

Leaded Power Inductors

Features

- The SL-series power inductors have low DC resistance and a large permissible DC current with high reliability.
- Magnetic shielded products are available for each series for consideration against radiation.
- The SL-series has high saturation magnetic-flux density and high efficiency



Applications

- For DC-DC converter, (Example: step-up or step-down)
- Suitable for use in power lines of:
 - Camcorder
 - LCD set
 - OA equipment
 - Notebook
 - Computer
 - PDA
 - Small size communication equipment

Part Number Systems

SL - 0406 - 1R0 - M - U - LF

(1) (2) (3) (4) (5) (6)

(1)	Product series	(2)	Size
(3)	Inductance Value: 1R0 = 1 uH	(4)	Inductance Tolerance: M = ± 20%, L = ±15%, K = ± 10%
(5)	U = UL tube		
(6)	ROHs Compliant		

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Shape And Dimensions

TYPE	DIMENSIONS (MM)	
SL-0406 ($1\mu\text{H}\sim 1.0\text{mH}$)		
SL-0608 ($1\mu\text{H}\sim 1.0\text{mH}$)		
SL-0810 ($100\mu\text{H}\sim 1.0\text{mH}$)		
SL-0912 ($100\mu\text{H}\sim 1.0\text{mH}$)		
SL-1216 ($10\mu\text{H}\sim 1.0\text{mH}$)		
SL-1415 ($10\mu\text{H}\sim 1.0\text{mH}$)		
SL-1618 ($22\mu\text{H}\sim 1.0\text{mH}$)		

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SL-XXXX-Series			ELECTRICAL CHARACTERISTICS																
Dash No.	Inductance (uH)	Test Freq	Dc Resistance (W) Max.								Permissible DC Current (A) Max.								
			Size								Size								
			0406	0608	0810	0912	1216	1415	1618	0406	0608	0810	0912	1216	1415	1618			
1R0	1.0	7.96MHz	0.021	0.024								4.50	2.10						
1R2	1.2		0.030	0.027									4.00	2.05					
1R5	1.5		0.034	0.030									3.60	2.00					
1R8	1.8		0.037	0.032									3.30	1.95					
2R2	2.2		0.040	0.035									3.00	1.90					
2R7	2.7		0.045	0.042									2.70	1.85					
3R3	3.3		0.058	0.049									2.50	1.80					
3R9	3.9		0.066	0.056									2.30	1.75					
4R7	4.7		0.072	0.061									2.20	1.70					
5R6	5.6		0.081	0.089									2.00	1.65					
6R8	6.8		0.087	0.092									1.80	1.60					
8R2	8.2		0.108	0.10									1.60	1.55					
100	10	2.52MHz	0.124	0.13			0.015	0.017				1.50	1.50			4.20	14		
120	12		0.160	0.16									1.30	1.35					
150	15		0.187	0.19			0.020	0.021					1.20	1.30			3.30	10	
180	18		0.219	0.25			0.022						1.10	1.25			3.30		
220	22		0.295	0.30			0.025	0.026	0.031				1.00	1.15			3.00	8.8	14.0
270	27		0.330	0.40			0.027	0.028	0.035				0.90	1.10			2.50	8.3	13.5
330	33		0.375	0.55			0.030	0.031	0.037				0.85	1.05			2.30	7.8	13.0
390	39		0.460	0.59			0.032	0.035	0.052				0.80	1.00			2.10	7.3	12.5
470	47		0.540	0.61			0.035	0.046	0.056				0.70	0.95			2.00	6.7	11.5
560	56		0.664	0.63			0.040	0.051	0.058				0.60	0.90			1.80	6.2	11.0
680	68		0.819	0.65			0.055	0.055	0.062				0.55	0.83			1.70	5.7	9.2
820	82		1.431	0.68			0.060	0.058	0.076				0.50	0.78			1.60	5.2	8.7
101	100	1KHz	0.105	0.74	0.26	0.135	0.086	0.075	0.108			0.46	0.70	1.40	1.70	1.40	4.6	7.7	
121	120		1.515	0.76	0.31	0.175	0.093	0.100	0.132			0.41	0.62	1.30	1.50	1.20	4.2	7.0	
151	150		1.770	0.80	0.38	0.200	0.100	0.125	0.152			0.37	0.57	1.10	1.40	1.00	3.7	6.5	
181	180		1.725	0.85	0.44	0.227	0.115	0.141	0.163			0.35	0.53	1.00	1.30	0.90	3.5	6.0	
221	220		1.753	0.89	0.50	1.316	0.145	0.208	0.216			0.32	0.49	0.90	1.10	0.90	3.0	5.5	
271	270		3.036	1.01	0.60	0.366	0.166	0.240	0.253			0.28	0.45	0.83	1.00	0.79	2.7	5.0	
331	330		3.432	1.08	0.78	0.467	0.190	0.272	0.270			0.25	0.41	0.78	0.93	0.74	2.5	4.4	

* All specifications are subjected to change without prior notice

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			0406	0608	0810	0912	1216	1415	1618	0406	0608	0810	0912	1216	1415	1618	
391	390	1KHz	3.864	1.32	0.85	0.532	0.241	0.303	0.341	0.23	0.37	0.70	0.86	0.69	2.3	3.9	
471	470		4.368	1.45	1.08	0.656	0.311	0.342	0.390	0.2	0.32	0.63	0.78	0.58	2.1	3.6	
561	560		5.664	1.60	1.19	0.741	0.352	0.531	0.425	0.2	0.29	0.60	0.71	0.54	1.8	3.3	
681	680		6.480	1.85	1.59	0.917	0.405	0.590	0.565	0.18	0.26	0.55	0.65	0.52	1.7	2.9	
821	820		7.296	2.00	1.88	1.195	0.530	0.728	0.700	0.16	0.22	0.50	0.59	0.47	1.5	2.7	
102	1000		10.20	2.30	2.30	1.362	0.606	0.750	0.881	0.14	0.20	0.45	0.53	0.45	1.4	2.5	

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- ❖ Tolerance of Inductance: 1.0 ~ 8.2 uH = ± 20% (M)
1000 ~ 10,000 uH = ± 10% (K)
- ❖ The maximum permissible DC current is the DC current applied which causes 10% reduction of its initial inductance value, or the coil temperature to rise by 40°C (Ta = 20°C), whichever is lower.