imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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1800R Series

Radial Lead Inductors



FEATURES
RoHS compliant
Radial format
Up to 5.35A loc
■ 4.7µH to 10mH
Low DC resistance
Compact size
MIL-I-23053/5 class III sleeving
Fully tinned leads
Supplied in packs of 100
Custom & axial parts available
Backward compatible with Sn/Pb soldering systems

DESCRIPTION

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

SELECTION GUIDE							
Order Code	Inductance (1kHz, 0.1Vac)	DC Current ¹	DC Resistance	Q @ f kHz Nom.		SRF	
	±10%	Max.	Max.			Nom.	
	μH	А	mΩ	Q	f	MHz	
18R472C	4.7 ²	5.35	9.0	106	1000	35.1	
18R682C	6.8	4.15	12.0	73	500	26.3	
18R103C	10.0	3.45	15.0	59	500	23.8	
18R153C	15.0	3.00	18.0	55	500	17.0	
18R223C	22.0	2.42	25.0	51	500	14.1	
18R333C	33.0	2.00	40.0	48	500	11.5	
18R473C	47.0	1.65	55.0	46	500	9.85	
18R683C	68.0	1.35	70.0	27	100	8.29	
18R104C	100.0	1.20	100.0	40	100	7.40	
18R154C	150.0	1.10	165.0	40	100	5.58	
18R224C	220.0	0.90	230.0	39	100	4.00	
18R254C	250.0	0.80	255.0	40	100	3.85	
18R334C	330.0	0.73	335.0	49	100	3.57	
18R474C	470.0	0.60	465.0	50	100	2.81	
18R684C	680.0	0.53	630.0	48	100	2.43	
18R105C	1.0mH	0.44	1.0Ω	92	50	1.82	
18R155C	1.5mH	0.33	1.5Ω	106	50	1.60	
18R225C	2.2mH	0.30	2.2Ω	106	50	1.41	
18R335C	3.3mH	0.22	3.5Ω	139	50	1.04	
18R475C	4.7mH	0.20	4.6Ω	126	40	0.87	
18R685C	6.8mH	0.15	7.0Ω	143	40	0.71	
18R106C	10.0mH	0.13	12.0Ω	142	40	0.58	

TYPICAL CORE/WIRE CHARACTERISTICS Inductance Temperature **Resistance Temperature** Curie Temperature Saturation Flux Coefficient Coefficient (T_{c}) $(\mathsf{B}_{\mathsf{SAT}})$ 190°C 325mT

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

4000ppm

SOLDERING INFORMATION ³					
Peak wave solder temperature	300°C for 10 seconds				
Pin finish	Bright tin				

All specifications typical at $T_{a}=25^{\circ}C$

430ppm

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 Tolerance ±15%.
- 3 For further information, please visit www.murata-ps.com/rohs



www.murata-ps.com/support



1800R Series

Radial Lead Inductors

PACKAGE SPECIFICATIONS MECHANICAL DIMENSIONS **RECOMMENDED FOOTPRINT DETAILS** 13.70 (0.539) Max. Ø1.20^{+0.15}-0.00 Ø0.047^{+0.006}-0.000 + 7.20±0.30 (0.283±0.01) 15.90 (0.625)Max. muRata Ps 18R103C 13.00 All dimensions in mm (inches) (0.511) Max. 4 45±1.50 (1.77±0.059) 50±1.50 (1.96±0.059) 0.60 ± 0.1 (0.024 ± 0.002) All dimensions in mm (inches). Package weight 4.6g Typ.

Murata Power Solutions, Inc. 11 Cabot Boulevard, Mansfield, MA 02048-1151 U.S.A. ISO 9001 and 14001 REGISTERED

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