

## **3000A Series**

**Surface Mount Power Inductor** 



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|  |    |   |  |

- 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

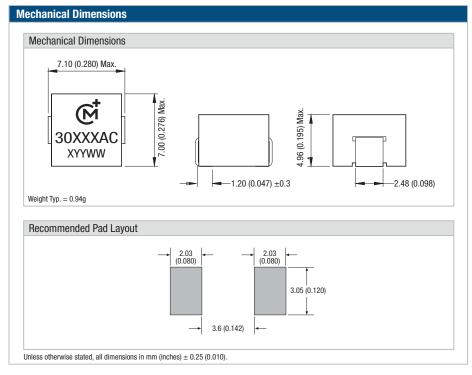
| PRODUCT OVERVIEV |
|------------------|
|------------------|

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 |                         |                        |                  |              |       |               |      |
|-----------------|-------------------------|------------------------|------------------|--------------|-------|---------------|------|
|                 | Inductance (1MHz, 0.1V) |                        | IDC <sup>3</sup> | Isat (Typ.)4 |       | DC Resistance |      |
| Order Code      | ±20%                    | Typ. @ I <sub>DC</sub> | Тур.             | 25°C         | 100°C | Тур.          | Max. |
|                 | nH                      | nH                     | Α                | Α            | 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 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      |



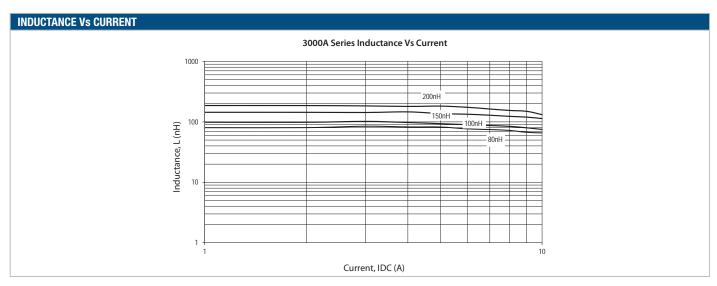


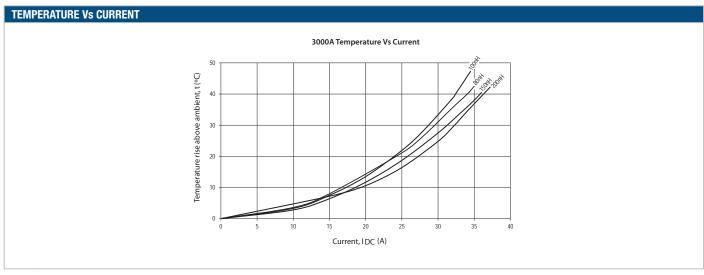


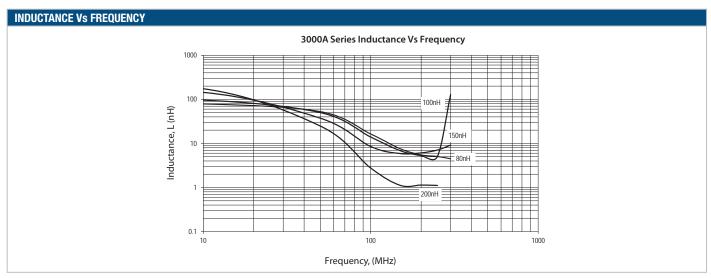
Specifications typical at  $T_A = 25^{\circ}C$ 

- 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 loc 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  $\ensuremath{\mathsf{I}_{\mathsf{SAT}}}$  is the value at which the inductance falls to 80% of its nominal value.

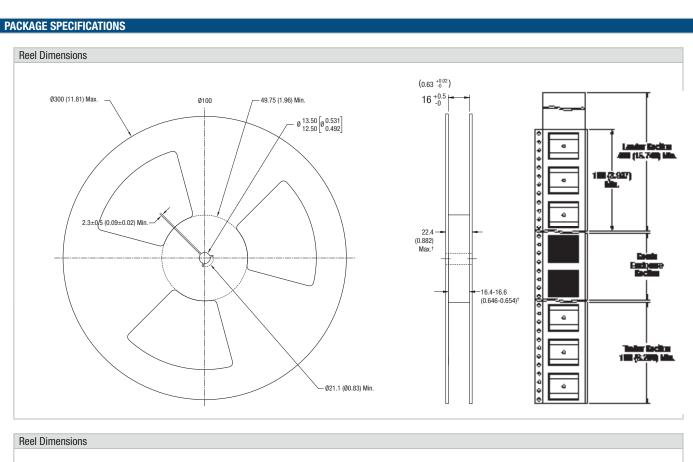
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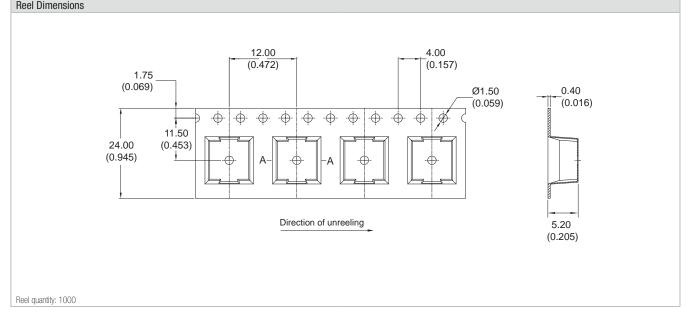






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- Undersea equipment
- Power plant control equipment
- Medical equipment
- Transportation equipment ( automobiles, trains, ships, etc.)
- Traffic signal equipment
- Disaster prevention / crime prevention equipment
- Data Processing equipment

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