

SMD Wire Wound Power Inductors---CDU Series



Feature

- Un-Shielded construction.
- Mn-Zn Ferrite core, High DC saturation Current.
- 100% Pb lead(Pb) free meet RoHS standard.
- Operating temperature range $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$ (Including self - temperature rise).

Application

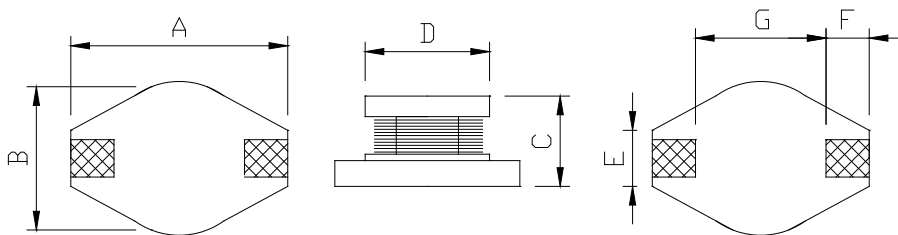
- Ideal for communication power supply.

Production identification

CDU 1608 - 2R2 M
 ① ② ③ ④

- ① Series name
- ② Size: 6.90×4.50×2.90mm
- ③ Inductance: 2.2μH
- ④ Tolerance: $\pm 20\%$

Series Shape and Dimensions (Unit:mm)



Series	A (Max)	B (Max)	C (Max)	D	E	F	G	SPQ
CDU1608	6.9	4.5	2.9	4.00	1.20	1.15	4.20	2500
CDU3316	13.5	10.0	5.2	8.40	2.54	2.54	7.62	1000
CDU3340	14.5	10.0	11.4	8.40	2.54	2.54	7.62	250
CDU5022	19.0	14.3	6.8	12.70	2.54	2.54	12.70	400

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CDU1608 Electrical Characteristics

Part Number	Inductance(μ H)	Tolerance(\pm %)	DCR Max(Ω)	Rated Current (A)
CDU1608-1R2M	1.2	20	0.031	2.880
CDU1608-1R5M	1.5	20	0.034	2.700
CDU1608-2R2M	2.2	20	0.047	2.250
CDU1608-3R3M	3.3	20	0.065	1.750
CDU1608-4R7M	4.7	20	0.086	1.400
CDU1608-6R8M	6.8	20	0.117	1.300
CDU1608-100M	10	20	0.189	1.050
CDU1608-150M	15	20	0.286	0.810
CDU1608-220M	22	20	0.364	0.700
CDU1608-330M	33	20	0.650	0.530
CDU1608-470M	47	20	0.845	0.450
CDU1608-680M	68	20	1.120	0.370
CDU1608-101M	100	20	1.660	0.310
CDU1608-151M	150	20	2.930	0.220
CDU1608-221M	220	20	3.900	0.180
CDU1608-331M	330	20	6.310	0.160

Notes:

1. All test data is based on 20°C ambient.
2. Inductance measuring frequency: $L \leq 10\mu\text{H}$ at 100KHz/0.25V; $L > 10\mu\text{H}$ at 1KHz/0.25V.
3. Irms: DC current that will causes the temperature rise ($\Delta t = 40^\circ\text{C}$) from 20°C ambient.
4. Isat: DC current at which the inductance drops approximate 10% from it's value without current.
5. Rated current: Isat or Irms, which is smaller.

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CDU3316 Electrical Characteristics

Part Number	Inductance(μ H)	Tolerance(\pm %)	DCR Max(Ω)	Rated Current (A)
CDU3316-1R2M	1.2	20	0.008	6.100
CDU3316-1R5M	1.5	20	0.009	5.700
CDU3316-2R2M	2.2	20	0.012	5.000
CDU3316-3R3M	3.3	20	0.018	4.300
CDU3316-3R9M	3.9	20	0.020	4.000
CDU3316-4R7M	4.7	20	0.021	3.780
CDU3316-5R6M	5.6	20	0.025	3.700
CDU3316-6R8M	6.8	20	0.029	3.500
CDU3316-8R2M	8.2	20	0.031	3.400
CDU3316-100M	10	20	0.036	3.060
CDU3316-150M	15	20	0.056	2.800
CDU3316-220M	22	20	0.075	2.250
CDU3316-270M	27	20	0.091	1.980
CDU3316-330M	33	20	0.111	1.800
CDU3316-390M	39	20	0.121	1.710
CDU3316-470M	47	20	0.156	1.620
CDU3316-560M	56	20	0.178	1.500
CDU3316-680M	68	20	0.208	1.330
CDU3316-820M	82	20	0.260	1.210
CDU3316-101M	100	20	0.317	1.080
CDU3316-151M	150	20	0.471	0.900
CDU3316-181M	180	20	0.533	0.792
CDU3316-221M	220	20	0.663	0.720
CDU3316-331M	330	20	1.030	0.600
CDU3316-391M	390	20	1.210	0.550
CDU3316-471M	470	20	1.050	0.500
CDU3316-561M	560	20	1.700	0.405
CDU3316-681M	680	20	2.080	0.350
CDU3316-821M	820	20	2.500	0.300
CDU3316-102M	1000	20	3.120	0.270

Notes:

1. All test data is based on 20°C ambient.
2. Inductance measuring frequency: $L \leq 10\mu\text{H}$ at 100KHz/0.25V; $L > 10\mu\text{H}$ at 1KHz/0.25V.
3. Irms: DC current that will causes the temperature rise ($\Delta t = 40^\circ\text{C}$) from 20°C ambient.
4. Isat: DC current at which the inductance drops approximate 10% from it's value without current.
5. Rated current: Isat or Irms, which is smaller.

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CDU3340 Electrical Characteristics

Part Number	Inductance(μ H)	Tolerance(\pm %)	DCR Max(Ω)	Rated Current (A)
CDU3340-1R0M	1.0	20	0.007	9.800
CDU3340-1R2M	1.2	20	0.010	9.000
CDU3340-1R5M	1.5	20	0.012	8.500
CDU3340-3R3M	3.3	20	0.014	7.000
CDU3340-4R7M	4.7	20	0.015	6.500
CDU3340-6R8M	6.8	20	0.017	6.000
CDU3340-100M	10	20	0.030	4.100
CDU3340-150M	15	20	0.036	3.800
CDU3340-220M	22	20	0.052	3.000
CDU3340-330M	33	20	0.070	2.500
CDU3340-470M	47	20	0.099	2.000
CDU3340-680M	68	20	0.144	1.700
CDU3340-101M	100	20	0.182	1.350
CDU3340-151M	150	20	0.334	1.100
CDU3340-221M	220	20	0.436	1.000
CDU3340-331M	330	20	0.689	0.765
CDU3340-471M	470	20	1.000	0.600
CDU3340-681M	680	20	1.430	0.495
CDU3340-102M	1000	20	2.080	0.430

Notes:

1. All test data is based on 20°C ambient.
2. Inductance measuring frequency: $L \leq 10\mu\text{H}$ at 100KHz/0.25V; $L > 10\mu\text{H}$ at 1KHz/0.25V.
3. Irms: DC current that will causes the temperature rise ($\Delta t = 40^\circ\text{C}$) from 20°C ambient.
4. Isat: DC current at which the inductance drops approximate 10% from it's value without current.
5. Rated current: Isat or Irms, which is smaller.

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CDU5022 Electrical Characteristics

Part Number	Inductance(μ H)	Tolerance(\pm %)	DCR Max(Ω)	Rated Current (A)
CDU5022-1R5M	1.5	20	0.007	8.500
CDU5022-2R2M	2.2	20	0.008	7.200
CDU5022-3R3M	3.3	20	0.013	6.300
CDU5022-5R6M	5.6	20	0.020	5.300
CDU5022-6R8M	6.8	20	0.021	4.900
CDU5022-100M	10	20	0.023	4.300
CDU5022-150M	15	20	0.033	3.850
CDU5022-220M	22	20	0.052	3.150
CDU5022-330M	33	20	0.075	2.500
CDU5022-470M	47	20	0.098	2.100
CDU5022-560M	56	20	0.105	2.000
CDU5022-680M	68	20	0.120	1.800
CDU5022-101M	100	20	0.218	1.350
CDU5022-151M	150	20	0.317	1.150
CDU5022-221M	220	20	0.433	1.000
CDU5022-331M	330	20	0.644	0.810
CDU5022-471M	470	20	0.932	0.675
CDU5022-561M	560	20	1.160	0.585
CDU5022-681M	680	20	1.470	0.530
CDU5022-102M	1000	20	2.050	0.440

Notes:

1. All test data is based on 20°C ambient.
2. Inductance measuring frequency: $L \leq 10\mu\text{H}$ at 100KHz/0.25V; $L > 10\mu\text{H}$ at 1KHz/0.25V.
3. Irms: DC current that will causes the temperature rise ($\Delta t = 40^\circ\text{C}$) from 20°C ambient.
4. Isat: DC current at which the inductance drops approximate 10% from it's value without current.
5. Rated current: Isat or Irms, which is smaller.