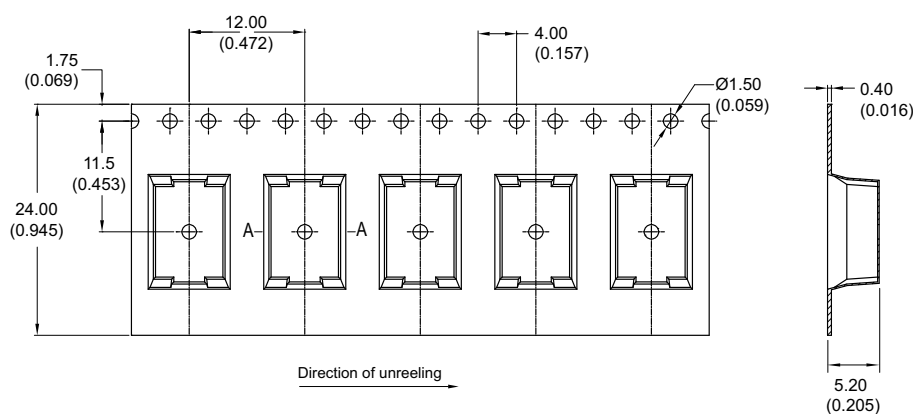


**PACKAGE SPECIFICATIONS**

**Reel Dimensions**



**Reel Dimensions**



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