



### FEATURES

- RoHS compliant
- Toroidal construction
- Up to 7.6A loc
- Inductance range from 10μH to 1.0mH
- Low EMI
- UL 94V-0 packaging materials
- Low DC resistance

### PRODUCT OVERVIEW

The 3300 series is a range of through-hole power inductors. Due to the toroidal construction, they exhibit a very low EMI as stray flux is kept to a minimum. Typical applications include switching regulators, and power line filtering.

### SELECTION GUIDE

| Order Code | Inductance, L | DC Current <sup>2</sup> | DC Resistance | Q @ f MHz |     | SRF  | Package Weight |
|------------|---------------|-------------------------|---------------|-----------|-----|------|----------------|
|            | ±15%          | Max.                    | Max.          | Nom.      |     | Typ. | Typ.           |
|            | μH            | A                       | mΩ            | Q         | f   | MHz  | g              |
| 33100C     | 10            | 7.60                    | 20            | 3.4       | 1.0 | 68   | 20.8           |
| 33150C     | 15            | 6.20                    | 27            | 3.3       | 1.0 | 49   | 21.3           |
| 33220C     | 22            | 5.10                    | 33            | 3.4       | 1.0 | 37   | 21.5           |
| 33330C     | 33            | 4.20                    | 40            | 3.5       | 1.0 | 24   | 22.0           |
| 33470C     | 47            | 3.50                    | 48            | 3.4       | 1.0 | 17   | 22.5           |
| 33680C     | 68            | 2.90                    | 57            | 3.5       | 1.0 | 16   | 22.9           |
| 33101C     | 100           | 2.40                    | 70            | 3.9       | 0.8 | 9.7  | 23.7           |
| 33151C     | 150           | 2.00                    | 84            | 3.8       | 0.8 | 7.2  | 24.9           |
| 33221C     | 220           | 1.60                    | 102           | 3.2       | 0.8 | 2.0  | 26.1           |
| 33331C     | 330           | 1.30                    | 126           | 3.4       | 0.8 | 1.9  | 27.8           |
| 33471C     | 470           | 1.10                    | 152           | 2.6       | 0.8 | 1.4  | 29.5           |
| 33681C     | 680           | 0.92                    | 183           | 0.64      | 0.8 | 0.9  | 31.5           |
| 33102C     | 1000          | 0.76                    | 221           | 0.85      | 0.8 | 0.7  | 34.0           |

### ABSOLUTE MAXIMUM RATINGS

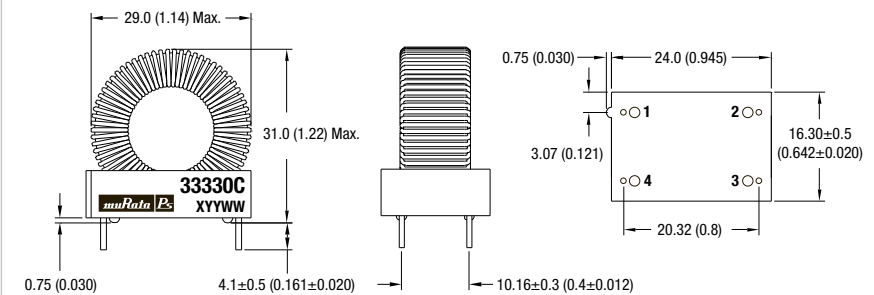
|                                      |                |
|--------------------------------------|----------------|
| Operating free air temperature range | -40°C to 125°C |
| Storage temperature range            | -40°C to 125°C |

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

|                              |       |
|------------------------------|-------|
| Peak wave solder temperature | 260°C |
| Pin finish                   | Tin   |

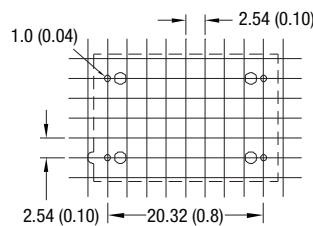
### PACKAGE SPECIFICATIONS

#### Mechanical Dimensions



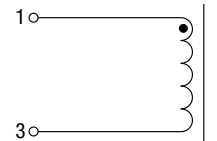
Package weight: See selection guide.

#### Recommended Footprint Details



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

#### Pin Connections



#### Packaging

Supplied in trays (16 pieces per tray)

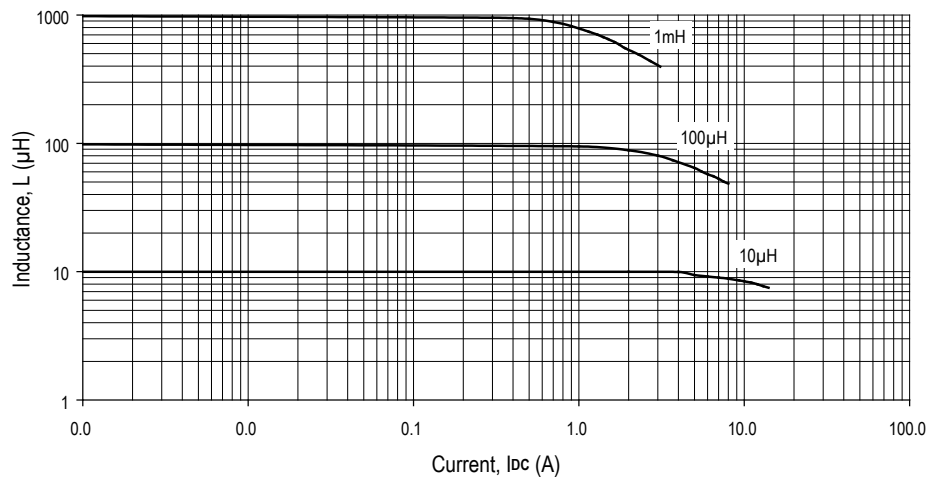
Specifications typical at  $T_a = 25^\circ\text{C}$

1 For further information, please visit [www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

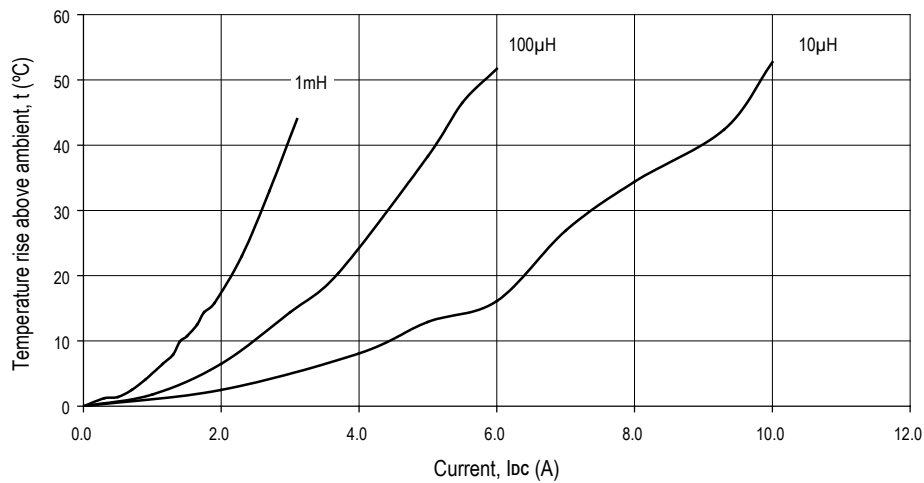
2 The maximum DC current is the value at which the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.



**INDUCTANCE Vs CURRENT**



**TEMPERATURE Vs CURRENT**



**INDUCTANCE Vs FREQUENCY**

