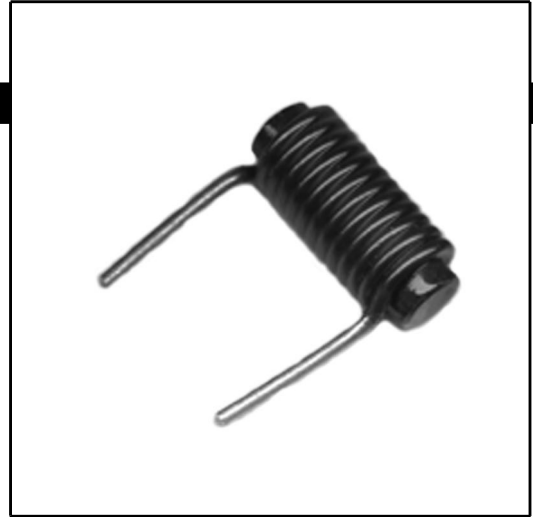


LR Switchmode Inductors Radial Lead



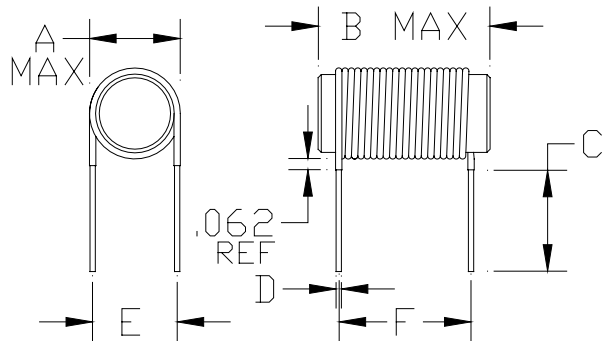
Features:

- High DC current bias capability
- 125° rating (ambient plus rise)
- Large range of energy storage capacity for output inductors

How to choose your model:

- 1) Calculate the energy storage needed based on inductance and current
- 2) No de-rating needed for ambients up to 85° C

Figure 1



Precision Model Number	Figure Number	Data on Page		A MAX	B MAX	C NOM	D DIA	E NOM	F
LR-09250-xxxx	1	2	mm in	8.89 .350	25.4 1.00	12.7 .500	--	7.42 .292	Note 1
LR-09290-xxxx	1	2	mm in	8.89 .350	28.6 1.13	12.7 .500	--	7.21 .284	Note 1
LR-10000-xxxx	1	3	mm in	Note 1	Note 1	25.4 1.00	Note1	Note 1	Note 1
LR-14000-xxxx	1	3	mm in	Note 1	Note 1	25.4 1.00	Note1	Note 1	Note 1
LR-17000-xxxx	1	4	mm in	Note 1	Note 1	25.4 1.00	Note1	Note 1	Note 1
LR-21000-xxxx	1	4	mm in	Note 1	Note 1	25.4 1.00	Note1	Note 1	Note 1

Note 1: See electrical tables on following pages for dimensions

LR Switchmode Inductors Radial Lead

Precision Model Number	Figure Number	Inductance @ 1kHz [uH ± 15%]	DC Resistance [Ohms Max]	Rated Current [Amps]	Typical Lead Spacing "F"		Energy Storage [uJoules] (note 1)
					[in]	[mm]	
LR-09250-0R22	1	0.22	0.003	4.0	0.13	3.18	1.76
LR-09250-0R47	1	0.47	0.004	4.0	0.13	3.18	3.76
LR-09250-0R68	1	0.68	0.005	4.0	0.19	4.75	5.44
LR-09250-1R00	1	1.0	0.006	4.0	0.19	4.75	8.0
LR-09250-1R50	1	1.5	0.007	4.0	0.25	6.35	12.0
LR-09250-2R00	1	2.0	0.008	4.0	0.31	7.92	16.0
LR-09250-2R50	1	2.5	0.009	4.0	0.31	7.92	20.0
LR-09250-3R00	1	3.0	0.010	4.0	0.38	9.53	24.0
LR-09250-3R50	1	3.5	0.011	4.0	0.38	9.53	28.0
LR-09250-4R00	1	4.0	0.012	4.0	0.50	12.70	32.0
LR-09250-4R70	1	4.7	0.013	4.0	0.50	12.70	37.6
LR-09250-5R50	1	5.5	0.014	4.0	0.56	14.27	44.0
LR-09250-6R00	1	6.0	0.015	4.0	0.56	14.27	48.0
LR-09250-6R75	1	6.8	0.016	4.0	0.63	15.88	54.0
LR-09250-7R50	1	7.5	0.017	4.0	0.63	15.88	60.0
LR-09250-8R00	1	8.0	0.018	4.0	0.69	17.45	64.0
LR-09250-8R80	1	8.8	0.019	4.0	0.69	17.45	70.4
LR-09250-9R50	1	9.5	0.020	4.0	0.75	19.05	76.0
LR-09250-10R0	1	10.0	0.021	4.0	0.75	19.05	80.0
LR-09250-10R8	1	10.8	0.022	4.0	0.81	20.62	86.4
LR-09250-11R5	1	11.5	0.023	4.0	0.81	20.62	92.0
LR-09250-12R0	1	12.0	0.024	4.0	0.88	22.23	96.0
LR-09250-12R5	1	12.5	0.025	4.0	0.88	22.23	100

Precision Model Number	Figure Number	Inductance @ 1kHz [uH ± 15%]	DC Resistance [Ohms Max]	Rated Current [Amps]	Typical Lead Spacing "F"		Energy Storage [uJoules] (note 1)
					[in]	[mm]	
LR-09290-0R22	1	0.22	0.002	6.0	0.13	3.18	3.96
LR-09290-0R56	1	0.56	0.002	6.0	0.17	4.24	10.1
LR-09290-0R82	1	0.82	0.004	6.0	0.21	5.31	14.8
LR-09290-1R00	1	1.0	0.004	6.0	0.25	6.38	18.0
LR-09290-1R50	1	1.5	0.005	6.0	0.29	7.44	27.0
LR-09290-2R00	1	2.0	0.006	6.0	0.33	8.48	36.0
LR-09290-2R50	1	2.5	0.006	6.0	0.38	9.53	45.0
LR-09290-3R00	1	3.0	0.007	6.0	0.42	10.59	54.0
LR-09290-3R50	1	3.5	0.008	6.0	0.46	11.63	63.0
LR-09290-4R20	1	4.2	0.008	6.0	0.50	12.70	75.6
LR-09290-4R70	1	4.7	0.009	6.0	0.54	13.72	84.6
LR-09290-5R50	1	5.5	0.009	6.0	0.58	14.78	99.0
LR-09290-6R00	1	6.0	0.010	6.0	0.64	16.31	108
LR-09290-6R80	1	6.8	0.011	6.0	0.67	16.94	122
LR-09290-7R30	1	7.3	0.011	6.0	0.71	17.98	131
LR-09290-8R00	1	8.0	0.012	6.0	0.75	19.05	144
LR-09290-8R50	1	8.5	0.013	6.0	0.79	20.09	153
LR-09290-9R20	1	9.2	0.013	6.0	0.88	22.43	166
LR-09290-10R2	1	10.2	0.015	6.0	0.88	22.23	184

Note 1: Energy Storage is calculated using the rating current

Temperature Rating: Storage: -55^o C to +125^o C; Operating: -55^o C to +85^o C

LR Switchmode Inductors Radial Lead

Precision Model Number	Fig. No.	Inductance @ 1kHz [uH±10%]	DC Resistance [Ohms Max]	Rated Current [Amps]	Typical Saturation Current [Amps] (note 1)	Energy Storage [uJoules] (note 2)	Self Resonant Frequency [MHz]		A Max	B Max	D Diameter	E Nominal	F Nominal
LR-10000-05R0	1	5	0.015	10.0	25	245	40	[mm] [in]	15.24 0.600	22.23 0.875	1.07 0.042	14.2 0.559	12.70 0.500
LR-10000-0100	1	10	0.018	9.0	19	397	25	[mm] [in]	15.88 0.625	28.58 1.125	1.07 0.042	14.8 0.583	17.45 0.687
LR-10000-0270	1	27	0.035	7.0	12	648	8	[mm] [in]	20.32 0.800	22.23 0.875	1.07 0.042	19.3 0.760	11.10 0.437
LR-10000-0500	1	50	0.050	5.6	8	760	5	[mm] [in]	20.32 0.800	22.23 0.875	1.07 0.042	19.3 0.760	19.05 0.750
LR-10000-0101	1	100	0.065	5.2	6	1300	2.5	[mm] [in]	20.32 0.800	28.58 1.125	1.07 0.042	19.3 0.760	23.80 0.937
LR-10000-0151	1	150	0.075	5.0	5	1780	2	[mm] [in]	20.32 0.800	34.93 1.375	1.07 0.042	19.3 0.760	26.97 1.062
LR-10000-0251	1	250	0.090	5.0	4	1900	1	[mm] [in]	20.32 0.800	41.28 1.625	1.07 0.042	19.3 0.760	33.32 1.312

Precision Model Number	Fig. No.	Inductance @ 1kHz [uH±10%]	DC Resistance [Ohms Max]	Rated Current [Amps]	Typical Saturation Current [Amps] (note 1)	Energy Storage [uJoules] (note 2)	Self Resonant Frequency [MHz]		A Max	B Max	D Diameter	E Nominal	F Nominal
LR-14000-05R0	1	5	0.012	14.0	25	478	30	[mm] [in]	15.88 0.625	22.23 0.875	1.35 0.053	14.5 0.571	19.05 0.750
LR-14000-0100	1	10	0.015	12.0	19	702	20	[mm] [in]	15.88 0.625	28.58 1.125	1.35 0.053	14.5 0.571	25.40 1.000
LR-14000-0270	1	27	0.025	9.0	13	1060	7	[mm] [in]	21.34 0.840	22.23 0.875	1.35 0.053	20.0 0.787	14.27 0.562
LR-14000-0500	1	50	0.030	8.0	10	1540	4	[mm] [in]	21.34 0.840	28.58 1.125	1.35 0.053	20.0 0.787	19.05 0.750
LR-14000-0680	1	68	0.035	7.5	9	1840	3.5	[mm] [in]	21.84 0.860	28.58 1.125	1.35 0.053	20.0 0.787	22.23 0.875
LR-14000-0101	1	100	0.050	7.5	7	2330	2.5	[mm] [in]	21.84 0.860	34.93 1.375	1.35 0.053	20.0 0.787	25.40 1.000
LR-14000-0151	1	150	0.060	7.0	5	1780	2	[mm] [in]	21.84 0.860	41.28 1.625	1.35 0.053	20.0 0.787	31.75 1.250

Note 1: Saturation Current: DC current where inductance drops 5% below initial value

Note 2: Energy Storage is calculated using the rating current or the saturation current, whichever is less

Electrical Specifications: Dielectric Rating: 2500V RMS between winding and flame retardant tubing
Core: High resistivity ferrite

Temperature Rating: Storage: -55° C to +125° C; Operating: -55° C to +85° C

LR Switchmode Inductors Radial Lead

Precision Model Number	Fig. No.	Inductance @ 1kHz [uH±10%]	DC Resistance [Ohms Max]	Rated Current [Amps]	Typical Saturation Current [Amps] (note 1)	Energy Storage [uJoules] (note 2)	Self Resonant Frequency [MHz]		A Max	B Max	D Diameter	E Nominal	F Nominal
LR-17000-05R0	1	5	0.010	19.0	25.0	875	30	[mm] [in]	16.13 0.635	28.58 1.125	1.65 0.065	14.5 0.571	20.62 0.812
LR-17000-0100	1	10	0.012	16.0	19.0	1240	20	[mm] [in]	16.13 0.635	34.93 1.375	1.65 0.065	14.5 0.571	30.94 1.218
LR-17000-0270	1	27	0.018	12.5	12.0	1850	7	[mm] [in]	23.75 0.935	28.58 1.125	1.65 0.065	22.1 0.870	17.45 0.687
LR-17000-0500	1	50	0.025	11.0	10.0	2380	4	[mm] [in]	23.75 0.935	34.93 1.375	1.65 0.065	22.1 0.870	23.80 0.937
LR-17000-0680	1	68	0.027	10.0	8.0	2070	3.5	[mm] [in]	23.75 0.935	34.93 1.375	1.65 0.065	22.1 0.870	28.58 1.125
LR-17000-0101	1	100	0.030	10.0	7.0	2330	2.5	[mm] [in]	23.75 0.935	41.28 1.625	1.65 0.065	22.1 0.870	33.32 1.312

Precision Model Number	Fig. No.	Inductance @ 1kHz [uH±10%]	DC Resistance [Ohms Max]	Rated Current [Amps]	Typical Saturation Current [Amps] (note 1)	Energy Storage [uJoules] (note 2)	Self Resonant Frequency [MHz]		A Max	B Max	D Diameter	E Nominal	F Nominal
LR-21000-05R0	1	5	0.008	24.0	25.0	1370	30	[mm] [in]	17.78 0.700	34.93 1.375	2.08 0.082	15.7 0.618	23.80 0.937
LR-21000-0100	1	10	0.010	20.0	19.0	1710	20	[mm] [in]	17.78 0.700	42.85 1.687	2.08 0.082	15.7 0.618	38.10 1.500
LR-21000-0270	1	27	0.015	16.0	14.0	2510	7	[mm] [in]	25.40 1.000	34.93 1.375	2.08 0.082	23.3 0.917	23.80 0.937
LR-21000-0500	1	50	0.020	15.0	10.0	2380	4	[mm] [in]	25.40 1.000	41.28 1.625	2.08 0.082	23.3 0.917	28.58 1.125

Note 1: Saturation Current: DC current where inductance drops 5% below initial value

Note 2: Energy Storage is calculated using the rating current or the saturation current, whichever is less

Electrical Specifications: Dielectric Rating: 2500V RMS between winding and flame retardant tubing
shiCore: High resistivity ferrite

Temperature Rating: Storage: -55° C to +125° C; Operating: -55° C to +85° C