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4000 Series

**Toroidal Surface Mount Inductors** 



#### **FEATURES**

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- 3.3µH to 330µH
- Surface mount
- J-STD-020C reflow
- Up to 5.20A loc
- UL94 V-0 package materials
- Compact size
- Toroidal construction minimizes EMI
- Pick & place compatible
- Backward compatible with Sn/Pb soldering systems

| <br>   | _ |   | <br> |     |    |       |   |    |
|--------|---|---|------|-----|----|-------|---|----|
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The 4000 series is a range of surface mount toroidal inductors designed for use in switching power supplies and DC/DC converters. The parts are ideal for applications requiring low profile compact components in a surface mount package.

| SELECTION GUIDE |  |                                     |                         |               |  |
|-----------------|--|-------------------------------------|-------------------------|---------------|--|
| Order Code      | Inductance<br>(10kHz, 10mV <sub>AC</sub> ) | Inductance Range<br>(10kHz, 10mVac) | DC Current <sup>1</sup> | DC Resistance |  |
|                 | Nom.                                       | Min Max.                            | Max.                    | Max.          |  |
|                 | μΗ   | μΗ                                  | Α                       | mΩ            |  |
| 403R3C          | 3.3  | 2.4-3.9                             | 5.20                    | 17            |  |
| 404R7C          | 4.7  | 3.7-6.1                             | 4.40                    | 19            |  |
| 406R8C          | 6.8  | 5.3-8.8                             | 3.60                    | 20            |  |
| 40100C          | 10   | 7.2-12.0                            | 3.00                    | 23            |  |
| 40150C          | 15   | 11.9-19.8                           | 2.40                    | 30            |  |
| 40220C          | 22   | 16.2-27.0                           | 2.10                    | 35            |  |
| 40330C          | 33   | 24.8-41.4                           | 1.66                    | 54            |  |
| 40470C          | 47   | 35.3-58.9                           | 1.42                    | 79            |  |
| 40680C          | 68   | 50.3-83.9                           | 1.20                    | 148           |  |
| 40101C          | 100  | 74.4-124                            | 0.94                    | 177           |  |
| 40151C          | 150  | 115-192                             | 0.76                    | 273           |  |
| 40221C          | 220  | 165-275                             | 0.67                    | 405           |  |
| 40331C          | 330  | 247-412                             | 0.54                    | 610           |  |

| ABSOLUTE MAXIMUM RATINGS             |                |
|--------------------------------------|----------------|
| Operating free air temperature range | -40°C to 85°C  |
| Storage temperature range            | -40°C to 125°C |

| SOLDERING INFORMATION <sup>2</sup> |              |  |
|------------------------------------|--------------|--|
| Peak reflow temperature            | 245°C        |  |
| Pin finish                         | Pure tin dip |  |

All specifications typical at T<sub>A</sub>=25°C

- 1 Maximum DC current occurs when either the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.
- 2 For further information, please visit www.murata-ps.com/rohs







**Toroidal Surface Mount Inductors** 

## **PACKAGE SPECIFICATIONS** MECHANICAL DIMENSIONS RECOMMENDED FOOTPRINT DETAILS 14.10 (0.555) Max. -40331C 13.21 (0.520) muRata Ps 14.22 (0.560) Max. 11.68 (0.460) 1.52 (0.060) -All dimensions in mm (inches). TUBE OUTLINE DIMENSIONS x4 PLACES 0.127 (0.005) (S) 0.60±0.15 (0.024±0.006) 8.76 (0.345) Max. 9.2 (0.362) ATTA 15.00 (0.591<del>)</del> 12.32 (0.485) 10.60 (0.417) All dimensions in mm (inches). Tube quantity: 30 All dimensions in mm (inches).. Tube material: Antistatic coated clear PVC Package weight 3.2g. Tube length: 475±2 [18.701±0.079]

# **Mouser Electronics**

**Authorized Distributor** 

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### Murata:

<u>40100C</u> <u>40101C</u> <u>40150C</u> <u>40151C</u> <u>40220C</u> <u>40221C</u> <u>40330C</u> <u>40331C</u> <u>40470C</u> <u>40680C</u> <u>40688C</u> <u>403R3C</u> 404R7C 406R8 40220 40470 40221 40150 40101 40151 40100 40330 40331 40680