

## SMD Unshielded Power Inductors-CD Series



### Feature

1. RoHS, Halogen Free and REACH Compliance
2. Unshielded power inductor
3. Various package size and wide inductance range

### Applications

1. Graphic cards
2. DC/DC converters

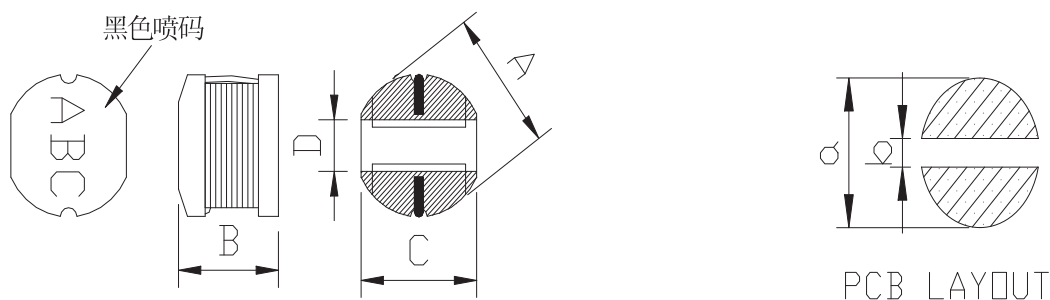
### Product Identification

**CD 1054- 150 M B**

**1 2 3 4 5**

1. Series name.
2. Dimension.
3. Inductance.
4. Tolerance(N:30%,M:20%,K:10%)
5. Lettering direction

### Configurations & Dimensions



Series Name	A	B	C	D	a	b
CD3521	3.5±0.3	2.1±0.3	3.0±0.3	1.25 Ref	4.50	1.00
CD4532	4.5±0.3	3.2±0.3	4.0±0.3	1.8 Ref	5.50	1.20
CD5830	5.8±0.3	3.0±0.3	5.2±0.3	2.2 Ref	6.80	1.30
CD5835	5.8±0.3	3.5±0.3	5.2±0.3	2.2 Ref	6.80	1.30
CD5845	5.8±0.3	4.5±0.3	5.2±0.3	2.2 Ref	6.80	1.30
CD7835	7.8±0.3	3.5±0.3	7.0±0.3	2.6 Ref	8.80	2.10
CD7850	7.8±0.3	5.0±0.3	7.0±0.3	2.6 Ref	8.80	2.10
CD1054	10.0±0.3	5.4±0.3	9.0±0.3	3.2 Ref	11.00	2.50

Unit: mm

## SMD Unshielded Power Inductors-CD Series

### Electrical Characteristics / CD3521

Part Number	Inductance (uH)	Test Frequency (KHz/Volt)	DC Resistance (Ω)MAX	Saturation Current (A)MAX	wire (Φ/mm)	Turns (Ref)
CD3521-R56MB	0.56	100/0.25	0.023	4.00	0.21	5.5
CD3521-1R0MB	1.0		0.040	3.20	0.21	7.5
CD3521-1R5MB	1.5		0.055	2.80	0.18	9.5
CD3521-2R2MB	2.2		0.070	2.50	0.18	11.5
CD3521-2R7MB	2.7		0.078	2.00	0.18	12.5
CD3521-3R3MB	3.3		0.090	1.83	0.17	13.5
CD3521-3R9MB	3.9		0.125	1.60	0.16	14.5
CD3521-4R7MB	4.7		0.140	1.50	0.16	16.5
CD3521-6R8MB	6.8		0.230	0.95	0.13	19.5
CD3521-8R2MB	8.2		0.250	0.92	0.13	21.5
CD3521-100KB	10		0.270	0.90	0.12	23.5
CD3521-150KB	15		0.400	0.75	0.12	29.5
CD3521-180KB	18		0.480	0.70	0.11	32.5
CD3521-220KB	22		0.580	0.60	0.11	35.5
CD3521-330KB	33		0.920	0.55	0.09	44.5
CD3521-420KB	42		1.200	0.50	0.09	49.5
CD3521-470KB	47		1.270	0.45	0.09	52.5
CD3521-680KB	68		2.000	0.30	0.08	63.5
CD3521-101KB	100		2.800	0.20	0.07	76.5

### Electrical Characteristics / CD4532

Part Number	Inductance (uH)	Test Frequency (KHz/Volt)	DC Resistance (Ω)MAX	Saturation Current (A)MAX	wire (Φ/mm)	Turns (Ref)
CD4532-1R0MB	1.00	100/0.25	0.021	4.00	0.30	6.5
CD4532-1R5MB	1.5		0.026	3.60	0.28	8.5
CD4532-2R2MB	2.2		0.030	3.40	0.28	9.5
CD4532-2R7MB	2.7		0.045	3.00	0.25	11.5
CD4532-3R3MB	3.3		0.055	2.80	0.25	12.5
CD4532-4R7MB	4.7		0.076	2.50	0.23	14.5
CD4532-6R8MB	6.8		0.100	1.80	0.22	17.5
CD4532-8R2MB	8.2		0.124	1.65	0.21	19.5
CD4532-100KB	10		0.140	1.60	0.20	21.5
CD4532-150KB	15		0.210	1.20	0.18	26.5
CD4532-220KB	22		0.316	1.00	0.16	31.5
CD4532-270KB	27		0.403	0.90	0.16	35.5
CD4532-330KB	33		0.466	0.80	0.15	38.5
CD4532-470KB	47		0.770	0.70	0.12	45.5
CD4532-680KB	68		0.986	0.50	0.12	54.5
CD4532-101KB	100		1.500	0.44	0.11	67.5
CD4532-151KB	150		2.110	0.35	0.10	81.5
CD4532-181KB	180		2.420	0.30	0.10	90.5

### Electrical Characteristics / CD5825

Part Number	Inductance (uH)	Test Frequency (KHz/Volt)	DC Resistance (Ω)MAX	Saturation Current (A)MAX	wire (Φ/mm)	Turns (Ref)
CD5825-1R5MB	1.5	100/0.25	0.024	4.00	0.30	6.5
CD5825-2R2MB	2.2		0.035	3.50	0.27	7.5
CD5825-3R3MB	3.3		0.046	2.70	0.27	9.5
CD5825-4R7MB	4.7		0.070	2.30	0.23	11.5
CD5825-6R8MB	6.8		0.092	1.70	0.21	13.5
CD5825-100MB	10		0.115	1.50	0.21	16.5
CD5825-150MB	15		0.192	1.20	0.18	20.5
CD5825-220KB	22		0.280	1.00	0.16	24.5
CD5825-330KB	33		0.384	0.80	0.15	30.5
CD5825-470KB	47		0.563	0.70	0.14	36.5
CD5825-680KB	68		0.800	0.60	0.13	43.5
CD5825-101KB	100		1.100	0.40	0.12	52.5

### Electrical Characteristics / CD5830

Part Number	Inductance (uH)	Test Frequency (KHz/Volt)	DC Resistance (Ω)MAX	Saturation Current (A)MAX	wire (Φ/mm)	Turns (Ref)
CD5830-1R5MB	1.5	100/0.25	0.018	4.10	0.37	7.5
CD5830-2R2MB	2.2		0.026	3.50	0.32	8.5
CD5830-3R3MB	3.3		0.034	3.00	0.32	10.5
CD5830-4R7MB	4.7		0.048	2.50	0.28	12.5
CD5830-6R8MB	6.8		0.070	2.20	0.25	14.5
CD5830-8R2MB	8.2		0.082	2.00	0.25	16.5
CD5830-100MB	10		0.100	1.80	0.23	18.5
CD5830-150MB	15		0.150	1.70	0.21	22.5
CD5830-180KB	18		0.184	1.60	0.20	24.5
CD5830-220KB	22		0.220	1.50	0.20	26.5
CD5830-330KB	33		0.300	1.10	0.18	32.5
CD5830-390KB	39		0.370	1.00	0.17	36.5
CD5830-470KB	47		0.430	0.90	0.16	39.5
CD5830-680KB	68		0.680	0.80	0.15	47.5
CD5830-101KB	100		0.880	0.60	0.14	57.5
CD5830-121KB	120		1.200	0.58	0.13	64.5
CD5830-151KB	150		1.300	0.43	0.13	70.5
CD5830-181KB	151		1.680	0.41	0.12	77.5
CD5830-221KB	220		1.880	0.38	0.12	85.5
CD5830-331KB	330		3.200	0.28	0.10	104.5

### Electrical Characteristics / CD5845

Part Number	Inductance (uH)	Test Frequency (KHz/Volt)	DC Resistance (Ω)MAX	Saturation Current (A)MAX	wire (Φ/mm)	Turns (Ref)
CD5845-R56MB	0.56	100/0.25	0.007	9.50	0.45	4.5
CD5845-1R0NB	1.0		0.012	6.00	0.40	6.5
CD5845-1R5MB	1.5		0.014	5.20	0.40	7.5
CD5845-2R2MB	2.2		0.018	4.50	0.40	9.5
CD5845-3R3MB	3.3		0.025	3.50	0.37	11.5
CD5845-4R7MB	4.7		0.035	3.10	0.37	13.5
CD5845-6R8MB	6.8		0.047	2.50	0.32	15.5
CD5845-8R2MB	8.2		0.059	2.20	0.30	17.5
CD5845-100KB	10		0.068	2.00	0.30	19.5
CD5845-120KB	12		0.075	1.80	0.30	21.5
CD5845-150KB	15		0.105	1.70	0.27	24.5
CD5845-180KB	18		0.150	1.65	0.25	26.5
CD5845-220KB	22		0.164	1.50	0.25	28.5
CD5845-270KB	27		0.180	1.30	0.25	32.5
CD5845-330KB	33		0.230	1.20	0.25	35.5
CD5845-470KB	47		0.370	1.00	0.21	42.5
CD5845-560KB	56		0.420	0.72	0.20	46.5
CD5845-680KB	68		0.460	0.61	0.18	50.5
CD5845-101KB	100		0.610	0.52	0.18	61.5
CD5845-151KB	150		0.860	0.40	0.16	74.5
CD5845-221KB	220	1.370	0.35	0.15	91.5	
CD5845-331KB	330	1.850	0.25	0.14	113.5	
CD5845-391KB	390	2.200	0.23	0.13	122.5	
CD5845-471KB	470	2.400	0.20	0.13	132.5	
CD5845-681KB	680	3.600	0.15	0.12	162.5	
CD5845-102KB	1000	1/0.25	5.760	0.13	0.10	191.5

### Electrical Characteristics / CD7835

Part Number	Inductance (uH)	Test Frequency (KHz/Volt)	DC Resistance (Ω)MAX	Saturation Current (A)MAX	wire (Φ/mm)	Turns (Ref)
CD7835-1R0MB	1.0	100/0.25	0.009/0.008	6.00	0.45/0.35*2	4.5
CD7835-1R5MB	1.5		0.012/0.009	5.00	0.45/0.35*2	5.5
CD7835-2R2MB	2.2		0.014	4.00	0.45	6.5
CD7835-3R3MB	3.3		0.023	3.50	0.40	8.5
CD7835-4R7MB	4.7		0.029	3.00	0.40	10.5
CD7835-6R8MB	6.8		0.044	2.50	0.35	11.5
CD7835-100MB	10		0.061	2.00	0.32	14.5
CD7835-150MB	15		0.091	1.80	0.30	18.5
CD7835-220KB	22		0.120	1.50	0.27	21.5
CD7835-330KB	33		0.180	1.10	0.25	25.5

CD7835-470KB	47	0.250	0.90	0.25	31.5
CD7835-680KB	68	0.330	0.70	0.21	37.5
CD7835-101KB	100	0.480	0.55	0.20	46.5
CD7835-151KB	150	0.793	0.50	0.18	57.5
CD7835-221KB	220	1.124	0.42	0.16	69.5
CD7835-331KB	330	1.495	0.35	0.15	85.5
CD7835-471KB	470	2.376	0.30	0.13	99.5
CD7835-681KB	680	3.312	0.25	0.12	120.5

### Electrical Characteristics / CD7850

Part Number	Inductance (uH)	Test Frequency (KHz/Volt)	DC Resistance (Ω)MAX	Saturation Current (A)MAX	wire (Φ/mm)	Turns (Ref)
CD7850-1R2MB	1.2	100/0.25	0.013/0.011	10.00	0.45/0.35*2	5.5
CD7850-1R5MB	1.5		0.015/0.013	9.00	0.45/0.35*2	6.5
CD7850-2R2MB	2.2		0.018/0.015	8.00	0.45/0.35*2	7.5
CD7850-3R3MB	3.3		0.024/0.02	6.50	0.45/0.35*2	9.5
CD7850-4R7MB	4.7		0.021	4.00	0.35*2	11.5
CD7850-5R6MB	5.6		0.025	3.50	0.45	11.5
CD7850-6R8MB	7		0.030	3.10	0.45	13.5
CD7850-100KB	10		0.045	2.30	0.40	16.5
CD7850-150KB	15		0.059	1.80	0.40	20.5
CD7850-220KB	22		0.088	1.50	0.35	24.5
CD7850-330KB	33		0.120	1.30	0.32	29.5
CD7850-470KB	47		0.180	1.10	0.30	35.5
CD7850-560KB	56		0.240	0.94	0.27	38.5
CD7850-680KB	68		0.280	0.85	0.27	42.5
CD7850-101KB	100		0.430	0.72	0.25	51.5
CD7850-121KB	120		0.470	0.66	0.23	55.5
CD7850-151KB	150		0.600	0.60	0.22	62.5
CD7850-221KB	220		0.960	0.49	0.20	75.5
CD7850-331KB	330		1.260	0.40	0.18	92.5
CD7850-471KB	470		1.960	0.34	0.17	110.5
CD7850-681KB	680	2.610	0.30	0.15	133.5	
CD7850-821KB	820	2.990	0.25	0.15	146.5	
CD7850-102KB	1000	3.300	0.22	0.14	162.5	
CD7850-152KB	1500	5.500	0.20	0.13	198.5	
CD7850-222KB	2200	7.900	0.15	0.11	236.5	
CD7850-302KB	2201	11.500	0.12	0.10	277.5	
CD7850-682KB	6800	26.280	0.07	0.09	421.5	

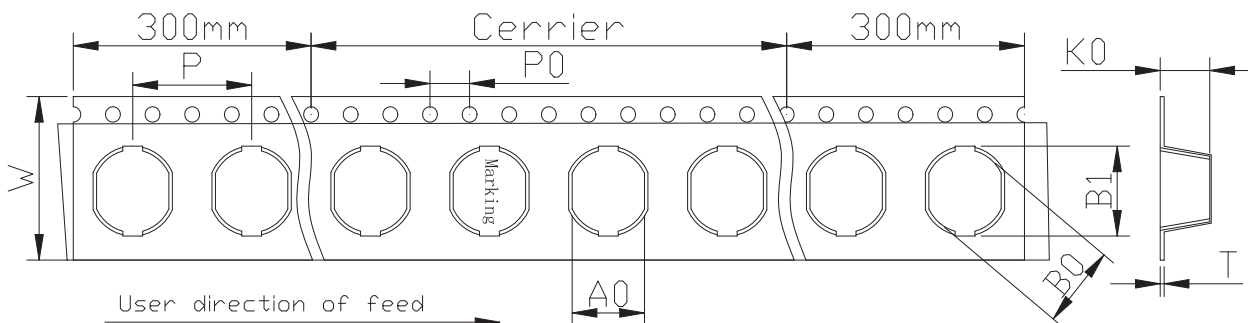
### Electrical Characteristics / CD1054

Part Number	Inductance (uH)	Test Frequency (KHz/Volt)	DC Resistance (Ω)MAX	Saturation Current (A)MAX	wire (Φ/mm)	Turns (Ref)
CD1054-3R3MB	3.3	100/0.25	0.015/0.012	7.00	0.5/0.4*2	7.5
CD1054-4R7MB	4.7		0.023/0.015	6.00	0.5/0.4*2	9.5
CD1054-6R8MB	6.8		0.025	5.00	0.50	11.5
CD1054-100KB	10.0		0.030	4.00	0.50	13.5
CD1054-150KB	15.0		0.042	3.20	0.45	16.5
CD1054-220KB	22.0		0.060	2.50	0.45	20.5
CD1054-330KB	33		0.095	2.00	0.40	25.5
CD1054-470KB	47		0.130	1.80	0.35	30.5
CD1054-560KB	56		0.142	1.50	0.35	32.5
CD1054-680KB	68		0.198	1.30	0.32	35.5
CD1054-820KB	82		0.235	1.10	0.30	38.5
CD1054-101KB	100		0.260	0.97	0.30	43.5
CD1054-121KB	120		0.312	0.85	0.30	47.5
CD1054-151KB	150		0.368	0.78	0.29	53.5
CD1054-181KB	180		0.437	0.72	0.25	58.5
CD1054-221KB	220		0.600	0.66	0.25	63.5
CD1054-331KB	330		0.830	0.52	0.23	78.5
CD1054-471KB	470		1.280	0.42	0.20	91.5
CD1054-681KB	680		1.950	0.40	0.18	112.5
CD1054-102KB	1000		2.500	0.30	0.17	137.5
CD1054-152KB	1500	4.250	0.25	0.15	167.5	
CD1054-202KB	2000	5.000	0.20	0.14	190.5	
CD1054-282KB	2800	6.400	0.18	0.14	229.5	

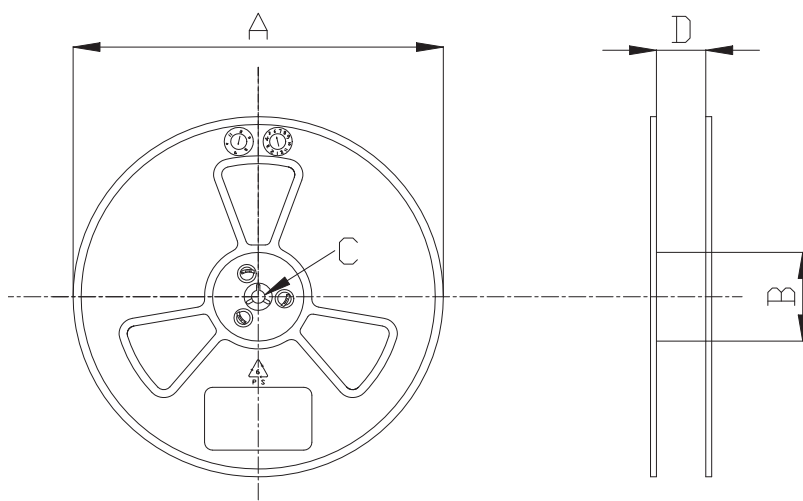
※ Saturation Rated Current that will cause initial inductance value approximately 10% rolloff. (Ta=25±5°C)

■ Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions						Reel Dimensions				Quantity
	A0(Typ)	B0(Typ)	K0(Typ)	W	P	P0	A	B	C	D	PCS/REEL
CD3521	3.3	3.8	2.4	12	8	4	330	100	13	12.5	3000
CD4532	4.3	4.8	3.5	12	8	4	330	100	13	12.5	2000
CD5825	5.5	6.1	2.8	12	8	4	330	100	13	12.5	2000
CD5830	5.5	6.1	3.3	12	8	4	330	100	13	12.5	2000
CD5845	5.5	6.1	4.8	12	8	4	330	100	13	12.5	1500
CD7835	7.3	8.1	3.8	16	12	4	330	100	13	16.5	1000
CD7850	7.3	8.1	5.4	16	12	4	330	100	13	16.5	1000
CD1054	9.3	10.3	5.8	24	12	4	330	100	13	24.5	1000