



SDR SERIES

High Current SMD Power Inductors

SDR0302, SDR0403, SDR0504, SDR0703, SDR0705, SDR1004, SDR1005

FEATURES

- Current up to 6.8A
- Larg Current
- Flat-top for Pick & Place
- Low cost

OPTIONS

- Tape & Reel is Standard Bulk Packaging Available for Smaller Quantities
- Tolerance:10% and 20% is Standard Custom Design Available

APPLICATIONS

- Ideal for Phone and Laptop DC-DC Converters
- Step-up, Step-down Converters
- Set Top-box
- Charger

Part Number	µH	DCR(Ohm)									IDC A max								
		SDR0302	SDR0403	SDR0503	SDR0504	SDR0703	SDR0705	SDR1004	SDR1005	SDR1008	SDR0302	SDR0403	SDR0503	SDR0504	SDR0703	SDR0705	SDR1004	SDR1005	SDR1008
1R0	1.0	0.07	0.049	0.03	0.028						2.080	2.560	4.500	3.000					
1R4	1.4	0.09	0.057	0.04	0.029						1.860	2.520	4.000	2.800					
1R8	1.8	0.11	0.064	0.05	0.030						1.800	1.950	3.300	2.600					
2R2	2.2	0.13	0.072	0.06	0.042						1.390	1.750	2.940	2.300					
2R7	2.7	0.14	0.079	0.07	0.044						1.320	1.580	2.500	2.100					
3R3	3.3	0.20	0.087	0.08	0.045						1.250	1.440	2.350	2.000					
3R9	3.9	0.21	0.094	0.09	0.047						1.200	1.330	2.200	1.950					
4R7	4.7	0.33	0.109	0.14	0.048						1.030	1.150	2.000	1.900					
5R6	5.6	0.35	0.126	0.15	0.050						0.910	1.100	1.800	1.800					
6R8	6.8	0.38	0.132	0.16	0.060						0.850	1.080	1.700	1.600					
8R2	8.2	0.43	0.147	0.17	0.090						0.820	1.050	1.400	1.500					
100	10	0.50	0.182	0.18	0.10	0.08	0.07	0.05	0.06	0.036	0.740	1.040	1.200	1.440	1.440	2.300	2.380	2.600	4.050
120	12	0.65	0.210	0.20	0.12	0.09	0.08	0.06	0.07	0.038	0.640	0.970	1.180	1.400	1.390	2.000	2.130	2.450	3.600
150	15	0.82	0.235	0.22	0.14	0.10	0.09	0.07	0.08	0.04	0.600	0.850	1.150	1.300	1.240	1.800	1.870	2.270	3.340
180	18	0.90	0.338	0.25	0.15	0.11	0.10	0.08	0.09	0.05	0.540	0.740	1.100	1.230	1.120	1.600	1.730	2.150	3.050
220	22	1.14	0.378	0.35	0.18	0.13	0.11	0.09	0.10	0.06	0.500	0.680	1.000	1.110	1.070	1.500	1.600	1.950	2.800
270	27	1.39	0.522	0.45	0.20	0.15	0.12	0.10	0.11	0.07	0.430	0.620	0.860	0.970	0.940	1.300	1.440	1.760	2.500
330	33	1.55	0.540	0.56	0.23	0.17	0.13	0.12	0.12	0.08	0.400	0.560	0.760	0.880	0.850	1.200	1.260	1.500	2.400
390	39	2.15	0.587	0.698	0.32	0.22	0.16	0.15	0.14	0.09	0.370	0.520	0.750	0.800	0.740	1.100	1.200	1.370	2.200
470	47	2.44	0.844	0.72	0.37	0.25	0.18	0.17	0.17	0.11	0.360	0.440	0.730	0.720	0.680	1.100	1.100	1.280	2.000
560	56	2.68	0.937	0.84	0.42	0.28	0.24	0.20	0.19	0.12	0.310	0.420	0.550	0.680	0.640	0.940	1.010	1.170	1.900
680	68	3.05	1.117	0.90	0.46	0.33	0.28	0.22	0.22	0.15	0.300	0.370	0.520	0.610	0.590	0.850	0.910	1.110	1.800
820	82	3.48	1.200	0.95	0.60	0.41	0.37	0.25	0.25	0.19	0.280	0.300	0.500	0.580	0.540	0.780	0.850	1.000	1.600
101	100	3.84	1.440	1.30	0.70	0.48	0.43	0.34	0.35	0.23	0.250	0.280	0.400	0.520	0.510	0.720	0.740	0.970	1.500
121	120	5.76	1.660	1.38	0.93	0.54	0.47	0.40	0.40	0.32	0.200	0.240	0.360	0.480	0.490	0.660	0.690	0.890	1.400
151	150	6.62	1.880	1.81	1.10	0.75	0.64	0.54	0.47	0.37	0.190	0.220	0.300	0.400	0.400	0.580	0.610	0.780	1.300
181	180	7.36	2.180	1.95	1.38	1.02	0.71	0.62	0.63	0.42	0.170	0.210	0.260	0.380	0.360	0.510	0.560	0.720	1.200
221	220	8.38	2.570	2.10	1.57	1.20	0.96	0.72	0.73	0.44	0.160	0.200	0.250	0.350	0.310	1R0	0.530	0.660	1.000
271	270	13.69	3.520	2.42	1.85	1.31	1.11	0.95	0.97	0.55	0.140	0.180	0.210	0.280	0.290	0.420	0.450	0.570	0.950
331	330	15.78	5.000	3.82	2.00	1.50	1.26	1.10	1.15	0.60	0.130	0.120	0.180	0.260	0.280	0.400	0.420	0.520	0.900
391	390	17.40	6.000	4.68	2.60	2.700	1.77	1.24	1.30	0.67	0.120	0.115	0.160	0.240	0.270	0.360	0.380	0.480	0.800
471	470	20.00	7.000	5.10	3.00	3.000	1.96	1.53	1.48	0.88	0.084	0.110	0.150	0.220	0.250	0.340	0.350	0.420	0.700
561	560			6.00	4.19			1.80	1.90	1.04			0.140	0.180			0.320	0.330	0.650
681	680			7.60	4.44			2.25	1.18				0.130	0.160				0.280	0.600
821	820			9.12	5.12			2.55	1.38				0.070	0.110			0.240	0.500	
102	1000			9.87	10.00					1.74			0.050	0.080					0.480
122	1200									1.92									0.380

1. TEST FREQ.(L) with HP4284A and HP4285A (equivalent acceptable)

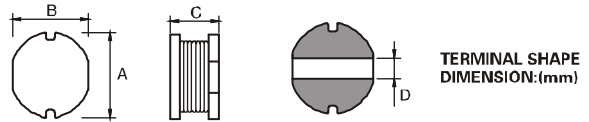
1.0-8.2 µH(7.95MHz) 10-82 µH(2.52MHz) 100-1200 µH(1KHz)

2. Tolerance of inductance

- SDR0302 1.0-470 µH ± 20%(M)
- SDR 0403 1.0-27 µH ± 20%(M) 33-470 µH ± 10%(K)
- SDR0503 1.0-2.7 µH ± 20%(M) 33-1000 µH ± 10(K)
- SDR0504 1.0-27 µH ± 20%(M) 33-47 µH ± 15%(L) 56-1000 µH ± 10%(K)
- SDR0703 10-47 µH ± 20%(M) 56-470 µH ± 10%(K)
- SDR 0705 10-470 µH ± 20%(M)
- SDR1004 10-47 µH ± 20%(M) 56-560 µH ± 10%(K)
- SDR1005 10-39 µH ± 20%(M) 47-820 µH ± 10%(K)
- SDR1008 10-82 µH ± 20%(M) 100-1200 µH ± 10%(K)

3. DCR: GW813 or QuadTech 1880 Milliohmeter
 4. IDC Max is decreased 10% against its initial value

- Operating Temperature: -40°C to +85°C
 - Storage Temperature: -40°C to +105°C
 - Solder methods: Vapor Phase, Infrared Reflow
 - Resistance to soldering heat: 260°C for 10 seconds
 - Solvent resistance: Conforms to MIL-STD-202E
 - Marking: Inductance & Tolerance
- Note: All specification subject to change without noticed.



TYPE	A	B	C	D
SDR 0302	3.0 ± 0.3	2.8 ± 0.3	2.5 ± 0.3	0.8
SDR 0403	4.5 ± 0.3	4.0 ± 0.3	3.2 ± 0.3	1.3
SDR 0503	5.8 ± 0.3	5.2 ± 0.3	2.5 ± 0.3	1.3
SDR 0504	5.8 ± 0.3	5.2 ± 0.3	4.5 ± 0.3	1.3
SDR 0703	7.8 ± 0.3	7.0 ± 0.3	3.5 ± 0.3	2.1
SDR 0705	7.8 ± 0.3	7.0 ± 0.3	5.0 ± 0.3	2.1
SDR 1004	10.0 ± 0.3	9.0 ± 0.3	4.0 ± 0.3	2.1
SDR 1005	10.0 ± 0.3	9.0 ± 0.4	5.4 ± 0.3	2.1
SDR 1006	11.0Max	10.0Max	7.5Max	2.1
SDR 1008	11.0Max	10.0Max	8.5Max	2.1