



## FEATURES

- RoHS compliant
- Radial format
- Up to 1.8A I<sub>DC</sub>
- 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, 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
17103C	10.0	1.80	0.05	65	1000	21.2
17153C	15.0	1.50	0.06	60	500	19.4
17223C	22.0	1.20	0.08	50	500	17.0
17333C	33.0	1.00	0.13	50	500	11.4
17473C	47.0	0.86	0.20	50	500	10.9
17683C	68.0	0.85	0.26	90	100	8.7
17104C	100.0	0.74	0.35	90	100	7.0
17154C	150.0	0.58	0.49	90	100	5.7
17224C	220.0	0.48	0.75	100	100	4.4
17334C	330.0	0.42	1.10	100	100	3.7
17474C	470.0	0.34	1.50	110	100	3.2
17684C	680.0	0.28	2.40	120	100	2.5
17105C	1.0mH	0.19	3.30	120	100	2.1
17155C	1.5mH	0.15	5.90	130	100	1.9
17225C	2.2mH	0.12	7.80	90	50	1.7
17335C	3.3mH	0.11	10.0	140	150	1.2
17475C	4.7mH	0.09	13.6	150	150	0.95
17685C	6.8mH	0.08	20.0	145	150	0.85
17106C	10.0mH	0.07	34.0	155	150	0.62
17156C	15.0mH	0.06	47.0	140	150	0.51
17226C	22.0mH	0.05	75.0	100	50	0.34
17336C	33.0mH	0.04	108.0	95	50	0.28
17476C	47.0mH	0.03	154.0	90	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 <sub>C</sub> )	Saturation Flux (B <sub>SAT</sub> )
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 INFORMATION<sup>2</sup>

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



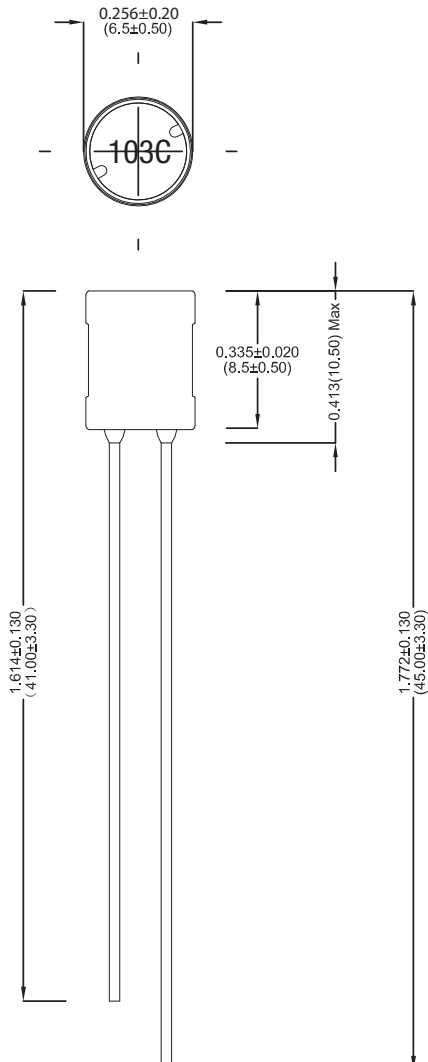
For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

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**

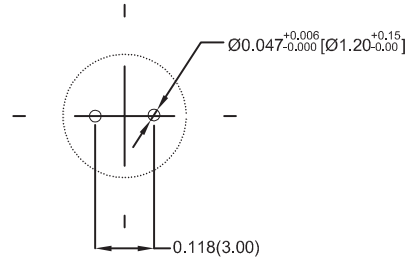
**MECHANICAL DIMENSIONS**



All dimensions in inches (mm).

Package weight 1.3g Typ.

**RECOMMENDED FOOTPRINT DETAILS**



All dimensions in inches (mm)

## DISCLAIMER

Unless otherwise stated in the datasheet, all products are designed for standard commercial and industrial applications and NOT for safety-critical and/or life-critical applications.

Particularly for safety-critical and/or life-critical applications, i.e. applications that may directly endanger or cause the loss of life, inflict bodily harm and/or loss or severe damage to equipment/property, and severely harm the environment, a prior explicit written approval from Murata is strictly required. Any use of Murata standard products for any safety-critical, life-critical or any related applications without any prior explicit written approval from Murata shall be deemed unauthorised use.

These applications include but are not limited to:

- Aircraft equipment
- Aerospace equipment
- Undersea equipment
- Power plant control equipment
- Medical equipment
- Transportation equipment ( automobiles, trains, ships, etc.)
- Traffic signal equipment
- Disaster prevention / crime prevention equipment
- Data Processing equipment

Murata makes no express or implied warranty, representation, or guarantee of suitability, fitness for any particular use/purpose and/or compatibility with any application or device of the buyer, nor does Murata assume any liability whatsoever arising out of unauthorised use of any Murata product for the application of the buyer. The suitability, fitness for any particular use/purpose and/or compatibility of Murata product with any application or device of the buyer remain to be the responsibility and liability of the buyer.

Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards that anticipate dangerous consequences of failures, monitor failures and their consequences, lessen the likelihood of failures that might cause harm, and take appropriate remedial actions. Buyer will fully indemnify and hold Murata, its affiliated companies, and its representatives harmless against any damages arising out of unauthorised use of any Murata products in any safety-critical and/or life-critical applications.

Remark: Murata in this section refers to Murata Manufacturing Company and its affiliated companies worldwide including, but not limited to, Murata Power Solutions.



This product is subject to the following [operating requirements](#) and the [Life and Safety Critical Application Sales Policy](#):

Refer to: <https://www.murata.com/en-eu/products/power/requirements>

Murata Power Solutions (Milton Keynes) Ltd. 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.

© 2021 Murata Power Solutions (Milton Keynes) Ltd