



### Wire Wound SMD Power Inductors

#### CD Series



#### Features

- Metallization on ferrite core results in excellent shock resistance and damage-free durability
- Rugged, cost-effective power inductors
- Excellent current handling; low DCR
- Takes up less PCB real estate and save more power
- Excellent solderability and high heat resistance.
- Packed in embossed carrier tape and can be used by automatic mounting machine
- RoHS Compliance

#### Applications

- LED Lighting
- Flat-screen TVs, blue-ray disc recorders, set top box
- Power supply for VCR,OA equipment, DC to AC inverters
- Notebooks, desktop computers, servers
- Ideally used in mobilephone,PDA,MP3,DSC/DVC, HDD, Portable DVD,etc as DC-DC Converter inductors.
- Portable gaming devices, personal navigation systems, personal multimedia devices
- Telecomm base stations

#### Environmental Data

- Operating temperature range: -40°C to +125°C (ambient plus self-temperature rise)

Description									
CD1054-150M		15.0μH			±20 % (±10 %)				
Model		Inductance Value			Inductance Tolerance				
Global Part Number									
C	D	1	0	5	4	1	5	0	M(K)
Product Series		Dimensions			Inductance Value			Tol. ±20% (±10%)	



# Magsonder Innovation (Shanghai) Co., Ltd

墨尚电子技术(上海)有限公司

P/N:CD series

## CD3521 Series

Part No.	Inductance	Test Frequency	DC Resistance	Saturation Current
	L( $\mu$ H)	(kHz/Volt)	DCR ( $\Omega$ ) MAX	Isat (A) MAX
CD3521-R56M	0.56 $\pm$ 20%	100/0.25	0.023	4.00
CD3521-1R0M	1.0 $\pm$ 20%	100/0.25	0.040	3.20
CD3521-1R5M	1.5 $\pm$ 20%	100/0.25	0.055	2.80
CD3521-2R2M	2.2 $\pm$ 20%	100/0.25	0.070	2.50
CD3521-2R7M	2.7 $\pm$ 20%	100/0.25	0.078	2.00
CD3521-3R3M	3.3 $\pm$ 20%	100/0.25	0.090	1.83
CD3521-3R9M	3.9 $\pm$ 20%	100/0.25	0.125	1.60
CD3521-4R7M	4.7 $\pm$ 20%	100/0.25	0.140	1.50
CD3521-6R8M	6.8 $\pm$ 20%	100/0.25	0.230	0.95
CD3521-8R2M	8.2 $\pm$ 20%	100/0.25	0.250	0.92
CD3521-100K	10 $\pm$ 10%	100/0.25	0.270	0.90
CD3521-150K	15 $\pm$ 10%	100/0.25	0.400	0.75
CD3521-180K	18 $\pm$ 10%	100/0.25	0.480	0.70
CD3521-220K	22 $\pm$ 10%	100/0.25	0.580	0.60
CD3521-330K	33 $\pm$ 10%	100/0.25	0.920	0.55
CD3521-420K	42 $\pm$ 10%	100/0.25	1.200	0.50
CD3521-470K	47 $\pm$ 10%	100/0.25	1.270	0.45
CD3521-680K	68 $\pm$ 10%	100/0.25	2.000	0.30
CD3521-101K	100 $\pm$ 10%	100/0.25	2.800	0.20

## CD4532 Series

Part No.	Inductance	Test Frequency	DC Resistance	Saturation Current
	L( $\mu$ H)	(kHz/Volt)	DCR ( $\Omega$ ) MAX	Isat (A) MAX
CD4532-1R0M	1.0 $\pm$ 20%	100/0.25	0.021	4.00
CD4532-1R5M	1.5 $\pm$ 20%	100/0.25	0.026	3.60
CD4532-2R2M	2.2 $\pm$ 20%	100/0.25	0.030	3.40
CD4532-2R7M	2.7 $\pm$ 20%	100/0.25	0.045	3.00
CD4532-3R3M	3.3 $\pm$ 20%	100/0.25	0.055	2.80



# Magsonder Innovation (Shanghai) Co., Ltd

墨尚电子技术(上海)有限公司

P/N:CD series

CD4532-4R7M	4.7±20%	100/0.25	0.076	2.50
CD4532-6R8M	6.8±20%	100/0.25	0.100	1.80
CD4532-8R2M	8.2±20%	100/0.25	0.124	1.65
CD4532-100K	10±10%	100/0.25	0.140	1.60
CD4532-150K	15±10%	100/0.25	0.210	1.20
CD4532-220K	22±10%	100/0.25	0.316	1.00
CD4532-270K	27±10%	100/0.25	0.403	0.90
CD4532-330K	33±10%	100/0.25	0.466	0.80
CD4532-470K	47±10%	100/0.25	0.770	0.70
CD4532-680K	68±10%	100/0.25	0.986	0.50
CD4532-101K	100±10%	100/0.25	1.500	0.44
CD4532-151K	150±10%	100/0.25	2.110	0.35
CD4532-181K	180±10%	100/0.25	2.420	0.30
CD4532-331K	330±10%	100/0.25	3.600	0.15

## CD5825 Series

Part No.	Inductance	Test Frequency	DC Resistance	Saturation Current
	L(μH)	(kHz/Volt)	DCR (Ω) MAX	Isat (A) MAX
CD5825-1R5M	1.5±20%	100/0.25	0.024	4.00
CD5825-2R2M	2.2±20%	100/0.25	0.035	3.50
CD5825-3R3M	3.3±20%	100/0.25	0.046	2.70
CD5825-4R7M	4.7±20%	100/0.25	0.070	2.30
CD5825-6R8M	6.8±20%	100/0.25	0.092	1.70
CD5825-100M	10±20%	100/0.25	0.115	1.50
CD5825-150M	15±20%	100/0.25	0.192	1.20
CD5825-220K	22±10%	100/0.25	0.280	1.00
CD5825-330K	33±10%	100/0.25	0.384	0.80
CD5825-470K	47±10%	100/0.25	0.563	0.70
CD5825-680K	68±10%	100/0.25	0.800	0.60
CD5825-101K	100±10%	100/0.25	1.100	0.40



# Magsonder Innovation (Shanghai) Co., Ltd

墨尚电子技术(上海)有限公司

P/N:CD series

## CD5830 Series

Part No.	Inductance	Test Frequency	DC Resistance	Saturation Current
	L( $\mu$ H)	(kHz/Volt)	DCR ( $\Omega$ ) MAX	Isat (A) MAX
CD5830-1R5M	1.5 $\pm$ 20%	100/0.25	0.018	4.10
CD5830-2R2M	2.2 $\pm$ 20%	100/0.25	0.026	3.50
CD5830-3R3M	3.3 $\pm$ 20%	100/0.25	0.034	3.00
CD5830-4R7M	4.7 $\pm$ 20%	100/0.25	0.048	2.50
CD5830-6R8M	6.8 $\pm$ 20%	100/0.25	0.070	2.20
CD5830-8R2M	8.2 $\pm$ 20%	100/0.25	0.082	2.00
CD5830-100M	10 $\pm$ 20%	100/0.25	0.100	1.80
CD5830-150M	15 $\pm$ 20%	100/0.25	0.150	1.70
CD5830-180K	18 $\pm$ 10%	100/0.25	0.184	1.60
CD5830-220K	22 $\pm$ 10%	100/0.25	0.220	1.50
CD5830-330K	33 $\pm$ 10%	100/0.25	0.300	1.10
CD5830-390K	39 $\pm$ 10%	100/0.25	0.370	1.00
CD5830-470K	47 $\pm$ 10%	100/0.25	0.430	0.90
CD5830-680K	68 $\pm$ 10%	100/0.25	0.680	0.80
CD5830-101K	100 $\pm$ 10%	100/0.25	0.880	0.60
CD5830-121K	120 $\pm$ 10%	100/0.25	1.200	0.58
CD5830-151K	150 $\pm$ 10%	100/0.25	1.300	0.43
CD5830-181K	180 $\pm$ 10%	100/0.25	1.680	0.41
CD5830-221K	220 $\pm$ 10%	100/0.25	1.880	0.38
CD5830-331K	330 $\pm$ 10%	100/0.25	3.200	0.28

## CD5845 Series

Part No.	Inductance	Test Frequency	DC Resistance	Saturation Current
	L( $\mu$ H)	(kHz/Volt)	DCR ( $\Omega$ ) MAX	Isat (A) MAX
CD5845-R56M	0.56 $\pm$ 20%	100/0.25	0.007	9.50
CD5845-1R0N	1.0 $\pm$ 30%	100/0.25	0.012	6.00
CD5845-1R5M	1.5 $\pm$ 20%	100/0.25	0.014	5.20
CD5845-2R2M	2.2 $\pm$ 20%	100/0.25	0.018	4.50



# Magsonder Innovation (Shanghai) Co., Ltd

墨尚电子技术(上海)有限公司

P/N:CD series

CD5845-3R3M	3.3±20%	100/0.25	0.025	3.50
CD5845-4R7M	4.7±20%	100/0.25	0.035	3.10
CD5845-6R8M	6.8±20%	100/0.25	0.047	2.50
CD5845-8R2M	8.2±20%	100/0.25	0.059	2.20
CD5845-100K	10±10%	100/0.25	0.068	2.00
CD5845-120K	12±10%	100/0.25	0.075	1.80
CD5845-150K	15±10%	100/0.25	0.105	1.70
CD5845-220K	22±10%	100/0.25	0.164	1.50
CD5845-330K	33±10%	100/0.25	0.230	1.20
CD5845-470K	47±10%	100/0.25	0.370	1.00
CD5845-560K	56±10%	100/0.25	0.420	0.72
CD5845-680K	68±10%	100/0.25	0.460	0.61
CD5845-101K	100±10%	100/0.25	0.610	0.52
CD5845-151K	150±10%	100/0.25	0.860	0.40
CD5845-221K	220±10%	100/0.25	1.370	0.35
CD5845-331K	330±10%	100/0.25	1.850	0.25
CD5845-391K	390±10%	100/0.25	2.200	0.23
CD5845-471K	470±10%	100/0.25	2.400	0.20
CD5845-681K	680±10%	100/0.25	3.600	0.15
CD5845-102K	1000±10%	1/0.25	5.760	0.13

## CD7835 Series

Part No.	Inductance	Test Frequency	DC Resistance	Saturation Current
	L(μH)	(kHz/Volt)	DCR (Ω) MAX	Isat (A) MAX
CD7835-1R0M	1.0±20%	100/0.25	0.009	6.00
CD7835-1R5M	1.5±20%	100/0.25	0.012	5.00
CD7835-2R2M	2.2±20%	100/0.25	0.014	4.00
CD7835-3R3M	3.3±20%	100/0.25	0.023	3.50
CD7835-4R7M	4.7±20%	100/0.25	0.029	3.00
CD7835-6R8M	6.8±20%	100/0.25	0.044	2.50
CD7835-100M	10±20%	100/0.25	0.061	2.00
CD7835-150M	15±20%	100/0.25	0.091	1.80
CD7835-220K	22±10%	100/0.25	0.120	1.50
CD7835-330K	33±10%	100/0.25	0.180	1.10



# Magsonder Innovation (Shanghai) Co., Ltd

墨尚电子技术(上海)有限公司

P/N:CD series

CD7835-470K	47±10%	100/0.25	0.250	0.90
CD7835-680K	68±10%	100/0.25	0.330	0.70
CD7835-101K	100±10%	100/0.25	0.480	0.55
CD7835-151K	150±10%	100/0.25	0.793	0.50
CD7835-221K	220±10%	100/0.25	1.124	0.42
CD7835-331K	330±10%	100/0.25	1.495	0.35
CD7835-471K	470±10%	100/0.25	2.376	0.30
CD7835-681K	680±10%	100/0.25	3.312	0.25

## CD7850 Series

Part No.	Inductance	Test Frequency	DC Resistance	Saturation Current
	L(μH)	(kHz/Volt)	DCR (Ω) MAX	Isat (A) MAX
CD7850-1R2M	1.2±20%	100/0.25	0.013	10.00
CD7850-1R5M	1.5±20%	100/0.25	0.015	9.00
CD7850-2R2M	2.2±20%	100/0.25	0.018	8.00
CD7850-3R3M	3.3±20%	100/0.25	0.024	6.50
CD7850-4R7M	4.7±20%	100/0.25	0.021	4.00
CD7850-5R6M	5.6±20%	100/0.25	0.025	3.50
CD7850-6R8M	6.8±20%	100/0.25	0.030	3.10
CD7850-100K	10±10%	100/0.25	0.045	2.30
CD7850-150K	15±10%	100/0.25	0.059	1.80
CD7850-220K	22±10%	100/0.25	0.088	1.50
CD7850-330K	33±10%	100/0.25	0.120	1.30
CD7850-470K	47±10%	100/0.25	0.180	1.10
CD7850-560K	56±10%	100/0.25	0.240	0.94
CD7850-680K	68±10%	100/0.25	0.280	0.85
CD7850-101K	100±10%	100/0.25	0.430	0.72
CD7850-121K	120±10%	100/0.25	0.470	0.66
CD7850-151K	150±10%	100/0.25	0.600	0.60
CD7850-221K	220±10%	100/0.25	0.960	0.49
CD7850-331K	330±10%	100/0.25	1.260	0.40
CD7850-471K	470±10%	100/0.25	1.960	0.34
CD7850-681K	680±10%	100/0.25	2.610	0.30
CD7850-821K	820±10%	100/0.25	2.990	0.25



# Magsonder Innovation (Shanghai) Co., Ltd

墨尚电子技术(上海)有限公司

P/N:CD series

CD7850-102K	1000±10%	1/0.25	3.300	0.22
CD7850-152K	1500±10%	1/0.25	5.500	0.20
CD7850-222K	2200±10%	1/0.25	7.900	0.15
CD7850-302K	3000±10%	1/0.25	11.500	0.12
CD7850-682K	6800±10%	1/0.25	26.280	0.07

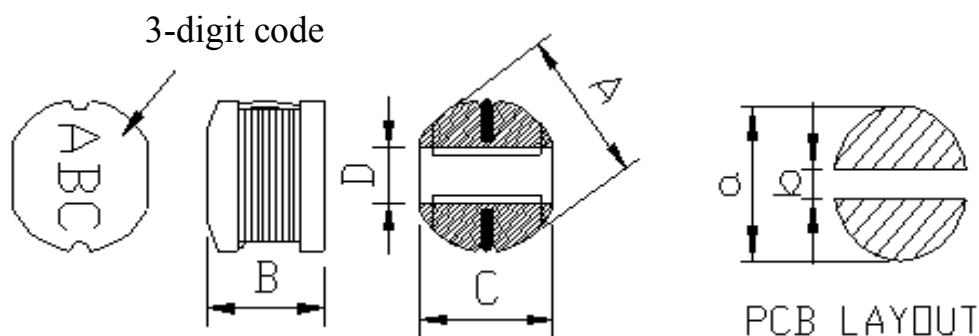
## CD1054 Series

Part No.	Inductance	Test Frequency	DC Resistance	Saturation Current
	L(μH)	(kHz/Volt)	DCR (Ω) MAX	Isat (A) MAX
CD1054-3R3M	3.3±20%	100/0.25	0.015	7.00
CD1054-4R7M	4.7±20%	100/0.25	0.023	6.00
CD1054-6R8M	6.8±20%	100/0.25	0.025	5.00
CD1054-100K	10±10%	100/0.25	0.030	4.00
CD1054-150K	15±10%	100/0.25	0.042	3.20
CD1054-220K	22±10%	100/0.25	0.060	2.50
CD1054-330K	33±10%	100/0.25	0.095	2.00
CD1054-470K	47±10%	100/0.25	0.130	1.80
CD1054-560K	56±10%	100/0.25	0.142	1.50
CD1054-680K	68±10%	100/0.25	0.198	1.30
CD1054-820K	82±10%	100/0.25	0.235	1.10
CD1054-101K	100±10%	100/0.25	0.260	0.97
CD1054-121K	120±10%	100/0.25	0.312	0.85
CD1054-151K	150±10%	100/0.25	0.368	0.78
CD1054-181K	180±10%	100/0.25	0.437	0.72
CD1054-221K	220±10%	100/0.25	0.600	0.66
CD1054-331K	330±10%	100/0.25	0.830	0.52
CD1054-471K	470±10%	100/0.25	1.280	0.42
CD1054-681K	680±10%	100/0.25	1.950	0.40
CD1054-102K	1000±10%	1/0.25	2.500	0.30
CD1054-152K	1500±10%	1/0.25	4.250	0.25
CD1054-202K	2000±10%	1/0.25	5.000	0.20
CD1054-282K	2800±10%	1/0.25	6.400	0.18

### Notes

1. All test data is referenced to 25 °C ambient
2. Operating temperature range - 40 °C to + 125 °C
3. Isat(A):DC current (A) that will cause L0 to drop approximately 10 %
4. The part temperature (ambient + temp rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

### Dimensions

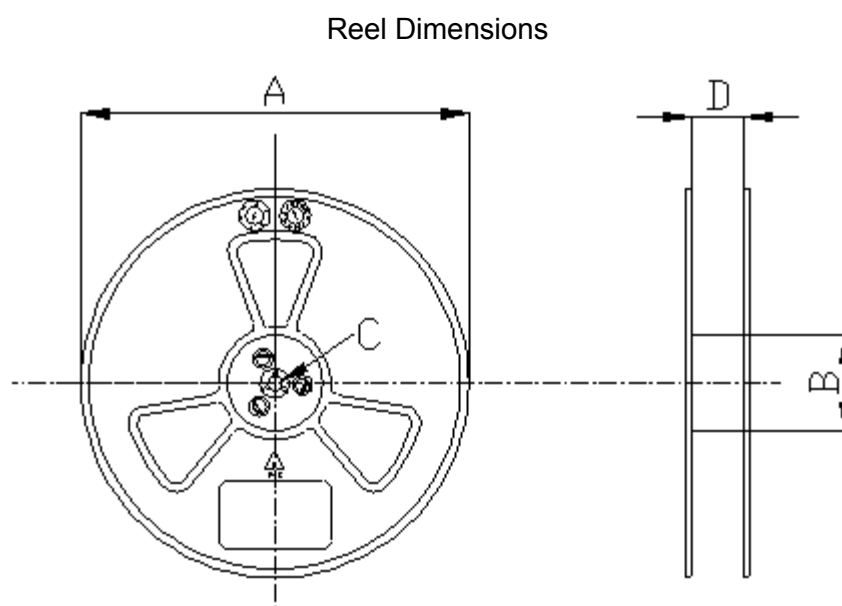
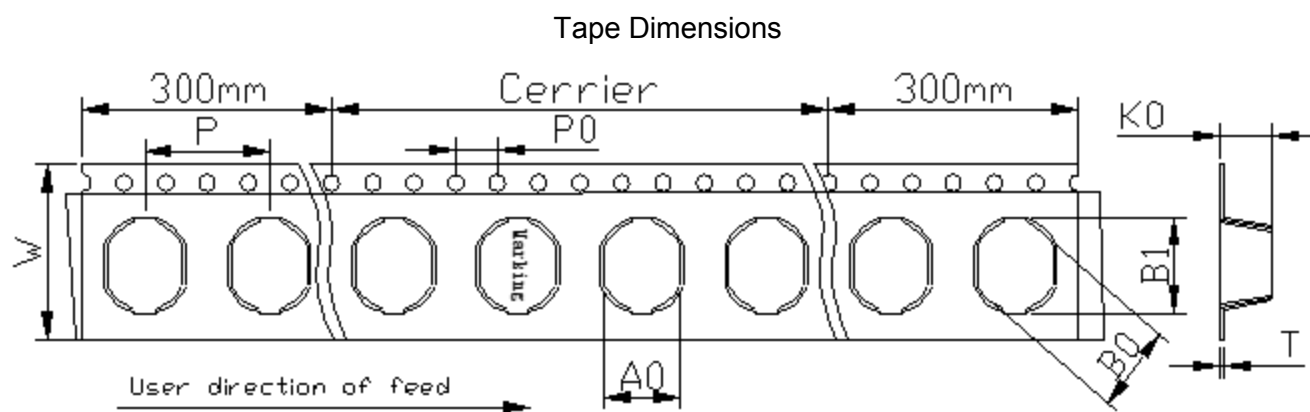


Unit: mm

Series	A	B	C	D	a Typ.	b Typ.
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



### Packaging



Unit: mm

Series	Tape Width						Reel Diameter				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

### Solder Reflow Profile:

△ Preheat condition: 150 ~200°C/60~120sec.

△ Allowed time above 217°C: 60~90sec.

△ Max temp: 260°C

△ Max time at max temp: 10sec.

△ Solder paste: Sn/3.0Ag/0.5Cu

△ Allowed Reflow time: 2x max

[Note: The reflow profile in the above table is only for qualification and is not meant to specify board assembly profiles. Actual board assembly profiles must be based on the customer's specific board design, solder paste and process, and should not exceed the parameters as the Reflow profile shows.]

