



# SPECIFICATION FOR APPROVAL

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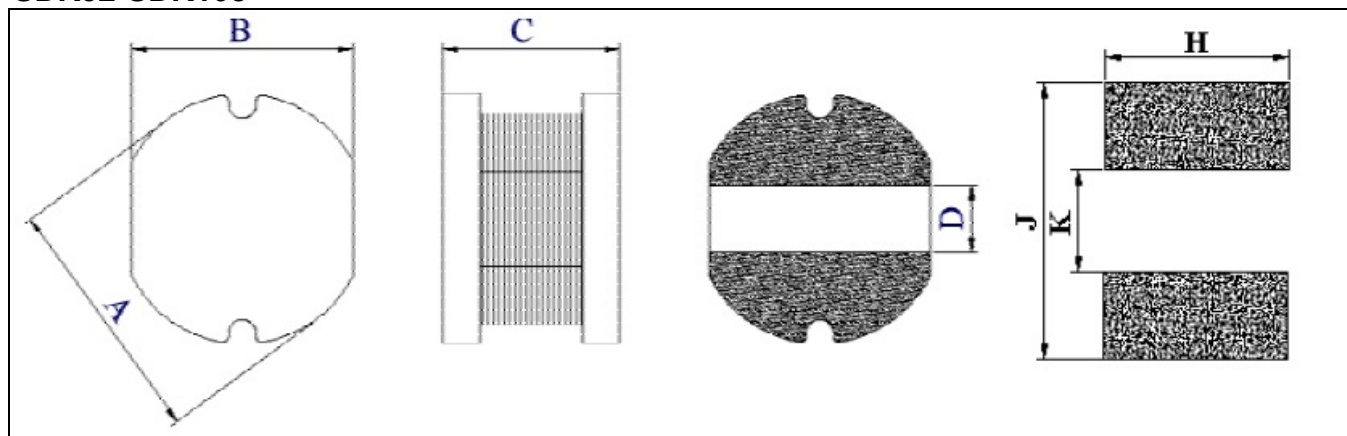


## PRODUCT DETAIL

Electrical Characteristics			Test Instruments
L	Page 3~14	TEST FREQ: Page 3~14	<ul style="list-style-type: none"> <li>•HP4285 RF IMPEDANCE / MATERIAL ANALYZER</li> <li>•HP4338A/B MILLIOHMMETER</li> <li>•HP4291A/B RF IMPEDANCE / MATERIAL ANALYZER</li> <li>•CHROMA AUTOMATIC COMPONENT ANALYZER 3302</li> <li>•HP6632B SYSTEM DC POWER SUPPLY</li> </ul>
RDC	Page 3~14	Test Level: Page 3~14	
IDC	Page 3~14	Opε.Temp.: -25°C~105°C	

## SHAPES AND DIMENSIONS :

### SDR32-SDR108



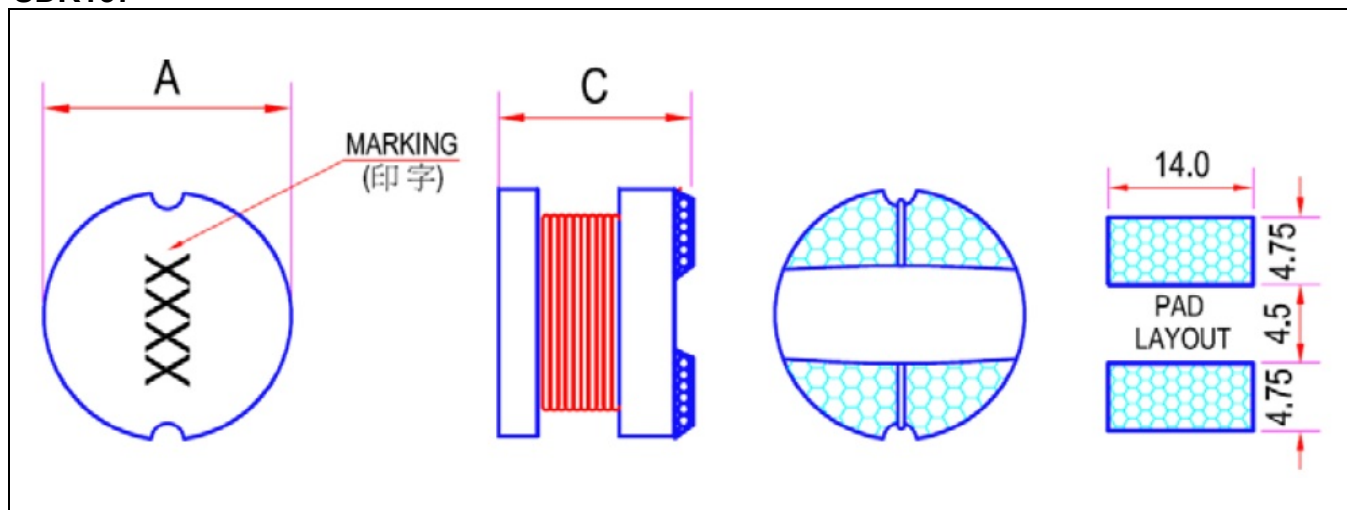
P/N	Item /Spec.(mm)						
	A	B	C	D	H	J	K
SDR32	3.5±0.3	3.0±0.3	2.0±0.3	1.2 ref	3.5 ref	4.0 ref	0.8 ref
SDR43	4.5±0.3	4.0±0.3	3.2±0.3	1.2 ref	4.5 typ	5.0 typ	1.0 typ
SDR52	5.8±0.3	5.2±0.3	2.5±0.3	2.0 ref	6.0 ref	5.7 typ	1.8 typ
SDR53	5.8±0.3	5.2±0.3	3.0±0.3	1.3 ref	5.5 ref	6.0 ref	1.7 ref
SDR54	5.8±0.3	5.2±0.3	4.5±0.3	1.3 ref	5.5 ref	6.0 ref	1.7 ref
SDR73	7.8±0.3	7.0±0.3	3.5±0.5	2.1 ref	7.5 ref	8.0 ref	2.0 ref
SDR75	7.8±0.3	7.0±0.3	5.0±0.5	2.6 ref	7.5 ref	8.0 ref	2.0 ref
SDR104	10.0±0.4	9.0±0.3	4.0±0.5	3.0 ref	9.5 typ	10.4 typ	2.5 typ
SDR105	10.0±0.4	9.0±0.3	5.4±0.4	2.1 ref	9.5 ref	10.0 ref	2.5 ref
SDR106	10.0±0.4	9.0±0.3	7.5 max	2.1 ref	9.5 ref	10.0 ref	2.5 ref
SDR108	10.0±0.4	9.0±0.3	8.5 max	3.0 ref	9.5 typ	10.4 typ	2.5 typ

### Marking :

“XXX”



**SDR137**



P/N	Item /Spec.(mm)	
	A	C
SDR137	13.0±0.5	7.0±0.5

**Marking :**  
"XXXX"

**PART NUMBER CODE**

**SDR**   **54** - **4R7**   **M**   **A**  
**1**   **2**   **3**   **4**   **5**

1. Series Name
2. Size Code
3. Inductance(R=Decimal Point) Unit :  $\mu\text{H}$
4. Inductance tolerance:"M" $\pm 20\%$  ; "L" $\pm 15\%$  ; "K" $\pm 10\%$
5. Soldering : A=Lead Free



### SMT POWER INDUCTORS SDR32 TYPE

Part NO.	L(uH)	Tolerance	RDC( $\Omega$ ) max	IDC(A) max
SDR32-1R0 MA	1.0	M	0.028	0.80
SDR32-1R2 MA	1.2	M	0.04	0.78
SDR32-1R4 MA	1.4	M	0.044	0.75
SDR32-1R8 MA	1.8	M	0.056	0.65
SDR32-2R2 MA	2.2	M	0.073	0.60
SDR32-2R7 MA	2.7	M	0.092	0.56
SDR32-3R3 MA	3.3	M	0.112	0.52
SDR32-3R9 MA	3.9	M	0.126	0.48
SDR32-4R7 MA	4.7	M	0.151	0.45
SDR32-5R6 MA	5.6	M	0.168	0.40
SDR32-6R8 MA	6.8	M	0.210	0.35
SDR32-8R2 MA	8.2	M	0.260	0.32
SDR32-100□A	10	M,K	0.327	0.30
SDR32-120□A	12	M,K	0.375	0.29
SDR32-150□A	15	M,K	0.481	0.28
SDR32-180□A	18	M,K	0.599	0.27
SDR32-200□A	20	M,K	0.62	0.26
SDR32-220□A	22	M,K	0.683	0.25
SDR32-270□A	27	M,K	0.870	0.23
SDR32-330□A	33	M,K	1.010	0.21
SDR32-390□A	39	M,K	1.268	0.19
SDR32-470□A	47	M,K	1.780	0.17
SDR32-560□A	56	M,K	1.960	0.15
SDR32-680□A	68	M,K	2.774	0.14
SDR32-820□A	82	M,K	3.080	0.12
SDR32-101□A	100	M,K	3.440	0.10
SDR32-121□A	120	M,K	4.730	0.09
SDR32-151□A	150	M,K	5.510	0.09
SDR32-181□A	180	M,K	6.180	0.08
SDR32-221□A	220	M,K	9.430	0.07
SDR32-271□A	270	M,K	10.020	0.06
SDR32-331□A	330	M,K	11.250	0.06
SDR32-391□A	390	M,K	18.250	0.06
SDR32-471□A	470	M,K	20.830	0.06

※Tolerance: N $\pm$ 30% M $\pm$ 20% L $\pm$ 15% K $\pm$ 10%

※IDC:  $\Delta L / L$  (0A)  $\leq$  10%

※Test Frequency: 1uH~8.2uH : 100KHZ,0.25V 10uH~470uH : 1KHZ,0.25V



## SMT POWER INDUCTORS

### SDR43TYPE

Part NO.	L(uH)	Tolerance	RDC( $\Omega$ ) max	IDC(A) max
SDR43-1R0 MA	1	M	0.049	2.56
SDR43-1R2 MA	1.2	M	0.053	2.54
SDR43-1R4 MA	1.4	M	0.057	2.52
SDR43-1R5 MA	1.5	M	0.061	2.24
SDR43-1R8 MA	1.8	M	0.064	1.95
SDR43-2R2□A	2.2	MK	0.072	1.75
SDR43-2R7 MA	2.7	M	0.079	1.58
SDR43-3R0 MA	3	M	0.080	1.48
SDR43-3R3 MA	3.3	M	0.087	1.44
SDR43-3R9 MA	3.9	M	0.094	1.33
SDR43-4R1 MA	4.1	M	0.100	1.24
SDR43-4R7□A	4.7	MK	0.109	1.15
SDR43-5R6 MA	5.6	M	0.126	1.10
SDR43-6R8 MA	6.8	M	0.132	1.08
SDR43-8R2 MA	8.2	M	0.147	1.05
SDR43-100□A	10	M,K	0.182	1.04
SDR43-120□A	12	M,K	0.201	0.97
SDR43-150□A	15	M,K	0.235	0.85
SDR43-180□A	18	M,K	0.338	0.74
SDR43-200□A	20	M,K	0.300	0.71
SDR43-220□A	22	M,K	0.378	0.68
SDR43-270□A	27	M,K	0.522	0.62
SDR43-330□A	33	M,K	0.540	0.56
SDR43-390□A	39	M,K	0.587	0.52
SDR43-470□A	47	M,K	0.844	0.44
SDR43-560□A	56	M,K	0.937	0.42
SDR43-680□A	68	M,K	1.117	0.37
SDR43-820□A	82	M,K	1.140	0.34
SDR43-101□A	100	M,K	1.190	0.30
SDR43-121□A	120	M,K	1.400	0.256
SDR43-151□A	150	M,K	1.80	0.212
SDR43-181□A	180	M,K	1.92	0.20
SDR43-221□A	220	M,K	2.03	0.18
SDR43-271□A	270	M,K,J	2.89	0.174
SDR43-331□A	330	M,K	3.76	0.168
SDR43-471□A	470	M,K	5.14	0.158
SDR43-561□A	560	M,K	6.37	0.148
SDR43-681□A	680	M,K	9.24	0.128
SDR43-821□A	820	M,K	10.5	0.11
SDR43-102□A	1000	M,K	15.1	0.109
SDR43-152□A	1500	M,K	19.0	0.089
SDR43-182□A	1800	M,K	21.6	0.07
SDR43-222□A	2200	M,K	27.0	0.07
SDR43-252□A	2500	M,K	28.0	0.07
SDR43-272□A	2700	M,K	37.0	0.07
SDR43-392□A	3900	M,K	46.2	0.05
SDR43-472□A	4700	M,K	67.9	0.05
SDR43-502□A	5000	M,K	72.0	0.05
SDR43-902□A	9000	M,K	124.5	0.04
SDR43-103□A	10000	M,K	160.0	0.04
※Tolerance: N±30% M±20% L±15% K±10%				
※IDC:ΔL/L(0A)≤10%				
※Test Frequency : 0.18uH~8.2uH : 100KHZ,0.25V 10uH~33000uH : 1KHZ,0.25V				



### SMT POWER INDUCTORS SDR52 TYPE

Part NO.	L(uH)	Tolerance	RDC( $\Omega$ ) max	IDC(A) max
SDR52-1R0 MA	1.0	M	0.021	4.00
SDR52-1R5 MA	1.5	M	0.03	3.75
SDR52-2R2 MA	2.2	M	0.032	3.00
SDR52-2R7 MA	2.7	M	0.036	3.00
SDR52-3R3 MA	3.3	M	0.050	2.00
SDR52-3R9 MA	3.9	M	0.052	1.97
SDR52-4R7□A	4.7	M,K	0.057	1.80
SDR52-5R6 MA	5.6	M	0.085	1.46
SDR52-6R8 MA	6.8	M	0.112	1.35
SDR52-8R2 MA	8.2	M	0.125	1.25
SDR52-100□A	10	M,K	0.14	1.15
SDR52-120□A	12	M,K	0.20	1.12
SDR52-150□A	15	M,K	0.23	1.04
SDR52-180□A	18	M,K	0.25	0.98
SDR52-220□A	22	M,K	0.30	0.89
SDR52-270□A	27	M,K	0.40	0.78
SDR52-330□A	33	M,K	0.48	0.70
SDR52-390□A	39	M,K	0.52	0.68
SDR52-470□A	47	M,K	0.56	0.58
SDR52-560□A	56	M,K	0.76	0.54
SDR52-680□A	68	M,K	0.93	0.49
SDR52-820□A	82	M,K	1.20	0.46
SDR52-101□A	100	M,K	1.34	0.42
SDR52-151□A	150	M,K	1.90	0.32
SDR52-181□A	180	M,K	2.09	0.31
SDR52-201□A	200	M,K	2.61	0.30
SDR52-221□A	220	M,K	3.26	0.28
SDR52-271□A	270	M,K	3.94	0.27
SDR52-331□A	330	M,K	4.20	0.26
SDR52-102□A	1000	M,K	15.0	0.14
SDR52-103□A	10000	M,K	102.0	0.052
※Tolerance : N±30%    M±20%    L±15%    K±10%    J±5%				
※IDC: $\Delta L / L (0A) \leq 10\%$				
※Test Frequency : 1uH~8.2uH : 100KHZ,0.25V    10uH~10000uH : 1KHZ,0.25V				



### SMT POWER INDUCTORS

#### SDR53 TYPE

Part NO.	L(uH)	Tolerance	RDC( $\Omega$ ) max	IDC(A) max
SDR53-1R0 MA	1.0	M	0.020	4.00
SDR53-1R2 MA	1.2	M	0.022	3.95
SDR53-1R5 MA	1.5	M	0.024	3.90
SDR53-1R8 MA	1.8	M	0.026	3.85
SDR53-2R2 MA	2.2	M	0.028	3.80
SDR53-2R7 MA	2.7	M	0.03	3.70
SDR53-3R3 MA	3.3	M	0.04	3.40
SDR53-3R9 MA	3.9	M	0.04	3.20
SDR53-4R7□A	4.7	M,K	0.05	3.10
SDR53-5R6 MA	5.6	M	0.07	2.80
SDR53-6R8 MA	6.8	M	0.08	2.50
SDR53-8R2 MA	8.2	M	0.09	2.20
SDR53-100□A	10	M,K	0.11	1.90
SDR53-120□A	12	M,K	0.13	1.60
SDR53-150□A	15	M,K	0.15	1.30
SDR53-180□A	18	M,K	0.18	1.00
SDR53-220□A	22	M,K	0.22	0.93
SDR53-270□A	27	M,K	0.27	0.86
SDR53-330□A	33	M,K	0.31	0.79
SDR53-390□A	39	M,K	0.33	0.78
SDR53-470□A	47	M,K	0.45	0.72
SDR53-560□A	56	M,K	0.58	0.65
SDR53-680□A	68	M,K	0.67	0.58
SDR53-820□A	82	M,K	0.89	0.51
SDR53-101□A	100	M,K	1.22	0.44
SDR53-121□A	120	M,K	1.30	0.40
SDR53-151□A	150	M,K	1.41	0.37
SDR53-181□A	180	M,K	1.85	0.35
SDR53-221□A	220	M,K	1.90	0.33
SDR53-271□A	270	M,K	1.90	0.33
SDR53-331□A	330	M,K	3.40	0.30
SDR53-471□A	470	M,K	4.40	0.27
SDR53-102□A	1000	M,K	10.75	0.19
SDR53-183□A	18000	M,K	210.59	0.042

※Tolerance: N±30% M±20% L±15% K±10% J±5%

※IDC:  $\Delta L / L (0A) \leq 10\%$

※Test Frequency : 1uH~8.2uH : 100KHZ,0.25V 10uH~18000uH : 1KHZ,0.25V



## SMT POWER INDUCTORS

### SDR54 TYPE

Part NO.	L(uH)	Tolerance	RDC( $\Omega$ ) max	IDC(A) max
SDR54-1R0 MA	1.0	M	0.010	5.00
SDR54-1R2 MA	1.2	M	0.012	4.77
SDR54-1R5 MA	1.5	M	0.013	4.50
SDR54-1R8 MA	1.8	M	0.016	4.25
SDR54-2R2 MA	2.2	M	0.017	4.20
SDR54-2R6 MA	2.6	M	0.022	4.20
SDR54-2R7 MA	2.7	M	0.025	4.00
SDR54-3R3 MA	3.3	M	0.034	2.50
SDR54-3R9 MA	3.9	M	0.035	2.20
SDR54-4R7□A	4.7	M,K	0.035	2.00
SDR54-4R8MA	4.8	M	0.038	1.98
SDR54-5R6MA	5.6	M	0.042	1.82
SDR54-6R8MA	6.8	M	0.06	1.69
SDR54-7R5MA	7.5	M	0.06	1.65
SDR54-8R2MA	8.2	M	0.06	1.56
SDR54-100□A	10	M,K	0.10	1.44
SDR54-120□A	12	M,K	0.12	1.40
SDR54-150□A	15	M,K	0.14	1.30
SDR54-180□A	18	M,K	0.15	1.23
SDR54-220□A	22	M,K	0.18	1.11
SDR54-270□A	27	M,K	0.20	0.97
SDR54-330□A	33	M,K	0.23	0.88
SDR54-390□A	39	M,K	0.32	0.80
SDR54-470□A	47	M,K	0.37	0.72
SDR54-560□A	56	M,K	0.42	0.68
SDR54-680□A	68	M,K	0.46	0.61
SDR54-820□A	82	M,K	0.60	0.58
SDR54-101□A	100	M,K	0.70	0.52
SDR54-121□A	120	M,K	0.93	0.48
SDR54-151□A	150	M,K	1.10	0.40
SDR54-181□A	180	M,K	1.38	0.38
SDR54-201□A	200	M,K	1.43	0.36
SDR54-221□A	220	M,K	1.57	0.35
SDR54-271□A	270	M,K	1.60	0.34
SDR54-331□A	330	M,K	1.82	0.32
SDR54-471□A	470	M,K	2.76	0.30
SDR54-561□A	560	M,K	3.10	0.29
SDR54-681□A	680	M,K	4.05	0.28
SDR54-821□A	820	M,K	5.56	0.27
SDR54-102□A	1000	M,K	5.74	0.26
SDR54-123□A	12000	M,K	106	0.23
※Tolerance: N±30% M±20% L±15% K±10% J±5%				
※IDC: $\Delta L / L (0A) \leq 10\%$				
※Test Frequency : 0.47uH~8.2uH : 100KHZ,0.25V 10uH~12000uH : 1KHZ,0.25V				





### SMT POWER INDUCTORS

#### SDR73 TYPE

Part NO.	L(uH)	Tolerance	RDC( $\Omega$ ) max	IDC(A) max
SDR73-1R0 MA	1.0	M	0.018	1.64
SDR73-1R5 MA	1.5	M	0.020	1.60
SDR73-3R3 MA	3.3	M	0.025	1.59
SDR73-4R7 MA	4.7	M	0.039	1.54
SDR73-6R8 MA	6.8	M	0.04	1.49
SDR73-8R2 MA	8.2	M	0.08	1.46
SDR73-100□A	10	M,K	0.08	1.44
SDR73-110□A	11	M,K	0.09	1.42
SDR73-120□A	12	M,K	0.09	1.39
SDR73-150□A	15	M,K	0.10	1.24
SDR73-180□A	18	M,K	0.11	1.12
SDR73-220□A	22	M,K	0.13	1.07
SDR73-270□A	27	M,K	0.15	0.94
SDR73-330□A	33	M,K	0.17	0.85
SDR73-390□A	39	M,K	0.22	0.74
SDR73-470□A	47	M,K	0.25	0.68
SDR73-560□A	56	M,K	0.28	0.64
SDR73-680□A	68	M,K	0.33	0.59
SDR73-700□A	70	M,K	0.35	0.56
SDR73-800□A	80	M,K	0.38	0.55
SDR73-820□A	82	M,K	0.41	0.54
SDR73-101□A	100	M,K	0.48	0.51
SDR73-121□A	120	M,K	0.54	0.49
SDR73-151□A	150	M,K	0.75	0.40
SDR73-181□A	180	M,K	1.02	0.36
SDR73-221□A	220	M,K	1.20	0.31
SDR73-271□A	270	M,K	1.31	0.29
SDR73-331□A	330	M,K	1.50	0.28
SDR73-561□A	560	M,K	2.66	0.25
SDR73-102□A	1000	M,K	4.76	0.20
SDR73-562□A	5600	M,K	31.2	0.18
SDR73-103□A	10000	M,K	55.0	0.05
SDR73-113□A	11000	M,K	62.0	0.037

※Tolerance : N±30% M±20% L±15% K±10% J±5%

※IDC:  $\Delta L / L (0A) \leq 10\%$

※Test Frequency : 1uH~8.2uH : 100KHZ,0.25V 10uH~11000uH : 1KHZ,0.25V



## SMT POWER INDUCTORS

### SDR75 TYPE

Part NO.	L(uH)	Tolerance	RDC(Ω) max	IDC(A) max
SDR75-1R0 MA	1.0	M	0.013	3.40
SDR75-1R5 MA	1.5	M	0.016	3.30
SDR75-1R8 MA	1.8	M	0.020	3.20
SDR75-2R2 MA	2.2	M	0.023	3.00
SDR75-2R5 MA	2.5	M	0.026	2.90
SDR75-3R3 MA	3.3	M	0.028	2.80
SDR75-4R7 □A	4.7	MK	0.045	2.70
SDR75-5R6 MA	5.6	M	0.048	2.65
SDR75-6R8 MA	6.8	M	0.058	2.60
SDR75-8R2 MA	8.2	M	0.07	2.40
SDR75-100 □A	10	M,K	0.07	2.30
SDR75-120 □A	12	M,K	0.08	2.00
SDR75-150 □A	15	M,K	0.09	1.80
SDR75-180 □A	18	M,K	0.10	1.60
SDR75-220 □A	22	M,K	0.11	1.50
SDR75-270 □A	27	M,K	0.12	1.30
SDR75-330 □A	33	M,K	0.13	1.20
SDR75-390 □A	39	M,K	0.16	1.10
SDR75-470 □A	47	M,K	0.23	0.95
SDR75-560 □A	56	M,K	0.24	0.94
SDR75-680 □A	68	M,K	0.28	0.85
SDR75-800 □A	80	M,K	0.35	0.78
SDR75-820 □A	82	M,K	0.37	0.78
SDR75-101 □A	100	M,K	0.43	0.72
SDR75-121 □A	120	M,K	0.47	0.66
SDR75-151 □A	150	M,K	0.64	0.58
SDR75-181 □A	180	M,K	0.71	0.51
SDR75-221 □A	220	M,K	0.96	0.49
SDR75-261 □A	260	M,K	1.00	0.45
SDR75-271 □A	270	M,K	1.11	0.42
SDR75-331 □A	330	M,K	1.26	0.40
SDR75-391 □A	390	M,K	1.77	0.36
SDR75-471 □A	470	M,K	1.96	0.34
SDR75-511 □A	510	M,K	2.10	0.33
SDR75-561 □A	560	M,K	2.28	0.32
SDR75-681 □A	680	M,K	2.48	0.30
SDR75-821 □A	820	M,K	3.40	0.30
SDR75-102 □A	1000	M,K	4.2	0.30
SDR75-122 □A	1200	M,K	5.00	0.17
SDR75-152 □A	1500	M,K	5.52	0.16
SDR75-182 □A	1800	M,K	6.05	0.15
SDR75-202 □A	2000	M,K	7.28	0.14
SDR75-252 □A	2500	M,K	9.68	0.11
SDR75-302 □A	3000	M,K	13.20	0.10
SDR75-532 □A	5300	M,K	24.0	0.08
SDR75-882 □A	8800	M,K	28.0	0.04

※Tolerance: N±30% M±20% L±15% K±10% J±5%

※IDC:  $\Delta L / L (0A) \leq 10\%$

※Test Frequency : 0.47uH~8.2uH : 100KHZ,0.25V 10uH~12000uH : 1KHZ,0.25V



## SMT POWER INDUCTORS

### SDR104

Part NO.	L(uH)	Tolerance	RDC( $\Omega$ ) max	IDC(A) max
SDR104-1R0□A	1.0	M,K	0.012	8.70
SDR104-1R2□A	1.2	M,K	0.014	8.00
SDR104-1R4□A	1.4	M,K	0.016	7.48
SDR104-1R5□A	1.5	M,K	0.016	7.48
SDR104-1R8□A	1.8	M,K	0.018	6.80
SDR104-2R2□A	2.2	M,K	0.020	5.40
SDR104-2R7□A	2.7	M,K	0.024	3.20
SDR104-3R3□A	3.3	M,K	0.028	2.85
SDR104-3R9□A	3.9	M,K	0.030	2.80
SDR104-4R7□A	4.7	M,K	0.038	2.75
SDR104-5R6□A	5.6	M,K	0.040	2.70
SDR104-6R8□A	6.8	M,K	0.042	2.65
SDR104-8R2□A	8.2	M,K	0.048	2.60
SDR104-100□A	10	M,K	0.05	2.38
SDR104-120□A	12	M,K	0.06	2.13
SDR104-150□A	15	M,K	0.07	1.87
SDR104-180□A	18	M,K	0.08	1.73
SDR104-220□A	22	M,K	0.09	1.60
SDR104-270□A	27	M,K	0.10	1.44
SDR104-330□A	33	M,K	0.12	1.26
SDR104-390□A	39	M,K	0.15	1.20
SDR104-470□A	47	M,K	0.17	1.10
SDR104-560□A	56	M,K	0.20	1.01
SDR104-680□A	68	M,K	0.22	0.91
SDR104-820□A	82	M,K	0.25	0.85
SDR104-101□A	100	M,K	0.34	0.74
SDR104-121□A	120	M,K	0.40	0.69
SDR104-151□A	150	M,K	0.54	0.61
SDR104-181□A	180	M,K	0.62	0.56
SDR104-221□A	220	M,K	0.72	0.53
SDR104-271□A	270	M,K	0.95	0.45
SDR104-331□A	330	M,K	1.10	0.42
SDR104-391□A	390	M,K	1.24	0.38
SDR104-471□A	470	M,K	1.53	0.35
SDR104-561□A	560	M,K	1.90	0.32

※Tolerance : N±30% M±20% L±15% K±10% J±5%

※IDC:  $\Delta L / L (0A) \leq 10\%$

※Test Frequency : 1.0uH~8.2uH : 100KHZ,0.25V 10uH~560uH : 1KHZ,0.25V



## SMT POWER INDUCTORS

### SDR105

Part NO.	L(uH)	Tolerance	RDC( $\Omega$ ) max	IDC(A) max
SDR105-1R2MA	1.2	M	0.009	8.63
SDR105-1R5 MA	1.5	M	0.010	8.00
SDR105-1R6 MA	1.6	M	0.013	8.00
SDR105-2R2 MA	2.2	M	0.014	6.80
SDR105-3R3 MA	3.3	M	0.018	3.05
SDR105-4R7 MA	4.7	M	0.020	2.90
SDR105-6R8 MA	6.8	M	0.040	2.75
SDR105-8R2 MA	8.2	M	0.050	2.70
SDR105-100□A	10	M,K	0.06	2.60
SDR105-120□A	12	M,K	0.07	2.45
SDR105-150□A	15	M,K	0.08	2.27
SDR105-180□A	18	M,K	0.09	2.15
SDR105-220□A	22	M,K	0.10	1.95
SDR105-270□A	27	M,K	0.11	1.76
SDR105-330□A	33	M,K	0.12	1.50
SDR105-390□A	39	M,K	0.14	1.37
SDR105-470□A	47	M,K	0.17	1.28
SDR105-560□A	56	M,K	0.19	1.17
SDR105-680□A	68	M,K	0.22	1.11
SDR105-820□A	82	M,K	0.25	1.00
SDR105-101□A	100	M,K	0.35	0.97
SDR105-111□A	110	M,K	0.38	0.91
SDR105-121□A	120	M,K	0.40	0.89
SDR105-151□A	150	M,K	0.47	0.78
SDR105-181□A	180	M,K	0.63	0.72
SDR105-221□A	220	M,K	0.73	0.66
SDR105-271□A	270	M,K	0.97	0.57
SDR105-331□A	330	M,K	1.15	0.52
SDR105-391□A	390	M,K	1.30	0.48
SDR105-471□A	470	M,K	1.48	0.42
SDR105-561□A	560	M,K	1.90	0.33
SDR105-681□A	680	M,K	2.25	0.28
SDR105-821□A	820	M,K	2.55	0.24
SDR105-102□A	1000	M,K	3.49	0.20
SDR105-103□A	10000	M,K	31.0	0.15
※Tolerance : N $\pm$ 30%    M $\pm$ 20%    L $\pm$ 15%    K $\pm$ 10%    J $\pm$ 5%				
※IDC: $\Delta L/L$ (0A) $\leq$ 10%				
※Test Frequency : 1.2uH~10000uH : 100KHZ,0.25V				



**SMT POWER INDUCTORS**  
**SDR106**

Part NO.	L(uH)	Tolerance	RDC(Ω) max	IDC(A) max
SDR106-1R0□A	1.0	M,K	0.008	9.50
SDR106-1R8□A	1.8	M,K	0.011	8.60
SDR106-2R2□A	2.2	M,K	0.012	7.20
SDR106-3R3□A	3.3	M,K	0.016	6.80
SDR106-3R9□A	3.9	M,K	0.017	6.35
SDR106-4R7□A	4.7	M,K	0.019	5.45
SDR106-5R6□A	5.6	M,K	0.024	4.30
SDR106-6R8□A	6.8	M,K	0.035	3.52
SDR106-8R2□A	8.2	M,K	0.045	3.51
SDR106-100□A	10	M,K	0.06	3.50
SDR106-120□A	12	M,K	0.07	3.40
SDR106-150□A	15	M,K	0.08	3.10
SDR106-180□A	18	M,K	0.09	3.00
SDR106-220□A	22	M,K	0.10	2.60
SDR106-270□A	27	M,K	0.11	2.40
SDR106-330□A	33	M,K	0.12	2.30
SDR106-390□A	39	M,K	0.14	2.10
SDR106-470□A	47	M,K	0.17	1.95
SDR106-560□A	56	M,K	0.19	1.85
SDR106-680□A	68	M,K	0.22	1.65
SDR106-820□A	82	M,K	0.25	1.50
SDR106-101□A	100	M,K	0.35	1.40
SDR106-121□A	120	M,K	0.40	1.30
SDR106-151□A	150	M,K	0.47	1.20
SDR106-181□A	180	M,K	0.63	1.00
SDR106-221□A	220	M,K	0.73	0.95
SDR106-271□A	270	M,K	0.97	0.90
SDR106-331□A	330	M,K	1.15	0.80
SDR106-391□A	390	M,K	1.30	0.75
SDR106-471□A	470	M,K	1.48	0.65
SDR106-531□A	530	M,K	1.70	0.62
SDR106-561□A	560	M,K	1.90	0.60
SDR106-681□A	680	M,K	2.25	0.50
SDR106-821□A	820	M,K	2.55	0.48
SDR106-102□A	1000	M,K	3.00	0.46
SDR106-122□A	1200	M,K	3.50	0.35
SDR106-153□A	15000	M,K	41.00	0.12

※Tolerance: N±30% M±20% L±15% K±10% J±5%

※IDC:  $\Delta L / L (0A) \leq 10\%$

※Test Frequency : 1.0uH~8.2uH : 100KHZ,0.25V 10uH~15000uH : 1KHZ,0.25V



## SMT POWER INDUCTORS

### SDR108

Part NO.	L(uH)	Tolerance	RDC(Ω) max	IDC(A) max
SDR108-1R0MA	1.0	M	0.0068	14.0
SDR108-1R4MA	1.4	M	0.0077	13.5
SDR108-1R8MA	1.8	M	0.0086	13.0
SDR108-2R2MA	2.2	M	0.011	12.8
SDR108-2R7MA	2.7	M	0.012	11.4
SDR108-3R3MA	3.3	M	0.013	11.0
SDR108-3R9MA	3.9	M	0.014	10.2
SDR108-4R7MA	4.7	M	0.015	9.15
SDR108-5R6MA	5.6	M	0.019	8.37
SDR108-6R8MA	6.8	M	0.020	7.58
SDR108-8R2MA	8.2	M	0.023	6.55
SDR108-100□A	10	M,K	0.030	5.99
SDR108-120□A	12	M,K	0.033	5.40
SDR108-150□A	15	M,K	0.037	4.95
SDR108-180□A	18	M,K	0.053	4.35
SDR108-220□A	22	M,K	0.061	3.99
SDR108-270□A	27	M,K	0.064	3.70
SDR108-330□A	33	M,K	0.087	3.29
SDR108-390□A	39	M,K	0.096	3.01
SDR108-470□A	47	M,K	0.11	2.78
SDR108-560□A	56	M,K	0.12	2.57
SDR108-680□A	68	M,K	0.16	2.28
SDR108-820□A	82	M,K	0.17	2.10
SDR108-101□A	100	M,K	0.23	1.93
SDR108-121□A	120	M,K	0.27	1.75
SDR108-151□A	150	M,K	0.31	1.58
SDR108-181□A	180	M,K	0.36	1.44
SDR108-201□A	200	M,K	0.39	1.38
SDR108-221□A	220	M,K	0.46	1.30
SDR108-271□A	270	M,K	0.53	1.17
SDR108-331□A	330	M,K	0.65	1.06
SDR108-391□A	390	M,K	0.81	0.96
SDR108-471□A	470	M,K	1.01	0.88
SDR108-561□A	560	M,K	1.19	0.81
SDR108-681□A	680	M,K	1.43	0.74
SDR108-821□A	820	M,K	1.72	0.66
SDR108-102□A	1000	M,K	2.08	0.60
SDR108-122□A	1200	M,K	2.49	0.55
SDR108-152□A	1500	M,K	3.12	0.49
SDR108-182□A	1800	M,K	3.83	0.45
SDR108-202□A	2000	M,K	4.32	0.41
SDR108-222□A	2200	M,K	4.60	0.40
SDR108-252□A	2500	M,K	5.45	0.38
SDR108-272□A	2700	M,K	5.67	0.36

※Tolerance: N±30% M±20% L±15% K±10% J±5%

※IDC:  $\Delta L / L (0A) \leq 10\%$

※Test Frequency : 1.0uH~8.2uH : 100KHZ,0.25V 10uH~2700uH : 1KHZ,0.25V



## UNSHIELDED SMT POWER INDUCTORS

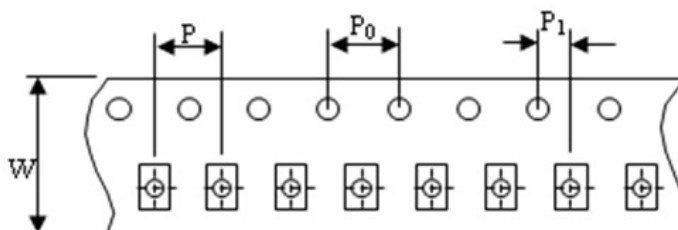
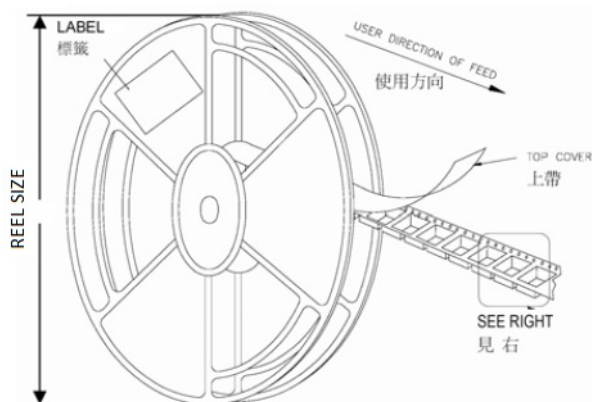
### SDR137 TYPE

Part No.	L ( $\mu$ H)	DCR max ( $\Omega$ )	Test Freq (@ 0.1V)	I sat (A)	I rms (A)
SDR137-1R5MA	1.5	5	100KHz	22	9.5
SDR137-2R2MA	2.2	6	100KHz	20	9
SDR137-2R7MA	2.7	8	100KHz	18	8.2
SDR137-3R3MA	3.3	8.7	100KHz	17	7.5
SDR137-4R7MA	4.7	11.8	100KHz	15	7
SDR137-5R6MA	5.6	15	100KHz	13	6.5
SDR137-6R8MA	6.8	17	100KHz	6	11.5
SDR137-8R2MA	8.2	19	100KHz	10.8	5.8
SDR137-100MA	10	23	100KHz	10.2	5.6
SDR137-120MA	12	30	100KHz	9	4.8
SDR137-150MA	15	34	100KHz	8	4.5
SDR137-180MA	18	40	100KHz	7.5	4.2
SDR137-220MA	22	47	100KHz	7	3.6
SDR137-270MA	27	60	100KHz	6	3.3
SDR137-330MA	33	70	100KHz	5.5	3.1
SDR137-390KA	39	75	100KHz	5.1	2.9
SDR137-470KA	47	82	100KHz	4.7	2.7
SDR137-560KA	56	112	100KHz	4.3	2.5
SDR137-680KA	68	120	100KHz	4	2.3
SDR137-820KA	82	140	100KHz	2.1	3.7
SDR137-101KA	100	180	100KHz	3.2	1.9
SDR137-121KA	120	230	100KHz	3	1.8
SDR137-151KA	150	260	100KHz	27	1.6
SDR137-181KA	180	350	100KHz	2.4	1.5
SDR137-221KA	220	380	100KHz	2.2	1.3
SDR137-271KA	270	480	100KHz	1.9	1.2
SDR137-331KA	330	520	100KHz	1.7	1.1
SDR137-391KA	390	650	100KHz	1.6	1
SDR137-471KA	470	800	100KHz	1.5	0.9
SDR137-561KA	560	1100	100KHz	1.3	0.85
SDR137-681KA	680	1150	100KHz	1.2	0.8
SDR137-821KA	820	1600	100KHz	1.1	0.75
SDR137-102KA	1000	1700	100KHz	1	0.65



## REEL DIMENSIONS

Unit: mm



## REEL PACKAGING QUANTITY

TYPE	W	P	P0	P1	REEL SIZE 180 mm (7") PCS / REEL	REEL SIZE 330 mm (13") PCS / REEL
SDR32	12	8	4	2	1000	3000
SDR43	12	8	4	2	500	2000
SDR52	12	8	4	2	500	2500
SDR53	12	8	4	2	500	2500
SDR54	12	8	4	2	350	1500
SDR73	16	12	4	2		1000
SDR75	16	12	4	2		1000
SDR104	24	16	4	2		1000
SDR105	24	16	4	2		750
SDR106	24	16	4	2		500
SDR108	24	16	4	2		450
SDR137	24	12	4	2		400





## RELIABILITY AND TEST CONDITION

ITEM	SPECIFICATION	DETAILS
Flexure Strength	There shall be no mechanical damage or electrical damage.	<p>The sample shall be soldered onto the printed circuit board in figure 1 and a load applied unit the figure in the arrow direction is made approximately 1.5mm.</p>
Soldering Heat Resistance	New solder More than 90%	<p>Flux should cover the whole of the sample before heating, then be preheated for about 2 minutes over temperature of 130 ~ 150 °C. Immersing to 260±5°C fully melted solder to 0.5mm depth for 10±1 seconds. More than 90% of the electrodes shall be covered.</p>
Dipping Verification	New solder More than 95%	<p>Temperature: 230±5°C Time: 4±1 seconds.</p>
Terminal Strength	Duration 10±1 seconds	<p>After solder between copper plate and terminals of coil, push of with 1.0kg must no crack</p>
High temperature storage	$\Delta L / \Delta L_0 \leq \pm 10\%$ There shall be no mechanical damage.	<p>The sample shall be left for 96±2 hours in an atmosphere with a temperature of 100±2°C and a normal humidity. Upon completion of the test, the measurement shall be make after the sample has been left in a normal temperature and normal humidity for 1~2 hours.</p>
Low temperature storage	$\Delta L / \Delta L_0 \leq \pm 10\%$ There shall be no mechanical damage.	<p>The sample shall be left for 96±2 hours in an atmosphere with a temperature of -40±2°C and a normal humidity. Upon completion of the test, the measurement shall be make after the sample has been left in a normal temperature and normal humidity for 1~2 hours.</p>
Vibration	$\Delta L / \Delta L_0 \leq \pm 10\%$ There shall be no mechanical damage.	<p>The sample shall be soldered onto the printed circuit board and when a vibration having an amplitude of 1.52mm and a frequency of from 10 to 50Hz/1 minute repeated should be applied to the 3 directions (X,Y,Z) for 2 hours each. (A total of 6 hours)</p>

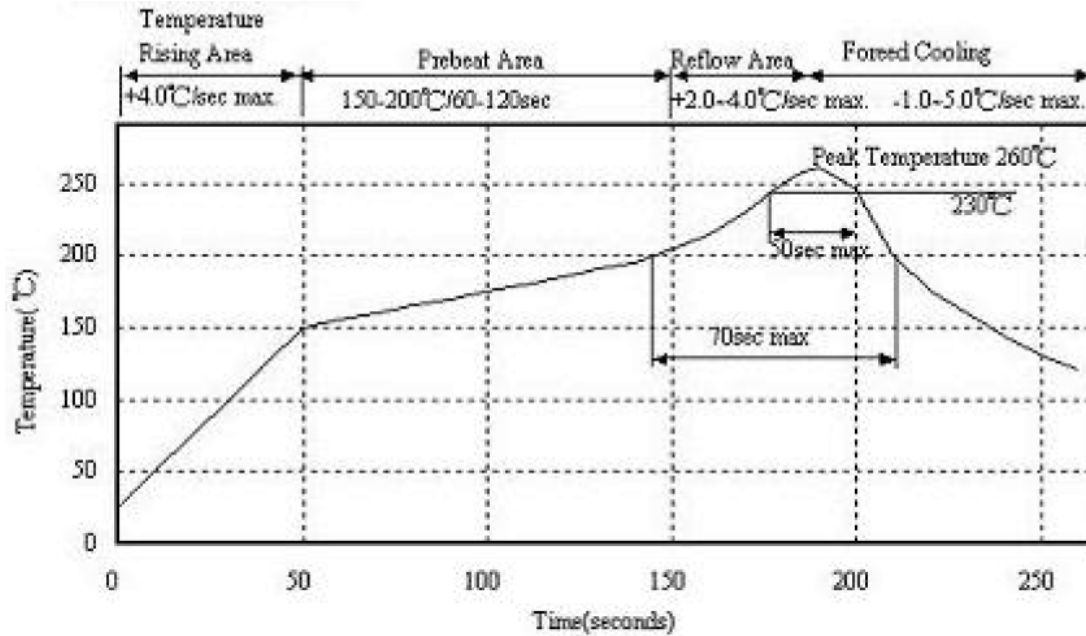


ITEM	SPECIFICATION	DETAILS															
Insulation resistance	Insulation Resistance <math>< 1 \times 10^8 \Omega</math>	DC 100V voltage shall be applied across this sample of top surface and the terminal.															
Dielectric withstand voltage	There shall be no other damage or problems.	AC 100V voltage shall be applied for 1 minute across set the top surface and the terminal of this sample.															
Temperature characteristics	$\Delta L/L_{20^\circ\text{C}} \leq \pm 10\%$	The test shall be performed after the sample has stabilized in an ambient temperature of $-20^\circ\text{C}$ to $+85^\circ\text{C}$ , and the value calculated based on the value applicable in a normal temperature and normal humidity shall be $\Delta L/L_{20^\circ\text{C}} \leq \pm 10\%$ .															
Change of temperature	$\Delta L/\Delta L_0 \leq \pm 10\%$ There shall be no other damage of problems	The sample shall be subject to 5 cycles, such as shown in the table 2 below and then it shall be subjected to standard atmospheric conditions for 1 hour, after which measurement shall be make.															
		<table border="1"> <thead> <tr> <th></th> <th>Temperature</th> <th>Duration</th> </tr> </thead> <tbody> <tr> <td>1</td> <td><math>-25 \pm 3^\circ\text{C}</math></td> <td>30 min.</td> </tr> <tr> <td>2</td> <td>Standard atmospheric</td> <td>5 sec. or less No.1→No.2</td> </tr> <tr> <td>3</td> <td><math>85 \pm 2^\circ\text{C}</math></td> <td>30 min.</td> </tr> <tr> <td>4</td> <td>Standard atmospheric</td> <td>5 sec. or less No.1→No.2</td> </tr> </tbody> </table>		Temperature	Duration	1	$-25 \pm 3^\circ\text{C}$	30 min.	2	Standard atmospheric	5 sec. or less No.1→No.2	3	$85 \pm 2^\circ\text{C}$	30 min.	4	Standard atmospheric	5 sec. or less No.1→No.2
			Temperature	Duration													
		1	$-25 \pm 3^\circ\text{C}$	30 min.													
		2	Standard atmospheric	5 sec. or less No.1→No.2													
3	$85 \pm 2^\circ\text{C}$	30 min.															
4	Standard atmospheric	5 sec. or less No.1→No.2															
Moisture storage	$\Delta L/\Delta L_0 \leq \pm 10\%$ There shall be no other damage of problems	The sample shall be left for $96 \pm 4$ hours in a temperature of $60 \pm 3^\circ\text{C}$ and a humidity(RH) of 90~95%. Upon completion of the test, the measurement shall be make after the sample has been left in a normal temperature and normal humidity more than 1 hour.															



### Reflow Curve of Heat endurance of Reflow soldering test

Peak temperature 260 °C : within 10 sec ; Max time above 230 °C : 50 sec ; Max time above 200 °C : 70 sec



1. This peak temperature only applicable to some special parts. The operating parameter may vary according to the part type.
2. A test is made under the conditions mentioned above. And it is left 1 hour in the normal temperature and humidity. After that, no mechanical and electrical defeat should be found out.
3. The reflow condition is according to the machine used by our company.

NOTE : Above specifications are only for reference, follow confirmation documents for the specific test conditions.