



## FEATURES

- RoHS compliant
- Radial format
- Up to 6.3A lbc
- 1.5μH to 68mH
- Low DC resistance
- UL VW-1 rated sleeving
- Backward compatible with Sn/Pb soldering systems
- Custom parts available

## DESCRIPTION

The 1300R Series is a general purpose range of inductors suitable for low to medium current applications such as power supply and other general purpose filtering designs.

## SELECTION GUIDE

| Order Code | Inductance<br>(1kHz, 0.1V <sub>AC</sub> ) | DC Current <sup>1</sup> | DC Resistance |
|------------|---|-------------------------|---------------|
|            | ±10%                                      | Max.                    | Max.          |
|            | μH  | A                       | Ω             |
| 13R152C    | 1.5 ±20%                                  | 6.3                     | 0.008         |
| 13R222C    | 2.2 ±20%                                  | 5.3                     | 0.010         |
| 13R332C    | 3.3 ±20%                                  | 4.8                     | 0.013         |
| 13R472C    | 4.7 ±20%                                  | 4.3                     | 0.017         |
| 13R682C    | 6.8 ±20%                                  | 3.5                     | 0.023         |
| 13R103C    | 10  | 3.0                     | 0.031         |
| 13R153C    | 15  | 2.5                     | 0.042         |
| 13R223C    | 22  | 2.0                     | 0.070         |
| 13R333C    | 33  | 1.8                     | 0.092         |
| 13R473C    | 47  | 1.5                     | 0.110         |
| 13R683C    | 68  | 1.3                     | 0.150         |
| 13R104C    | 100                                       | 1.0                     | 0.240         |
| 13R154C    | 150                                       | 0.82                    | 0.330         |
| 13R224C    | 220                                       | 0.70                    | 0.470         |
| 13R334C    | 330                                       | 0.58                    | 0.640         |
| 13R474C    | 470                                       | 0.45                    | 1.05          |
| 13R684C    | 680                                       | 0.42                    | 1.50          |
| 13R105C    | 1.0mH                                     | 0.33                    | 2.10          |
| 13R155C    | 1.5mH                                     | 0.28                    | 3.10          |
| 13R225C    | 2.2mH                                     | 0.24                    | 4.50          |
| 13R335C    | 3.3mH                                     | 0.19                    | 7.0           |
| 13R475C    | 4.7mH                                     | 0.16                    | 9.3           |
| 13R685C    | 6.8mH                                     | 0.13                    | 13.5          |
| 13R106C    | 10mH                                      | 0.085                   | 23.8          |
| 13R156C    | 15mH                                      | 0.080                   | 31.0          |
| 13R226C    | 22mH                                      | 0.070                   | 48.0          |
| 13R336C    | 33mH                                      | 0.060                   | 68.0          |
| 13R476C    | 47mH                                      | 0.045                   | 120.0         |
| 13R686C    | 68mH                                      | 0.040                   | 152.0         |

## 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 wave solder temperature | 260°C for 10 seconds |
| Pin finish                   | Bright tin           |

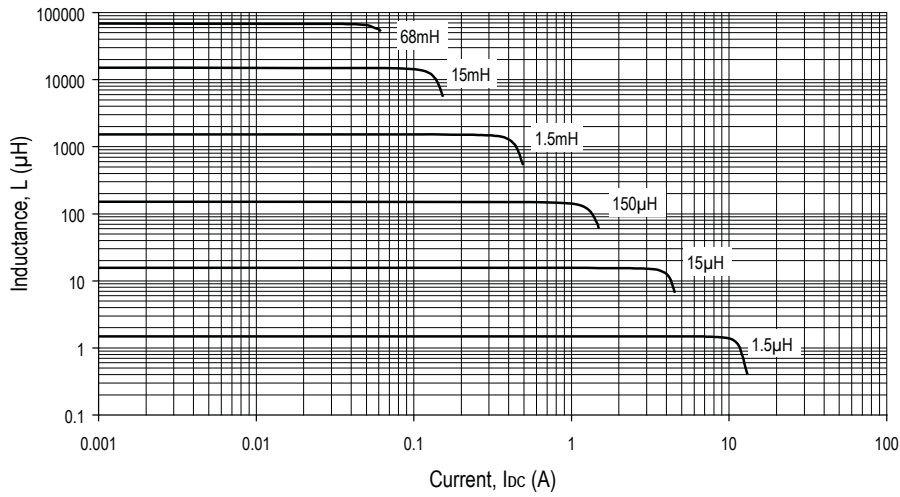
All specifications typical at T<sub>A</sub>=25°C

1 Maximum DC current occurs when either the inductance falls to 90% of its nominal value or when its temperature rise reaches 30°C, whichever is sooner.

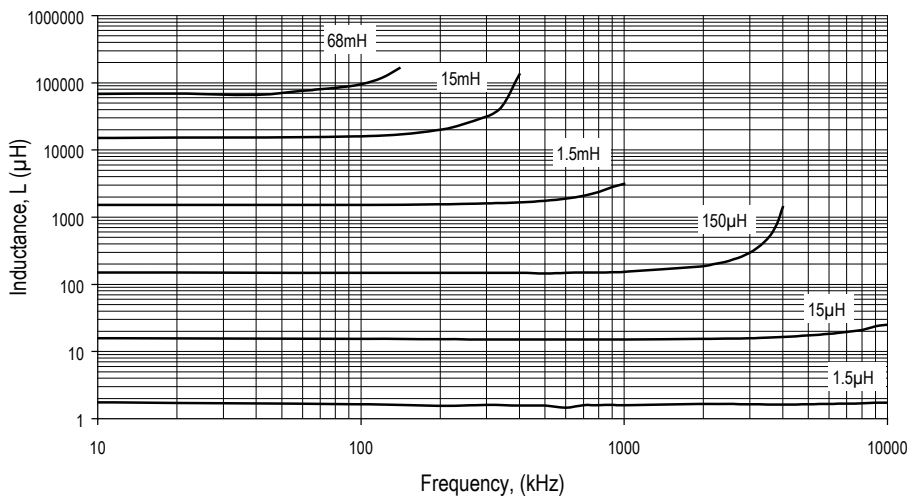
2 For further information, please visit [www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)



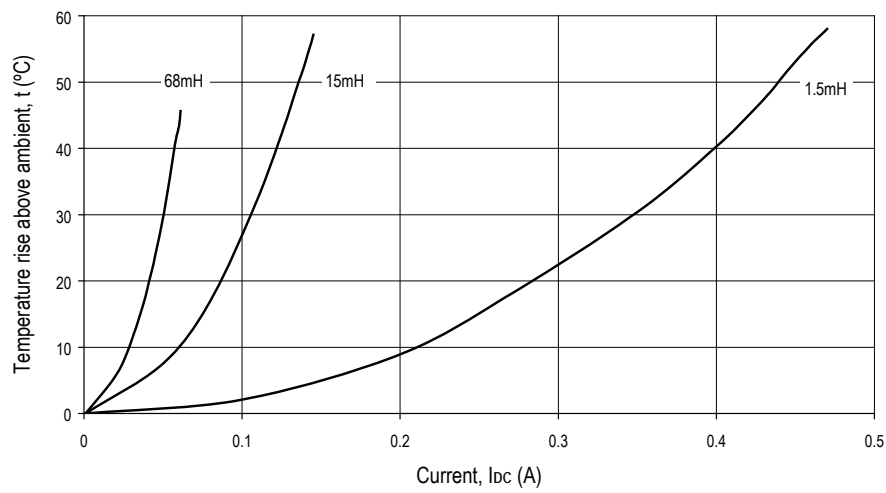
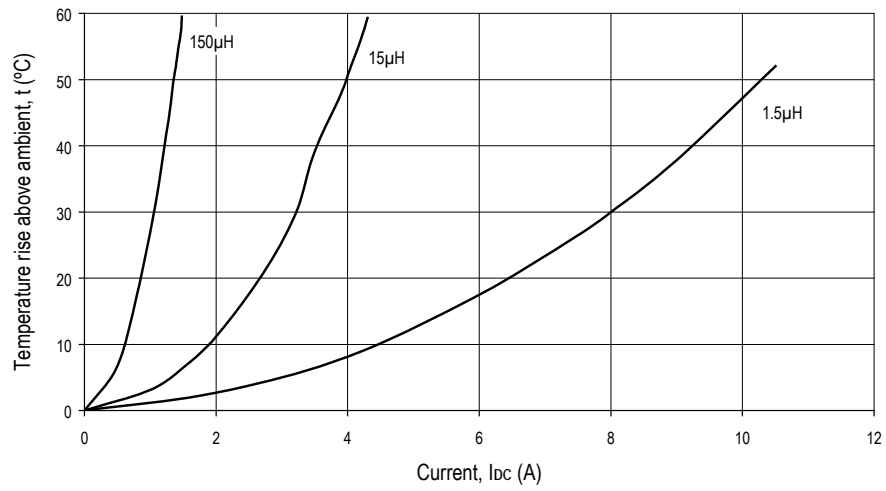
**INDUCTANCE VS CURRENT**



**INDUCTANCE VS FREQUENCY**

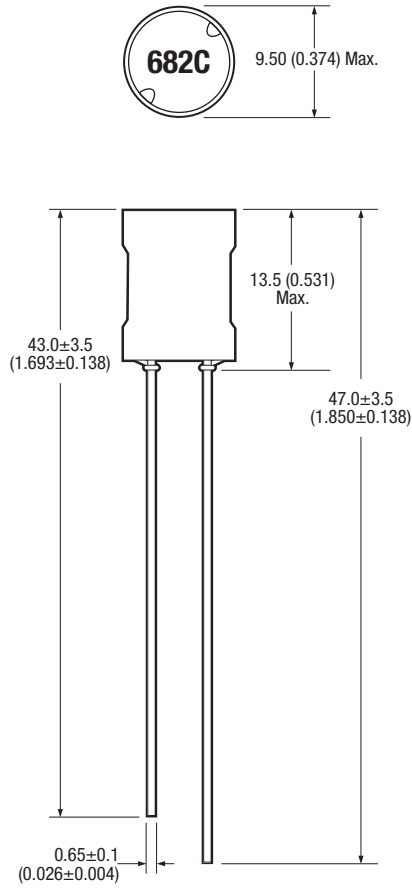


**TEMPERATURE Vs CURRENT**



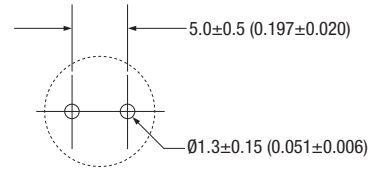
## PACKAGE SPECIFICATIONS

### MECHANICAL DIMENSIONS



All dimensions in mm (inches). Package weight 2.4g Typ.

### RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm (inches)

### PACKAGING DETAILS

Supplied in cartons (200 pieces per carton)