



FEATURES

- RoHS compliant
- Radial format
- Up to 1.8A I_{dc}
- 10µH to 68mH
- Low DC resistance
- Miniature size
- PCB mounting
- MIL-I-23053/5 class III sleeving
- Fully tinned leads
- Supplied in packs of 20
- Compatible with RoHS soldering systems
- Backward compatible with Sn/Pb soldering systems
- Custom parts available

DESCRIPTION

The 1700 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, (1kHz) | DC Current ¹ | DC Resistance | Q at f kHz | | SRF |
|------------|--------------------|-------------------------|---------------|------------|------|------|
| | ±10% | Max. | Max. | Nom. | | Nom. |
| | µH | A | Ω | Q | f | MHz |
| 17103C | 10.0 | 1.80 | 0.05 | 40 | 1000 | 21.2 |
| 17153C | 15.0 | 1.50 | 0.06 | 30 | 500 | 19.4 |
| 17223C | 22.0 | 1.20 | 0.08 | 30 | 500 | 17.0 |
| 17333C | 33.0 | 1.00 | 0.13 | 25 | 500 | 11.4 |
| 17473C | 47.0 | 0.86 | 0.20 | 25 | 500 | 10.9 |
| 17683C | 68.0 | 0.85 | 0.26 | 70 | 100 | 10.6 |
| 17104C | 100.0 | 0.74 | 0.35 | 65 | 100 | 8.9 |
| 17154C | 150.0 | 0.58 | 0.49 | 80 | 100 | 6.2 |
| 17224C | 220.0 | 0.48 | 0.75 | 90 | 100 | 5.4 |
| 17334C | 330.0 | 0.42 | 1.10 | 95 | 100 | 4.5 |
| 17474C | 470.0 | 0.34 | 1.50 | 100 | 100 | 3.2 |
| 17684C | 680.0 | 0.28 | 2.40 | 105 | 100 | 3.0 |
| 17105C | 1.0mH | 0.19 | 3.30 | 120 | 100 | 2.5 |
| 17155C | 1.5mH | 0.15 | 5.90 | 130 | 100 | 2.1 |
| 17225C | 2.2mH | 0.12 | 7.80 | 130 | 50 | 1.9 |
| 17335C | 3.3mH | 0.11 | 9.1 | 125 | 150 | 1.2 |
| 17475C | 4.7mH | 0.09 | 12.0 | 130 | 150 | 0.95 |
| 17685C | 6.8mH | 0.08 | 20.0 | 135 | 150 | 0.85 |
| 17106C | 10.0mH | 0.07 | 34.0 | 140 | 150 | 0.62 |
| 17156C | 15.0mH | 0.06 | 45.0 | 145 | 150 | 0.51 |
| 17226C | 22.0mH | 0.05 | 75.0 | 100 | 50 | 0.34 |
| 17336C | 33.0mH | 0.04 | 100.0 | 90 | 50 | 0.28 |
| 17476C | 47.0mH | 0.03 | 140.0 | 80 | 50 | 0.25 |
| 17686C | 68.0mH | 0.02 | 220.0 | 70 | 50 | 0.20 |

TYPICAL CORE/WIRE CHARACTERISTICS

| Inductance Temperature Coefficient | Resistance Temperature Coefficient | Curie Temperature (T _c) | Saturation Flux (B _{SAT}) |
|------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|
| 350ppm | 3900ppm | 190°C | 325mT |

ABSOLUTE MAXIMUM RATINGS

| | |
|--------------------------------------|----------------|
| Operating free air temperature range | 0°C to 70°C |
| Storage temperature range | -40°C to 125°C |

SOLDERING INFORMATION²

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

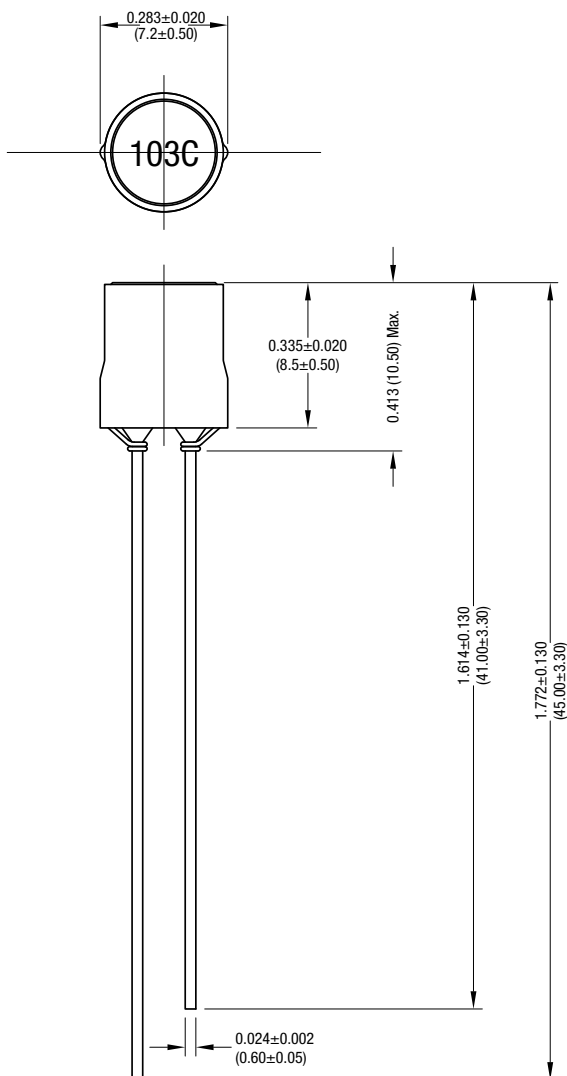
All specifications typical at T_A=25°C

- 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



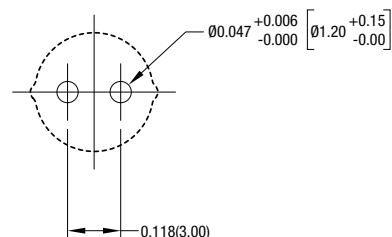
PACKAGE SPECIFICATIONS

MECHANICAL DIMENSIONS



All dimensions in inches (mm). Package weight 1.3g Typ.

RECOMMENDED FOOTPRINT DETAILS



All dimensions in inches (mm)