Murata Power Solutions

1800 Series

Axial Lead Inductors

FEATURES

- RoHS compliant
- Axial format
- Up to 5.35A I_{DC}
- 4.7µH to 10mH
- Low DC resistance
- Compact size
- MIL-I-23053/5 class III sleeving
- Fully tinned leads
- Supplied in packs of 10
- Custom & radial parts available
- Backward compatible with Sn/Pb soldering systems

DESCRIPTION

The 1800 Series of inductors are particularly suited to use with a wide variety of switching regulators. Offering high current handling with a low mounting height, the devices are ideal where space is at a premium.

SELECTION GUIDE

Order Code	Inductance (1kHz, 0.1V_{AC})	DC Current[1]	DC Resistance	Q @ f kHz		SRF
	±10%	Max.	Max.	Nom.		Nom.
	µH	A	mΩ	Q	f	MHz
18472C	4.7	5.35	9.0	112	1000	36.4
18682C	6.8	4.15	12.0	78	500	23.6
18103C	10.0	3.45	15.0	64	500	19.0
18153C	15.0	3.00	18.0	55	500	15.9
18223C	22.0	2.42	25.0	59	500	11.8
18333C	33.0	2.00	40.0	48	500	11.5
18473C	47.0	1.65	55.0	55	500	8.5
18683C	68.0	1.35	70.0	31	100	6.6
18104C	100.0	1.20	100.0	40	100	7.4
18154C	150.0	1.10	165.0	47	100	4.4
18224C	220.0	0.90	230.0	46	100	3.5
18254C	250.0	0.80	255.0	50	100	3.7
18334C	330.0	0.73	335.0	58	100	3.0
18474C	470.0	0.60	465.0	56	100	2.2
18684C	680.0	0.53	630.0	55	100	2.0
18105C	1.0mH	0.44	1.0Ω	94	50	1.6
18155C	1.5mH	0.33	1.5Ω	107	50	1.3
18225C	2.2mH	0.30	2.2Ω	108	50	1.1
18335C	3.3mH	0.22	3.5Ω	143	50	0.8
18475C	4.7mH	0.20	4.6Ω	128	40	0.7
18685C	6.8mH	0.15	7.0Ω	144	40	0.6
18106C	10.0mH	0.13	12.0Ω	143	40	0.5

TYPICAL CORE/WIRE CHARACTERISTICS

Inductance Temperature Coefficient	Resistance Temperature Coefficient	Curie Temperature (T_C)	Saturation Flux (B_{SAT})
430ppm	4000ppm	190°C	325mT

ABSOLUTE MAXIMUM RATINGS

Operating free air temperature range	0°C to 70°C
Storage temperature range	-55°C to 125°C

SOLDERING INFORMATION[2]

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.

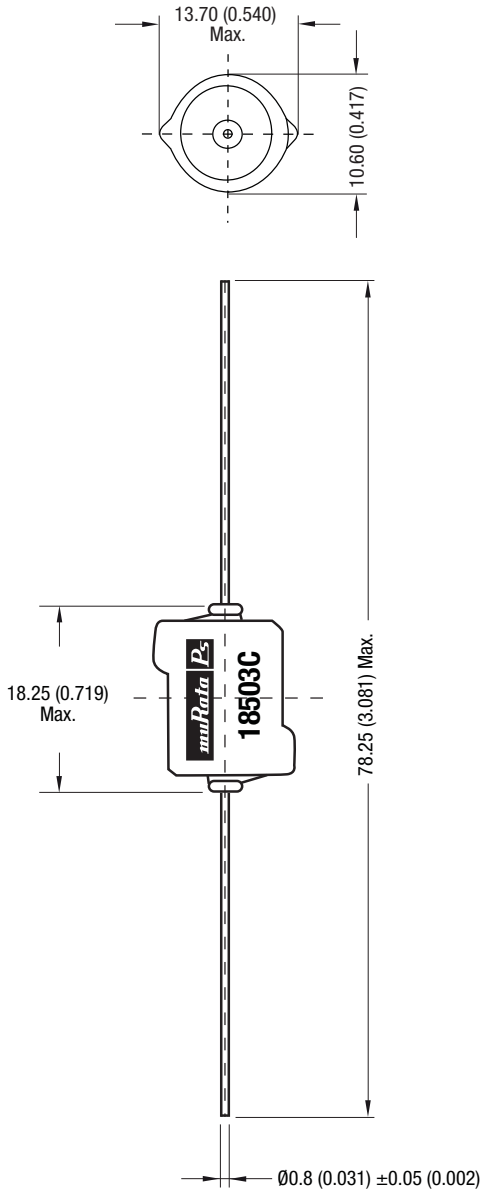
2 For further information, please visit www.murata-ps.com/rohs

RoHS COMPLIANT 2002/95/EC

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

PACKAGE SPECIFICATIONS

MECHANICAL DIMENSIONS



Unless otherwise stated, all dimensions in mm (inches) ±0.25 (0.01).
Package weight: 4.6g Typ.
Package quantity: 10

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ISO 9001 and 14001 REGISTERED