3000A Series

Surface Mount Power Inductor





FEATURES

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

PRODUCT OVERVIEW

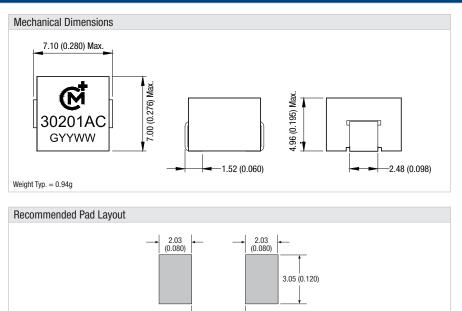
The 3000A series are a range of high-current, surface-mount bead inductors, suited to a variety of applications. The products are designed for noise suppression in high-frequency, high-current switching power supplies, DC-DC converters, DC-AC inverters and VRMs.

SELECTION GUIDI

SELECTION GOIDE							
Order Code	Inductance (1MHz, 0.1V)		DC3	Isat (Typ.) ⁴		DC Resistance	
	±20%	Typ. @ Icc	Тур.	25°C	100°C	Тур.	Max.
	nH	nH	Α	А	Α	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 RATINGSOperating temperature range-40°C to +130°CStorage temperature range-40°C to +155°CSOLDERING INFORMATION'-40°C to +155°CPeak reflow solder temperature250°CPin finishSAC305Moisture sensitivity level²1

Mechanical Dimensions



Specifications typical at $T_{A} = 25^{\circ}C$

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

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

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.

3.3 (0.130)

 $3 \, I_{DC}$ 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.

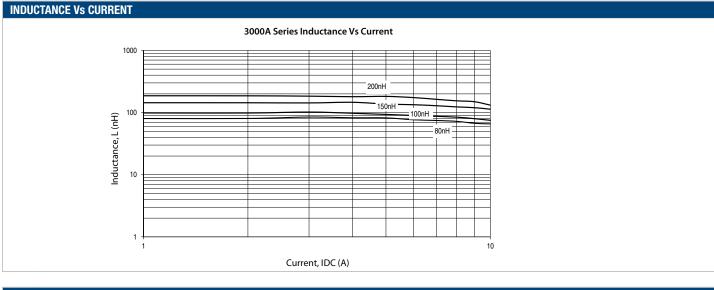


www.murata-ps.com/support

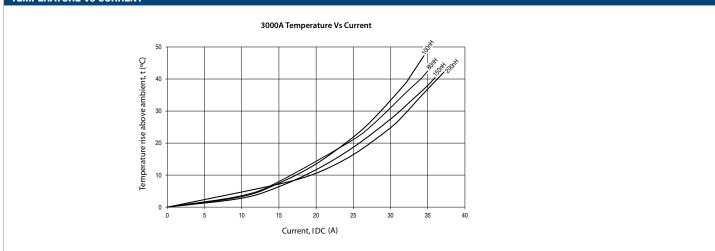


3000A Series

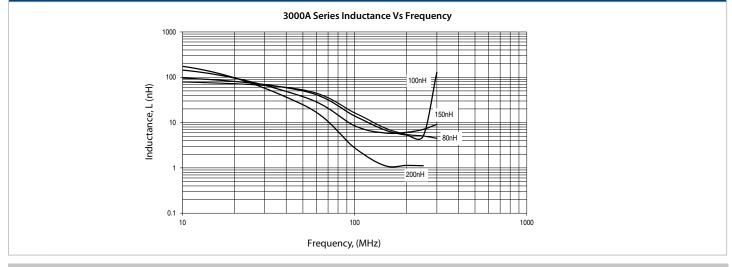
Surface Mount Power Inductor



TEMPERATURE Vs CURRENT



INDUCTANCE Vs FREQUENCY

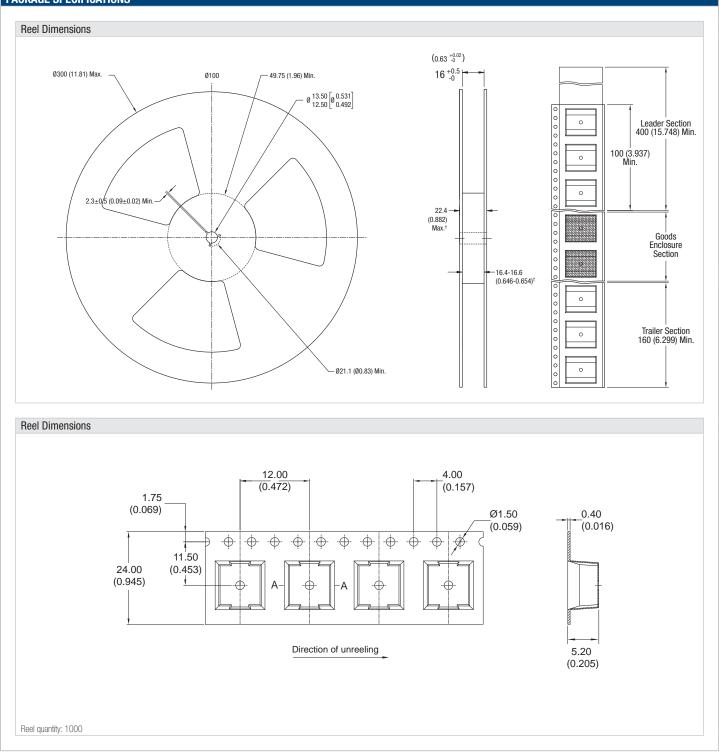


muRata Ps Murata Power Solutions

3000A Series

Surface Mount Power Inductor

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.