



### FEATURES

- RoHS compliant
- Compact size, low profile
- Surface mount design
- Inductance range from 1.0μH to 3.3mH
- Tape & reel packaging
- UL 94V-0
- J-STD-020C reflow
- Custom solutions available

### PRODUCT OVERVIEW

The 2800 series is a range of bobbin-wound, surface-mount inductors designed for use in switching power supply, and power line filter circuits. The parts are suitable for any application requiring a high saturation current in a miniature surface-mount footprint.

### SELECTION GUIDE

| Order Code | Inductance<br>(10kHz, 100mVAC) | Inductance Range<br>(10kHz, 100mVAC) | DC Current <sup>2</sup> | DC Resistance | Q@f MHz |     | SRF     |
|------------|--------------------------------|--------------------------------------|-------------------------|---------------|---------|-----|---------|
|            | Nom.                           | Min.-Max.                            | Max.                    | Max.          | Nom.    |     | Typical |
|            | μH                             | μH                                   | A                       | mΩ            | Q       | F   | MHz     |
| 28102C     | 1.0                            | 0.68 - 1.02                          | 15.5                    | 2.6           | 45.6    | 1.0 | 104     |
| 28152C     | 1.5                            | 1.12 - 1.68                          | 12.5                    | 3.6           | 43.9    | 1.0 | 72      |
| 28222C     | 2.2                            | 1.56 - 2.34                          | 11.2                    | 4.4           | 36.9    | 1.0 | 58      |
| 28332C     | 3.3                            | 2.84 - 4.26                          | 9.3                     | 7.5           | 34.6    | 1.0 | 42      |
| 28472C     | 4.7                            | 3.68 - 5.52                          | 8.3                     | 10            | 33.3    | 1.0 | 37      |
| 28682C     | 6.8                            | 5.52 - 8.28                          | 6.8                     | 14            | 31.2    | 1.0 | 29      |
| 28103C     | 10                             | 7.84 - 11.76                         | 5.9                     | 18            | 31.1    | 1.0 | 22.5    |
| 28153C     | 15                             | 12.0 - 18.0                          | 4.77                    | 28            | 31.0    | 1.0 | 17.8    |
| 28223C     | 22                             | 17.7 - 26.5                          | 3.85                    | 42            | 43.5    | 1.0 | 14.4    |
| 28333C     | 33                             | 26.2 - 39.4                          | 3.22                    | 63            | 42.8    | 1.0 | 11.8    |
| 28473C     | 47                             | 39.0 - 58.4                          | 2.66                    | 86            | 31.5    | 1.0 | 10.4    |
| 28683C     | 68                             | 55.4 - 83.0                          | 2.16                    | 122           | 33.9    | 1.0 | 8.6     |
| 28104C     | 100                            | 80.8 - 121.2                         | 1.80                    | 174           | 21.4    | 0.8 | 7.7     |
| 28154C     | 150                            | 121 - 181                            | 1.40                    | 276           | 20.9    | 0.8 | 6.7     |
| 28224C     | 220                            | 178 - 266                            | 1.20                    | 381           | 18.0    | 0.8 | 5.8     |
| 28334C     | 330                            | 266 - 398                            | 0.95                    | 575           | 30.8    | 0.8 | 5.0     |
| 28474C     | 470                            | 383 - 575                            | 0.78                    | 816           | 31.7    | 0.8 | 4.3     |
| 28684C     | 680                            | 548 - 822                            | 0.64                    | 1170          | 20.4    | 0.8 | 4.2     |
| 28105C     | 1000                           | 940 - 1150                           | 0.51                    | 1820          | 21.0    | 0.8 | 3.8     |
| 28155C     | 1500                           | 1390 - 1700                          | 0.41                    | 2620          | 19.8    | 0.8 | 3.4     |
| 28225C     | 2200                           | 1960 - 2400                          | 0.35                    | 3720          | 15.8    | 0.8 | 3.3     |
| 28335C     | 3300                           | 3030 - 3700                          | 0.29                    | 5760          | 12.8    | 0.8 | 3.2     |

### ABSOLUTE MAXIMUM RATINGS

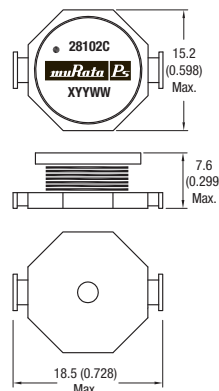
|                             |                |
|-----------------------------|----------------|
| Operating temperature range | -40°C to 125°C |
| Storage temperature range   | -40°C to 150°C |

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

|                                |       |
|--------------------------------|-------|
| Peak reflow solder temperature | 245°C |
| Pin finish                     | Tin   |

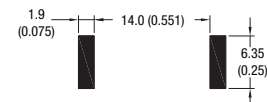
### PACKAGE SPECIFICATIONS

#### Mechanical Dimensions



Package weight: 3.9g Typ.  
All dimensions in mm (inches)  
Dot signifies the innermost turn of the winding

#### Recommended Footprint Details



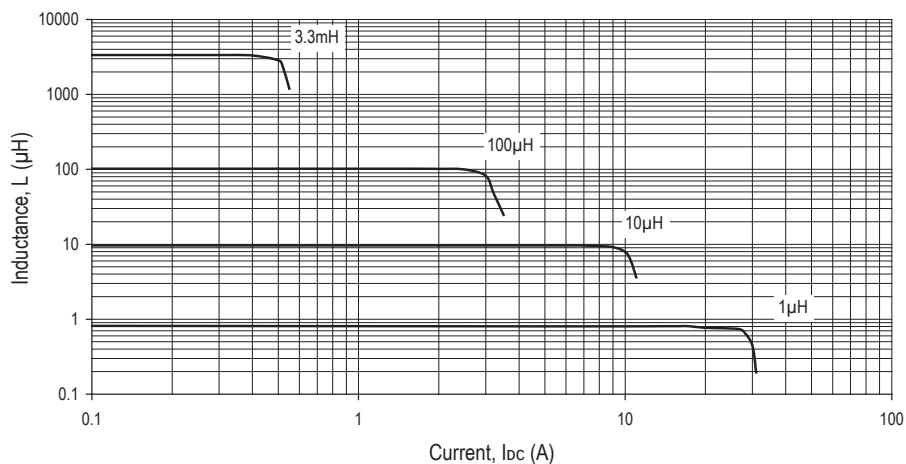
Specifications typical at T<sub>A</sub> = 25°C

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

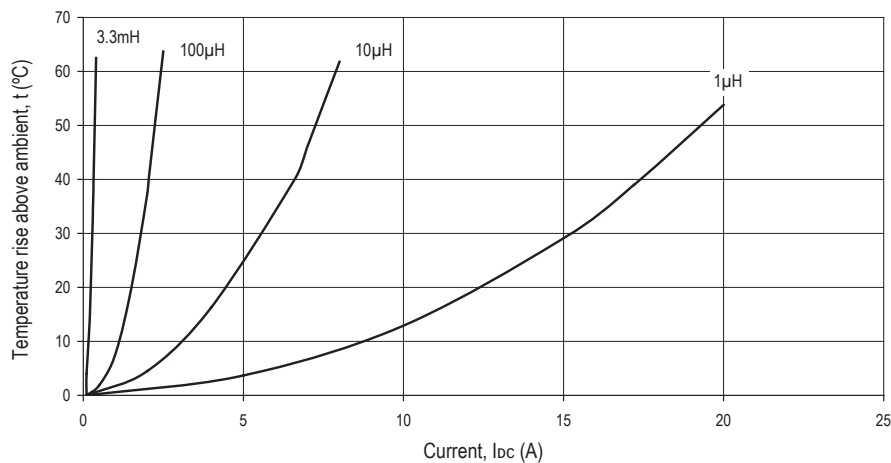


For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

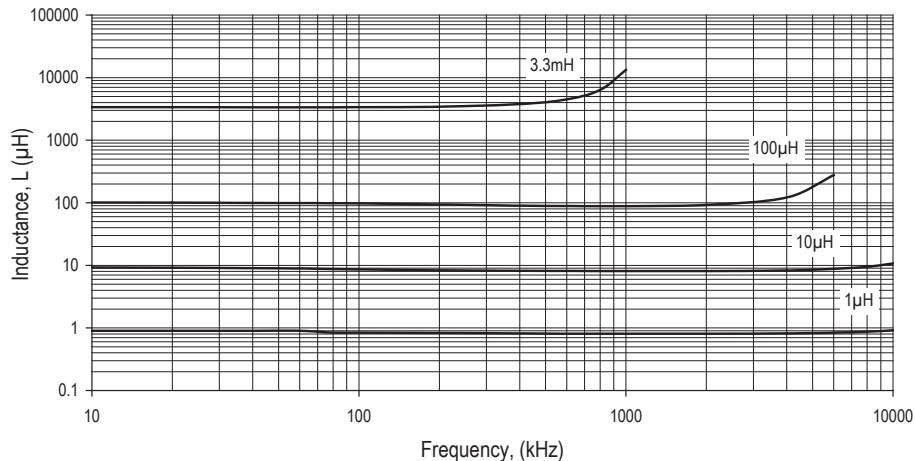
**INDUCTANCE Vs CURRENT**



**TEMPERATURE Vs CURRENT**

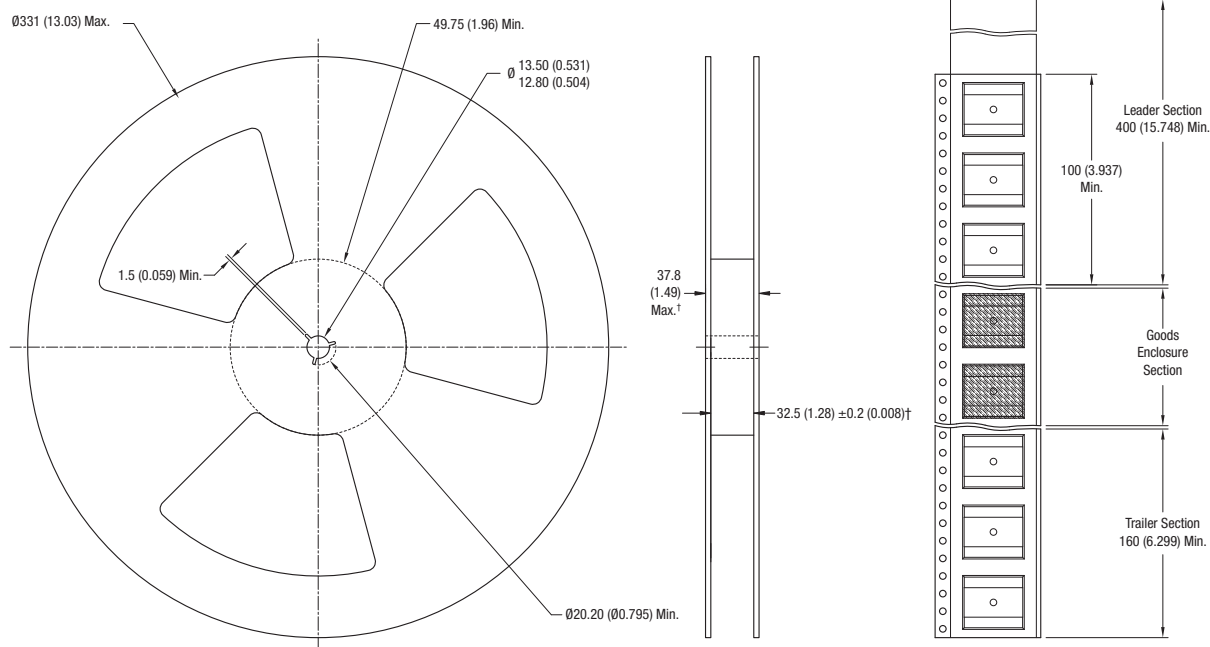


**INDUCTANCE Vs FREQUENCY**



## PACKAGE SPECIFICATIONS

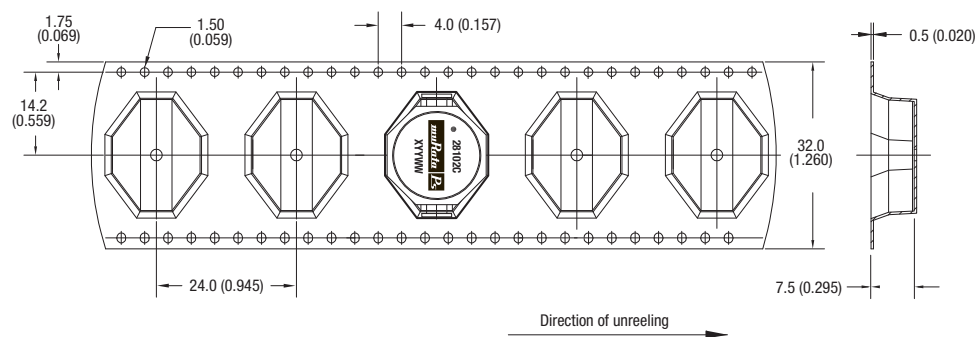
### Mechanical Dimensions



All dimension in mm (inches)

† Measured at hub

### Tape Outline Dimensions



Reel quantity: 350

All dimensions in mm (inches)

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.  
© 2013 Murata Power Solutions, Inc.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Murata:](#)

[28225C](#) [28683C](#) [28222C](#) [28154C](#) [28105C](#) [28472C](#) [28335C](#) [28474C](#) [28153C](#) [28102C](#) [28103C](#) [28473C](#)  
[28684C](#) [28332C](#) [28152C](#) [28333C](#) [28224C](#) [28682C](#) [28104C](#) [28155C](#) [28334C](#) [28223C](#)