



### FEATURES

- RoHS compliant
- Radial format
- Up to 1.62A I<sub>dc</sub>
- 10μH to 68mH
- Low DC resistance
- Miniature size
- PCB mounting
- MIL-I-23053/5 class I sleeving
- Fully tinned leads
- Supplied in bags of 100
- Compatible with RoHS soldering systems
- Backward compatible with Sn/Pb soldering systems
- Custom parts available

### DESCRIPTION

The 2200R Series is a general purpose range of inductors suitable for low to medium current applications. Their small footprint makes them ideal for high density applications where a chip inductor will not cope with the power requirement.

### SELECTION GUIDE

| Order Code | Inductance,<br>(1kHz, 0.1V <sub>ac</sub> ) | DC Current <sup>1</sup> | DC Resistance | Q at f kHz |      | SRF  |
|------------|--------------------------------------------|-------------------------|---------------|------------|------|------|
|            | ±10%                                       | Max.                    | Max.          | Nom.       |      | Nom. |
|            | μH                                         | A                       | Ω             | Q          | f    | MHz  |
| 22R103C    | 10.0                                       | 1.62                    | 0.05          | 65         | 1000 | 21.2 |
| 22R153C    | 15.0                                       | 1.35                    | 0.07          | 60         | 500  | 19.4 |
| 22R223C    | 22.0                                       | 1.08                    | 0.09          | 50         | 500  | 17.0 |
| 22R333C    | 33.0                                       | 0.90                    | 0.14          | 50         | 500  | 11.4 |
| 22R473C    | 47.0                                       | 0.77                    | 0.22          | 50         | 500  | 10.9 |
| 22R683C    | 68.0                                       | 0.77                    | 0.28          | 90         | 100  | 8.7  |
| 22R104C    | 100.0                                      | 0.67                    | 0.39          | 90         | 100  | 7.0  |
| 22R154C    | 150.0                                      | 0.52                    | 0.54          | 90         | 100  | 5.7  |
| 22R224C    | 220.0                                      | 0.43                    | 0.83          | 100        | 100  | 4.4  |
| 22R334C    | 330.0                                      | 0.38                    | 1.21          | 100        | 100  | 3.7  |
| 22R474C    | 470.0                                      | 0.31                    | 1.65          | 110        | 100  | 3.2  |
| 22R684C    | 680.0                                      | 0.25                    | 2.64          | 120        | 100  | 2.5  |
| 22R105C    | 1.0mH                                      | 0.17                    | 3.63          | 120        | 100  | 2.1  |
| 22R155C    | 1.5mH                                      | 0.13                    | 6.49          | 130        | 100  | 1.9  |
| 22R225C    | 2.2mH                                      | 0.11                    | 8.58          | 90         | 50   | 1.7  |
| 22R335C    | 3.3mH                                      | 0.10                    | 11.0          | 140        | 150  | 1.2  |
| 22R475C    | 4.7mH                                      | 0.081                   | 15.0          | 150        | 150  | 0.95 |
| 22R685C    | 6.8mH                                      | 0.072                   | 22.0          | 145        | 150  | 0.85 |
| 22R106C    | 10.0mH                                     | 0.063                   | 37.4          | 155        | 150  | 0.62 |
| 22R156C    | 15.0mH                                     | 0.054                   | 51.7          | 140        | 150  | 0.51 |
| 22R226C    | 22.0mH                                     | 0.045                   | 82.5          | 100        | 50   | 0.34 |
| 22R336C    | 33.0mH                                     | 0.036                   | 118.8         | 95         | 50   | 0.28 |
| 22R476C    | 47.0mH                                     | 0.027                   | 169.4         | 90         | 50   | 0.25 |
| 22R686C    | 68.0mH                                     | 0.018                   | 242.0         | 70         | 50   | 0.20 |

### TYPICAL CORE/WIRE CHARACTERISTICS

| Inductance Temperature Coefficient | Resistance Temperature Coefficient | Curie Temperature (T <sub>c</sub> ) | Saturation Flux (B <sub>sat</sub> ) |
|------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|
| 350ppm                             | 3900ppm                            | 190°C                               | 325mT                               |

### ABSOLUTE MAXIMUM RATINGS

|                                      |                |
|--------------------------------------|----------------|
| Operating free air temperature range | -25°C to 70°C  |
| Storage temperature range            | -40°C to 125°C |

### SOLDERING INFORMATION<sup>2</sup>

|                              |                      |
|------------------------------|----------------------|
| Peak wave solder temperature | 300°C for 10 seconds |
| Pin finish                   | Hot dipped tin       |



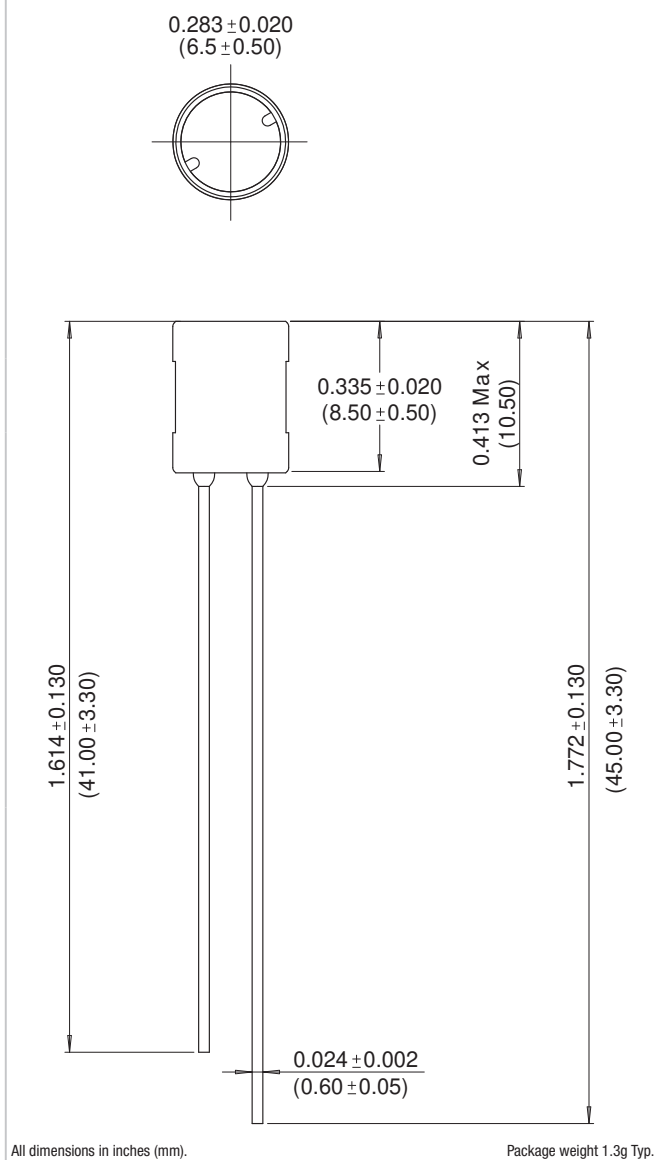
For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

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

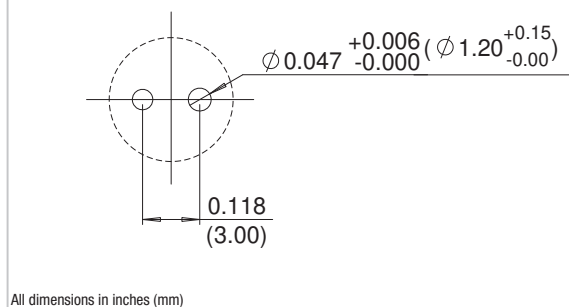
- 1 Maximum DC current occurs when either the inductance falls to 90% of its nominal value or when its temperature rise reaches 30°C, whichever is sooner.
- 2 For further information, please visit [www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

## PACKAGE SPECIFICATIONS

### MECHANICAL DIMENSIONS



### RECOMMENDED FOOTPRINT DETAILS



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