



HIGH CURRENT SURFACE-MOUNT POWER INDUCTORS

SDR SERIES

0302,0403,0504,0703,0705,1004,1005

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

COMMON APPLICATIONS:

- Ideal for Palm-Top and Laptop DC-DC Converters
- PDA's Flash Memory
- Step-up, Step-down Converters
- Top-box

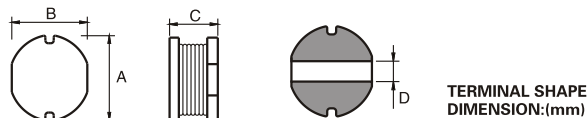
STANDARD SPECIFICATION:

Part Number	Inductance μH	DCR(Ω)										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		

TECHNICAL INFORMATION:

- 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)
- Tolerance of inductance
SDR0302 1.0-470 $\mu H \pm 20\%$ (M)
SDR 0403 1.0-27 $\mu H \pm 20\%$ (M) 33-470 $\mu H \pm 10\%$ (K)
SDR0503 1.0-2.7 $\mu H \pm 20\%$ (M) 33-1000 $\mu H \pm 10\%$ (K)
SDR0504 1.0-27 $\mu H \pm 20\%$ (M) 33-47 $\mu H \pm 15\%$ (L) 56-1000 $\mu H \pm 10\%$ (K)
SDR0703 10-47 $\mu H \pm 20\%$ (M) 56-470 $\mu H \pm 10\%$ (K)
SDR 0705 10-470 $\mu H \pm 20\%$ (M)
SDR1004 10-47 $\mu H \pm 20\%$ (M) 56-560 $\mu H \pm 10\%$ (K)
SDR1005 10-39 $\mu H \pm 20\%$ (M) 47-820 $\mu H \pm 10\%$ (K)
SDR1008 10-82 $\mu H \pm 20\%$ (M) 100-1200 $\mu H \pm 10\%$ (K)
- DCR: GW813 or QuadTech 1880 Milliohmeter
- 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.

CHARACTERISTICS:



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