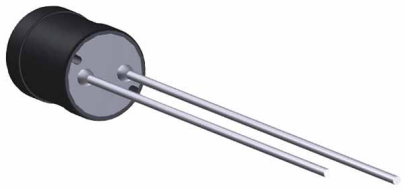
Murata Power Solutions

1700 Series

Radial Lead Inductors



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, 0.1V_{AC})	DC Current[1]	DC Resistance	Q at f kHz		SRF	Recommended Alternative
	±10%	Max.	Max.	Nom.		Nom.	
	µH	A	Ω	Q	f	MHz	
			To be discontinued				
17103C	10.0	1.80	0.05	65	1000	21.2	Contact Murata
17153C	15.0	1.50	0.06	60	500	19.4	Contact Murata
17223C	22.0	1.20	0.08	50	500	17.0	Contact Murata
17333C	33.0	1.00	0.13	50	500	11.4	Contact Murata
17473C	47.0	0.86	0.20	50	500	10.9	Contact Murata
17683C	68.0	0.85	0.26	90	100	8.7	Contact Murata
17104C	100.0	0.74	0.35	90	100	7.0	Contact Murata
17154C	150.0	0.58	0.49	90	100	5.7	Contact Murata
17224C	220.0	0.48	0.75	100	100	4.4	Contact Murata
17334C	330.0	0.42	1.10	100	100	3.7	Contact Murata
17474C	470.0	0.34	1.50	110	100	3.2	Contact Murata
17684C	680.0	0.28	2.40	120	100	2.5	Contact Murata
17105C	1.0mH	0.19	3.30	120	100	2.1	Contact Murata
17155C	1.5mH	0.15	5.90	130	100	1.9	Contact Murata
17225C	2.2mH	0.12	7.80	90	50	1.7	Contact Murata
17335C	3.3mH	0.11	10.0	140	150	1.2	Contact Murata
17475C	4.7mH	0.09	13.6	150	150	0.95	Contact Murata
17685C	6.8mH	0.08	20.0	145	150	0.85	Contact Murata
17106C	10.0mH	0.07	34.0	155	150	0.62	Contact Murata
17156C	15.0mH	0.06	47.0	140	150	0.51	Contact Murata
17226C	22.0mH	0.05	75.0	100	50	0.34	Contact Murata
17336C	33.0mH	0.04	108.0	95	50	0.28	Contact Murata
17476C	47.0mH	0.03	154.0	90	50	0.25	Contact Murata
17686C	68.0mH	0.02	220.0	70	50	0.20	Contact Murata

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 INFORMATION[2]

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

RoHS COMPLIANT

For full details go to www.murata-ps.com/rohs

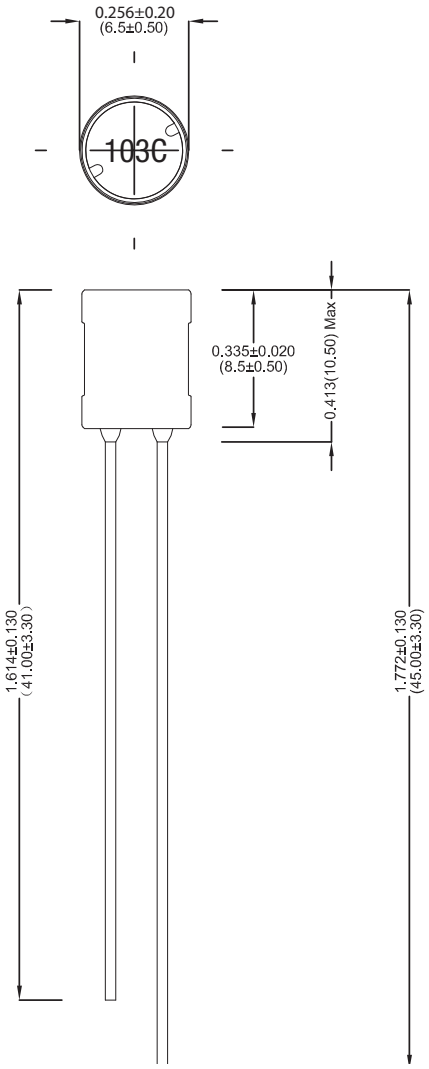
All specifications typical at T_A=25°C

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

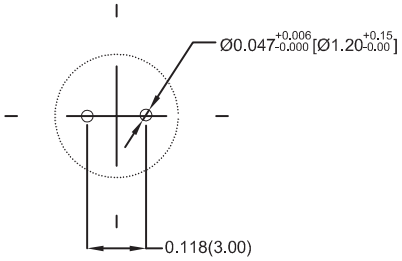
MECHANICAL DIMENSIONS



All dimensions in inches (mm).

Package weight 1.3g Typ.

RECOMMENDED FOOTPRINT DETAILS



All dimensions in inches (mm)

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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

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