

LEADED POWER INDUCTORS

Series DR *Bobbin type*

FEATURES

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

APPLICATIONS

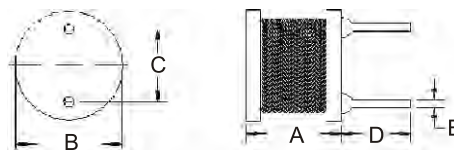
- ♦ For the smoothing circuit of D.C to D.C converter. As a choke coil or chopper coil.
- ♦ Suitable for use in power lines of camcorder. LCD set .OA equipment. Notebook computer. PDA and size communication equipment.

PRODUCT IDENTIFICATION

DR 09 X 12 A M 3U3
a b c d e f g

- a : Type of products - Leaded Power Inductors
b : Dimension(mm) - 04 : 4.0, 06 : 6.0, 08 : 8.0, 09 : 9.0, 12 : 12.0, 14 : 14.0, 16 : 16.0
c : Materials - X = No Define
d : Thickness(mm) - 06 : 6.0, 08 : 8.5, 10 : 10.5, 12 : 12.5, 16 : 16.5, 15 : 15.5, 18 : 18.5
e : Packing - PCS/REEL - A:100, E:300, I:500
f : Tolerance - K : ±10% M : ±20%
g : Inductance - 100N = 0.1uH, 10U = 10.0 uH, 1M2 = 1200uH

SHAPES & DIMENSIONS



Type	Inductance Range	Alias in mm	Dimensions (mm)				
			A	B	C	D	E
DR04X06	1μH ~1.0mH	0406	6.0	4.0	2.0	17.5	0.5
DR06X08		0608	8.5	6.0	3.0	5.0	0.65
DR08X10		0810	10.5	8.0	5.0	15.0	0.65
DR09X12		0912	12.5	9.0	5.0	15.0	0.8
DR12X16		1216	16.5	12.0	7.5	15.0	0.8
DR14X15		1415	15.5	14.0	7.5	14.5	1.0
DR16X18		1618	18.5	16.0	5.0	14.5	1.0

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ELECTRICAL CHARACTERISTICS

Part Number	Inductance L (μ H)	Test Frequency	D.C Resistance (Ω) max.	D.C Current (A) max.	
DR04X06I□1U	1.0	7.96MHz	0.021	4.50	
DR04X06I□1U2	1.2		0.030	4.00	
DR04X06I□1U5	1.5		0.034	3.60	
DR04X06I□1U8	1.8		0.037	3.30	
DR04X06I□2U2	2.2		0.040	3.00	
DR04X06I□2U7	2.7		0.045	2.70	
DR04X06I□3U3	3.3		0.058	2.50	
DR04X06I□3U9	3.9		0.066	2.30	
DR04X06I□4U7	4.7		0.072	2.20	
DR04X06I□5U6	5.6		0.081	2.00	
DR04X06I□6U8	6.8		0.087	1.80	
DR04X06I□8U2	8.2		0.108	1.60	
DR04X06I□10U	10		2.52MHz	0.124	1.50
DR04X06I□12U	12			0.160	1.30
DR04X06I□15U	15			0.187	1.20
DR04X06I□18U	18			0.219	1.10
DR04X06I□22U	22	0.295		1.00	
DR04X06I□27U	27	0.330		0.90	
DR04X06I□33U	33	0.375		0.85	
DR04X06I□39U	39	0.460		0.80	
DR04X06I□47U	47	0.540		0.70	
DR04X06I□56U	56	0.664		0.60	
DR04X06I□68U	68	0.819		0.55	
DR04X06I□82U	82	1.431		0.50	
DR04X06I□100U	100	0.105		0.46	
DR04X06I□120U	120	1.515		0.41	
DR04X06I□150U	150	1.770		0.37	
DR04X06I□180U	180	1.725		0.35	
DR04X06I□220U	220	1.753	0.32		
DR04X06I□270U	270	3.036	0.28		
DR04X06I□330U	330	3.432	0.25		
DR04X06I□390U	390	3.864	0.23		
DR04X06I□470U	470	4.368	0.20		
DR04X06I□560U	560	5.664	0.20		
DR04X06I□680U	680	6.480	0.18		
DR04X06I□820U	820	7.296	0.16		
DR04X06I□1M	1,000	10.20	0.14		

- ◆ Tolerance of inductance: $1.0\mu\text{H} \sim 82\mu\text{H} = \pm 20\%$ (M) $1,000\mu\text{H} \sim 10,000\mu\text{H} = \pm 10\%$ (K)
- ◆ The rated current indicates the value of current when the inductance is 10% lower than is initial value D.C Superposition or D.C current when 40°C. Whichever is lower.

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DR06X08O□1U	1.0	7.96MHz	0.024	2.10	
DR06X08O□1U2	1.2		0.027	2.05	
DR06X08O□1U5	1.5		0.030	2.00	
DR06X08O□1U8	1.8		0.032	1.95	
DR06X08O□2U2	2.2		0.035	1.90	
DR06X08O□2U7	2.7		0.042	1.85	
DR06X08O□3U3	3.3		0.049	1.80	
DR06X08O□3U9	3.9		0.056	1.75	
DR06X08O□4U7	4.7		0.061	1.70	
DR06X08O□5U6	5.6		0.089	1.65	
DR06X08O□6U8	6.8		0.092	1.60	
DR06X08O□8U2	8.2		0.100	1.55	
DR06X08O□10U	10		2.52MHz	0.130	1.50
DR06X08O□12U	12			0.160	1.35
DR06X08O□15U	15			0.190	1.30
DR06X08O□18U	18			0.250	1.25
DR06X08O□22U	22	0.300		1.15	
DR06X08O□27U	27	0.400		1.10	
DR06X08O□33U	33	0.550		1.05	
DR06X08O□39U	39	0.590		1.00	
DR06X08O□47U	47	0.610		0.95	
DR06X08O□56U	56	0.630		0.90	
DR06X08O□68U	68	0.650		0.83	
DR06X08O□82U	82	0.680		0.78	
DR06X08O□100U	100	1KHz		0.740	0.70
DR06X08O□120U	120			0.760	0.62
DR06X08O□150U	150			0.800	0.57
DR06X08O□180U	180			0.850	0.53
DR06X08O□220U	220		0.890	0.49	
DR06X08O□270U	270		1.010	0.45	
DR06X08O□330U	330		1.080	0.41	
DR06X08O□390U	390		1.320	0.37	
DR06X08O□470U	470		1.450	0.32	
DR06X08O□560U	560		1.600	0.29	
DR06X08O□680U	680		1.850	0.26	
DR06X08O□820U	820		2.000	0.22	
DR06X08O□1M	1,000		2.300	0.20	

- ◆ Tolerance of inductance: 1.0 μ H ~ 82 μ H = \pm 20%(M) 1,000 μ H ~ 10,000 μ H = \pm 10%(K)
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Part Number	Inductance L (μ H)	Test Frequency	D.C Resistance (Ω) max.	D.C Current (A) max.	
DR08X10G□100U	100	1KHz	0.260	1.40	
DR08X10G□120U	120		0.310	1.30	
DR08X10G□150U	150		0.380	1.10	
DR08X10G□180U	180		0.440	1.00	
DR08X10G□220U	220		0.500	0.90	
DR08X10G□270U	270		0.600	0.83	
DR08X10G□330U	330		0.780	0.78	
DR08X10G□390U	390		0.850	0.70	
DR08X10G□470U	470		1.080	0.63	
DR08X10G□560U	560		1.190	0.60	
DR08X10G□680U	680		1.590	0.55	
DR08X10G□820U	820		1.880	0.50	
DR08X10G□1M	1,000		2.300	0.45	
DR09X12E□100U	100		1KHz	0.135	1.70
DR09X12E□120U	120			0.175	1.50
DR09X12E□150U	150	0.200		1.40	
DR09X12E□180U	180	0.227		1.30	
DR09X12E□220U	220	0.316		1.10	
DR09X12E□270U	270	0.366		1.00	
DR09X12E□330U	330	0.467		0.93	
DR09X12E□390U	390	0.532		0.86	
DR09X12E□470U	470	0.656		0.78	
DR09X12E□560U	560	0.741		0.71	
DR09X12E□680U	680	0.917		0.65	
DR09X12E□820U	820	1.195		0.59	
DR09X12E□1M	1,000	1.362		0.53	
DR12X16M□10U	10	2.52MHz		0.015	4.20
DR12X16M□12U	12			0.018	3.80
DR12X16M□15U	15		0.020	3.30	
DR12X16M□18U	18		0.022	3.30	
DR12X16M□22U	22		0.025	3.00	
DR12X16M□27U	27		0.027	2.50	
DR12X16M□33U	33		0.030	2.30	
DR12X16M□39U	39		0.032	2.10	
DR12X16M□47U	47		0.035	2.00	
DR12X16M□56U	56		0.040	1.80	
DR12X16M□68U	68		0.055	1.70	
DR12X16M□82U	82		0.060	1.60	
DR12X16M□100U	100		0.086	1.40	
DR12X16M□120U	120		0.093	1.20	
DR12X16M□150U	150		0.100	1.00	
DR12X16M□180U	180	0.115	0.90		
DR12X16M□220U	220	0.145	0.90		
DR12X16M□270U	270	0.166	0.79		
DR12X16M□330U	330	0.190	0.74		
DR12X16M□390U	390	0.241	0.69		
DR12X16M□470U	470	0.311	0.58		
DR12X16M□560U	560	0.352	0.54		
DR12X16M□680U	680	0.405	0.52		
DR12X16M□820U	820	0.530	0.47		
DR12X16M□1M	1,000	0.606	0.45		

- ◆ Tolerance of inductance: 1.0 μ H ~ 82 μ H = \pm 20%(M) 1,000 μ H ~ 10,000 μ H = \pm 10%(K)
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Part Number	Inductance L (μ H)	Test Frequency	D.C Resistance (Ω) max.	D.C Current (A) max.	
DR14X15A□10U	10	2.52MHz	0.017	14.00	
DR14X15A□12U	12		0.019	12.00	
DR14X15A□15U	15		0.021	10.00	
DR14X15A□18U	18		0.024	9.20	
DR14X15A□22U	22		0.026	8.80	
DR14X15A□27U	27		0.028	8.30	
DR14X15A□33U	33		0.031	7.80	
DR14X15A□39U	39		0.035	7.30	
DR14X15A□47U	47		0.046	6.70	
DR14X15A□56U	56		0.051	6.20	
DR14X15A□68U	68		0.055	5.70	
DR14X15A□82U	82		0.058	5.20	
DR14X15A□100U	100		1KHz	0.075	4.60
DR14X15A□120U	120			0.100	4.20
DR14X15A□150U	150	0.125		3.70	
DR14X15A□180U	180	0.141		3.50	
DR14X15A□220U	220	0.208		3.00	
DR14X15A□270U	270	0.240		2.70	
DR14X15A□330U	330	0.272		2.50	
DR14X15A□390U	390	0.303		2.30	
DR14X15A□470U	470	0.342		2.10	
DR14X15A□560U	560	0.531		1.80	
DR14X15A□680U	680	0.590		1.70	
DR14X15A□820U	820	0.728		1.50	
DR14X15A□1M	1,000	0.750	1.40		

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Part Number	Inductance L (μ H)	Test Frequency	D.C Resistance (Ω) max.	D.C Current (A) max.	
DR16X18A□22U	22	2.52MHz	0.031	14.00	
DR16X18A□27U	27		0.035	13.50	
DR16X18A□33U	33		0.037	13.00	
DR16X18A□39U	39		0.052	12.50	
DR16X18A□47U	47		0.056	11.50	
DR16X18A□56U	56		0.058	11.00	
DR16X18A□68U	68		0.062	9.20	
DR16X18A□82U	82		0.076	8.70	
DR16X18A□100U	100		1KHz	0.108	7.70
DR16X18A□120U	120			0.132	7.00
DR16X18A□150U	150			0.152	6.50
DR16X18A□180U	180			0.163	6.00
DR16X18A□220U	220			0.216	5.50
DR16X18A□270U	270			0.053	5.00
DR16X18A□330U	330	0.270		4.40	
DR16X18A□390U	390	0.341		3.90	
DR16X18A□470U	470	0.390		3.60	
DR16X18A□550U	560	0.425		3.30	
DR16X18A□680U	680	0.565		2.90	
DR16X18A□820U	820	0.700		2.70	
DR16X18A□1M	1,000	0.881		2.50	

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