

# 4100 Series

### **Toroidal Surface Mount Inductors**



#### **FEATURES**

| RoHS | comp | liant |
|------|------|-------|
|------|------|-------|

- 2.7µH to 330µH
- Surface mount
- J-STD-020C reflow
- Up to 8.10A loc
- UL94 V-0 package materials
- Compact size
- Toroidal construction minimizes EMI
- Pick & place compatible
- Backward compatible with Sn/Pb soldering systems

#### **DESCRIPTION**

The 4100 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.

| ECTION GUIDE |                               |                                     |                         |               |
|--------------|-------------------------------|-------------------------------------|-------------------------|---------------|
| Order Code   | Inductance<br>(10kHz, 10mVac) | Inductance Range<br>(10kHz, 10mVac) | DC Current <sup>1</sup> | DC Resistance |
| Order Code   | Nom.                          | Min Max.                            | Max.                    | Max.          |
|              | μH                            | μН                                  | А                       | mΩ            |
|              |                               | Discontinued                        |                         |               |
| 412R7C       | 2.7                           | 2.1 - 3.5                           | 8.1                     | 14            |
| 414R7C       | 4.7                           | 3.3 - 5.4                           | 6.7                     | 18            |
| 416R8C       | 6.8                           | 4.7 - 7.8                           | 5.7                     | 20            |
| 41100C       | 10                            | 7.3 - 12.2                          | 4.7                     | 24            |
| 41150C       | 15                            | 10.6 - 17.6                         | 4.0                     | 28            |
| 41220C       | 22                            | 15.8 - 26.3                         | 3.3                     | 33            |
| 41330C       | 33                            | 23.8 - 39.6                         | 2.7                     | 38            |
| 41470C       | 47                            | 35.5 - 59.2                         | 2.2                     | 62            |
| 41680C       | 68                            | 52.2 - 87.0                         | 1.75                    | 110           |
| 41101C       | 100                           | 75.2 - 125                          | 1.47                    | 158           |
| 41151C       | 150                           | 114 - 189                           | 1.16                    | 247           |
| 41221C       | 220                           | 164 - 274                           | 1.03                    | 377           |
| 41331C       | 330                           | 247 - 412                           | 0.83                    | 462           |

| 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  $\rm T_A{=}25^{\circ}C$ 

- 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







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## **PACKAGE SPECIFICATIONS** MECHANICAL DIMENSIONS RECOMMENDED FOOTPRINT DETAILS 16.76 (0.660) Max. 41330C 15.75 (0.620) 14.99 (0.590) 17.53 (0.690) Max. muRata Ps 1.52 (0.060) XYYWW All dimensions in mm (inches). S *ПИЧЧЧ*ЧҢҢЫРУУУЛ TUBE OUTLINE DIMENSIONS x4 Places ○ 0.127 (0.005) (S) 0.60±0.15 (0.024±0.006) 10.10 (0.398) 9.91 (0.390) Max. 18.00 (0.709) 15.58 (0.614) 14.01 (0.552) All dimensions in mm (inches). Tube quantity: 25 All dimensions in mm (inches). Tube material: Antistatic coated clear PVC Package weight 5.6g Typ. Tube length: 475±2mm (18.701±0.079)