

叠层片式陶瓷电感—SDCL 系列

Multilayer Chip Ceramic Inductor – SDCL Series

Operating Temp. :

SDCL0603&1005 series: -55°C~ +125°C

SDCL1608 series: -40°C~ +85°C



特征

- 迭层独石结构、高度可靠性
- 高自谐频率
- 良好的可焊性和耐焊性

FEATURES

- Monolithic Structure for high reliability
- High self-resonant frequency
- Excellent solderability and high heat resistance

用途

- 通讯电子设备等的射频线路

APPLICATIONS

- RF Circuit of in telecommunication and other Equipments

产品型号

PRODUCT IDENTIFICATION

SDCL

①

分类 Type	
SDCL	片式陶瓷体电感 Chip Ceramic Inductor

1608

②

C

③

外形尺寸(L×W) (mm) External Dimensions (L×W) (mm)	
0603 [0201]	0.6×0.3
1005 [0402]	1.0×0.5
1608 [0603]	1.6×0.8

10N

④

公称电感量 Nominal Inductance	
Example	Nominal Value
3N9	3.9nH
10N	10nH
R10	100nH
※R=小数点, N=nH	

⑤

电感公差 Inductance Tolerance	
S	±0.3nH
J	±5%
K	±10%

J

⑤

T

⑥

材料代号 Material Code	
C	

⑥

包装 Packing	
B	散装 Bulk Package
T	编带 Tape & Reel

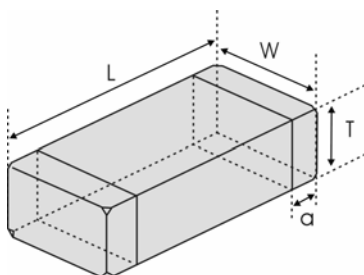
⑦

无有害物质产品 Hazardous Substance Free Products	
F	

外观尺寸

SHAPE AND DIMENSIONS

Unit: mm [inch]



Type	L	W	T	A
SDCL0603 [0201]	0.6±0.05 [.024±.002]	0.3±0.05 [.012±.002]	0.3±0.05 [.012±.002]	0.15±0.05 [.006±.002]
SDCL1005 [0402]	1.0±0.15 [.039±.006]	0.5±0.15 [.020±.006]	0.5±0.15 [.020±.006]	0.25±0.1 [.010±.004]
SDCL1608 [0603]	1.6±0.15 [.063±.006]	0.8±0.15 [.031±.006]	0.8±0.15 [.031±.006]	0.3±0.2 [.012±.008]
	1.65±0.15 [.065±.006]			

规格特性

SPECIFICATIONS

SDCL0603 TYPE

Part Number 型号	Inductance 电感量	Min. Quality Factor 品质 因子	L, Q Test Freq. L/Q 测试 频率	Typical Q @ Freq. (MHz)						Min. Self-resonant Frequency 自谐振 频率	Max. DC Resistance 直流电阻	Max. Rated Current 额定电流	Thickness 厚度
				100	300	500	800	1000	1800				
Units 单位	nH	-	MHz	-						MHz	Ω	mA	mm [inch]
Symbol 符号	L	Q	Freq	Q						SRF	DCR	Ir	T
SDCL0603C1N0S	1.0±0.3	3	100	3	7	10	15	16	24	>6000	0.15	170	0.3±0.05 [.012±.002]
SDCL0603C1N2S	1.2±0.3	3	100	3.5	7	10	15	16	24	>6000	0.15	170	
SDCL0603C1N5S	1.5±0.3	3	100	4	7	11	15	17	25	>6000	0.15	170	
SDCL0603C1N8S	1.8±0.3	4	100	4.5	8	11	15	17	25	>6000	0.20	170	
SDCL0603C2N0S	2.0±0.3	4	100	4.5	8	11	15	16	24	>6000	0.25	150	
SDCL0603C2N2S	2.2±0.3	4	100	4.5	8	11	15	16	24	>6000	0.25	150	
SDCL0603C2N7S	2.7±0.3	4	100	4.5	8	11	14	16	23	>6000	0.25	150	
SDCL0603C3N3S	3.3±0.3	4	100	4.5	8	11	14	15	22	>6000	0.30	150	
SDCL0603C3N6S	3.6±0.3	4.5	100	5	8	11	13	15	21	6000	0.35	150	
SDCL0603C3N9S	3.9±0.3	4.5	100	5	8	11	13	15	21	6000	0.35	150	
SDCL0603C4N7S	4.7±0.3	4.5	100	5	8	11	14	15	20	5300	0.40	150	
SDCL0603C5N6S	5.6±0.3	4.5	100	5	8	10	13	14	20	4600	0.45	150	
SDCL0603C6N8□	6.8	4.5	100	5	8	11	14	15	19	3900	0.50	150	
SDCL0603C8N2□	8.2	4.5	100	5	8	10	13	14	18	3400	0.60	150	
SDCL0603C9N1□	9.1	4.5	100	5	9	11	14	15	18	2900	0.70	150	
SDCL0603C10N□	10	4.5	100	5	9	11	14	15	18	2900	0.70	150	
SDCL0603C12N□	12	4	100	5	8	11	14	15	16	2500	0.85	100	
SDCL0603C15N□	15	4	100	4.5	8	10	13	15	15	2200	1.00	100	
SDCL0603C18N□	18	4	100	4.5	8	10	13	14	12	2000	1.30	100	
SDCL0603C22N□	22	4	100	4.5	8	10	13	14	8	1700	1.70	100	

※□: Please specify the inductance tolerance code (J=±5%, K=±10%). The product with tolerance less than ±5%, ±10% is also available. Please contact your local sales.

SDCL1005 TYPE

Part Number 型号	Inductance 电感量	Min. Quality Factor 品质 因子	L, Q Test Freq. L/Q 测试 频率	Typical Q @ Freq. (MHz)						Min. Self-resonant Frequency 自谐振 频率	Max. DC Resistance 直流电阻	Max. Rated Current 额定电流	Thickness 厚度
				100	300	500	800	1000	1800				
Units 单位	nH	-	MHz	-						MHz	Ω	mA	mm [inch]
Symbol 符号	L	Q	Freq	Q						SRF	DCR	Ir	T
SDCL1005C1N0S	1.0±0.3	8	100	11	21	25	33	35	52	6000	0.10	400	0.5±0.15 [.020±.006]
SDCL1005C1N1S	1.1±0.3	8	100	11	21	25	33	35	52	6000	0.10	400	
SDCL1005C1N2S	1.2±0.3	8	100	11	21	25	33	35	52	6000	0.10	400	
SDCL1005C1N3S	1.3±0.3	8	100	11	21	25	33	35	52	6000	0.12	400	
SDCL1005C1N5S	1.5±0.3	8	100	11	21	25	33	35	52	6000	0.13	400	
SDCL1005C1N8S	1.8±0.3	8	100	10	18	21	29	32	49	6000	0.14	400	
SDCL1005C2N0S	2.0±0.3	8	100	10	17	21	28	32	47	6000	0.15	400	
SDCL1005C2N2S	2.2±0.3	8	100	10	17	21	28	31	47	6000	0.16	400	
SDCL1005C2N4S	2.4±0.3	8	100	10	17	21	28	31	46	5500	0.16	400	
SDCL1005C2N7S	2.7±0.3	8	100	10	17	21	28	31	46	5500	0.17	400	
SDCL1005C3N0S	3.0±0.3	8	100	10	17	21	28	31	46	5500	0.18	400	
SDCL1005C3N3S	3.3±0.3	8	100	10	17	21	28	31	46	5500	0.19	400	
SDCL1005C3N6S	3.6±0.3	8	100	10	17	21	28	31	45	5200	0.22	400	
SDCL1005C3N9S	3.9±0.3	8	100	10	17	21	28	31	45	5200	0.22	400	
SDCL1005C4N3S	4.3±0.3	8	100	10	17	21	28	31	45	4800	0.24	400	
SDCL1005C4N7S	4.7±0.3	8	100	10	17	21	28	31	45	4800	0.24	400	
SDCL1005C5N1S	5.1±0.3	8	100	10	17	21	25	29	44	4600	0.26	400	
SDCL1005C5N6S	5.6±0.3	8	100	10	17	21	25	29	44	4600	0.27	400	
SDCL1005C6N2S	6.2±0.3	8	100	10	17	21	25	29	44	4200	0.30	300	

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规格特性

SPECIFICATIONS

SDCL1005 TYPE

Part Number 型号	Inductance 电感量	Min. Quality Factor 品质因子	L, Q Test Freq. L/Q 测试频率	Typical Q @ Freq. (MHz)						Min. Self-resonant Frequency 自谐振频率	Max. DC Resistance 直流电阻	Max. Rated Current 额定电流	Thickness 厚度
				100	300	500	800	1000	1800				
Units 单位	nH	-	MHz	-						MHz	Ω	mA	mm [inch]
Symbol 符号	L	Q	Freq	Q						SRF	DCR	Ir	T
SDCL1005C6N8□	6.8	8	100	10	18	21	26	30	44	4000	0.32	300	0.5±0.15 [.020±.006]
SDCL1005C7N5□	7.5	8	100	10	18	21	26	30	43	3600	0.37	300	
SDCL1005C8N2□	8.2	8	100	10	18	21	26	30	43	3600	0.37	300	
SDCL1005C9N1□	9.1	8	100	10	18	21	26	30	42	3200	0.42	300	
SDCL1005C10N□	10	8	100	10	18	21	26	30	42	3200	0.42	300	
SDCL1005C12N□	12	8	100	10	17	21	24	27	33	2800	0.50	300	
SDCL1005C15N□	15	8	100	10	17	20	23	26	27	2500	0.55	300	
SDCL1005C18N□	18	8	100	10	17	20	21	23	9	2200	0.65	300	
SDCL1005C22N□	22	8	100	10	18	21	22	23	-	2000	0.80	200	
SDCL1005C27N□	27	8	100	10	18	20	21	22	-	1600	0.90	200	
SDCL1005C33N□	33	8	100	10	18	20	21	21	-	1300	1.00	200	
SDCL1005C39N□	39	8	100	10	18	19	20	17	-	1200	1.20	150	
SDCL1005C47N□	47	8	100	10	18	19	18	-	-	1000	1.30	150	
SDCL1005C56N□	56	8	100	10	18	19	13	-	-	900	1.60	150	
SDCL1005C68N□	68	8	100	10	18	19	13	-	-	800	2.10	150	
SDCL1005C82N□	82	8	100	10	18	19	13	-	-	750	2.40	150	
SDCL1005CR10□	100	8	100	10	18	19	12	-	-	700	2.60	150	
SDCL1005CR12□	120	8	100	10	18	19	-	-	-	600	2.80	150	
SDCL1005CR15□	150	8	100	10	17	8	-	-	-	550	3.20	100	
SDCL1005CR18□	180	8	100	10	17	-	-	-	-	500	3.70	100	
SDCL1005CR22□	220	8	100	12	14	-	-	-	-	450	4.00	100	
SDCL1005CR27□	270	8	100	12	12	-	-	-	-	400	4.50	100	

※□: Please specify the inductance tolerance code (J=±5%, K=±10%). The product with tolerance less than ±5%, ±10% is also available. Please contact your local sales.

SDCL1608 TYPE

Part Number 型号	Inductance 电感量	Min. Quality Factor 品质因子	L, Q Test Freq. L/Q 测试频率	Typical Q @ Freq. (MHz)						Min. Self-resonant Frequency 自谐振频率	Max. DC Resistance 直流电阻	Max. Rated Current 额定电流	Thickness 厚度
				100	300	500	800	1000	1800				
Units 单位	nH	-	MHz	-						MHz	Ω	mA	mm [inch]
Symbol 符号	L	Q	Freq	Q						SRF	DCR	Ir	T
SDCL1608C1N2S	1.2±0.3	8	100	12	22	37	38	68	85	6000	0.05	500	0.8±0.15 [.031±.006]
SDCL1608C1N5S	1.5±0.3	8	100	12	22	37	38	68	85	6000	0.10	500	
SDCL1608C1N8S	1.8±0.3	8	100	12	21	33	35	61	85	6000	0.12	500	
SDCL1608C2N2S	2.2±0.3	8	100	12	26	40	39	60	85	6000	0.20	500	
SDCL1608C2N7S	2.7±0.3	8	100	12	23	27	37	47	85	6000	0.20	500	
SDCL1608C3N3S	3.3±0.3	8	100	12	23	27	36	47	77	6000	0.20	500	
SDCL1608C3N9S	3.9±0.3	8	100	12	25	28	38	47	73	6000	0.20	500	
SDCL1608C4N7S	4.7±0.3	8	100	12	26	30	38	49	81	6000	0.20	500	
SDCL1608C5N6S	5.6±0.3	8	100	12	26	29	35	34	28	5000	0.30	500	
SDCL1608C6N8□	6.8	8	100	12	23	27	35	40	63	4500	0.30	500	
SDCL1608C8N2□	8.2	8	100	12	22	26	33	39	50	4000	0.30	500	
SDCL1608C10N□	10	8	100	14	25	31	38	45	64	3500	0.50	300	
SDCL1608C12N□	12	8	100	14	24	28	35	39	50	2800	0.50	300	
SDCL1608C15N□	15	8	100	14	22	27	34	40	45	2300	0.60	300	
SDCL1608C18N□	18	8	100	14	24	28	35	38	37	2200	0.60	300	
SDCL1608C22N□	22	8	100	15	27	32	38	43	36	2000	0.60	300	
SDCL1608C27N□	27	8	100	15	26	29	36	44	25	1700	0.80	300	
SDCL1608C33N□	33	8	100	15	26	30	35	34	6	1500	0.80	300	
SDCL1608C39N□	39	8	100	15	22	25	28	28	-	1300	0.80	300	

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规格特性

SPECIFICATIONS

SDCL1608 TYPE

Part Number 型号	Inductance 电感量	Min. Quality Factor 品质因子	L, Q Test Freq. L/Q 测试频率	Typical Q @ Freq. (MHz)						Min. Self-resonant Frequency 自谐振频率	Max. DC Resistance 直流电阻	Max. Rated Current 额定电流	Thickness 厚度
				100	300	500	800	1000	1800				
Units 单位	nH	-	MHz	-						MHz	Ω	mA	mm [inch]
Symbol 符号	L	Q	Freq	Q						SRF	DCR	I _r	T
SDCL1608C47N□	47	8	100	15	25	29	30	25	-	1200	1.00	300	0.8±0.15 [.031±.006]
SDCL1608C56N□	56	8	100	15	28	31	31	25	-	1100	1.00	300	
SDCL1608C68N□	68	8	100	15	22	25	22	15	-	900	1.00	300	
SDCL1608C82N□	82	8	100	15	23	24	22	-	-	800	1.00	300	
SDCL1608CR10□	100	8	100	15	25	27	16	-	-	700	1.20	300	
SDCL1608CR12□*	120	8	50	15	24	23	-	-	-	600	1.40	200	
SDCL1608CR15□*	150	8	50	15	19	16	-	-	-	500	1.60	200	
SDCL1608CR18□*	180	8	50	15	18	12	-	-	-	400	1.90	200	
SDCL1608CR22□*	220	8	50	15	16	-	-	-	-	350	2.40	200	
SDCL1608CR27□*	270	8	50	16	18	-	-	-	-	350	2.60	150	
SDCL1608CR33□*	330	8	50	16	16	-	-	-	-	350	2.80	150	
SDCL1608CR39□*	390	8	50	16	-	-	-	-	-	300	3.20	150	
SDCL1608CR43□*	430	8	50	16	-	-	-	-	-	280	3.40	150	
SDCL1608CR47□*	470	8	50	15	-	-	-	-	-	250	3.60	150	

※□: Please specify the inductance tolerance code (J=±5%, K=±10%). The product with tolerance less than ±5%, ±10% is also available. Please contact your local sales.

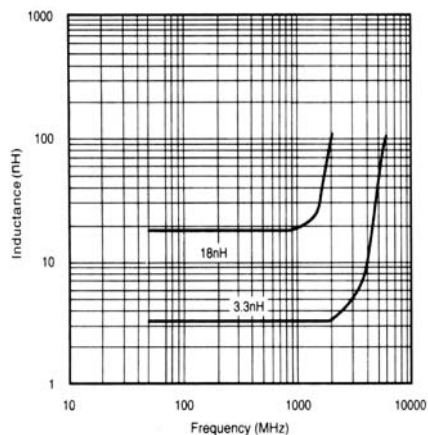
※*: The length: 1.65±0.15mm, for others: 1.60±0.15mm

电气特性

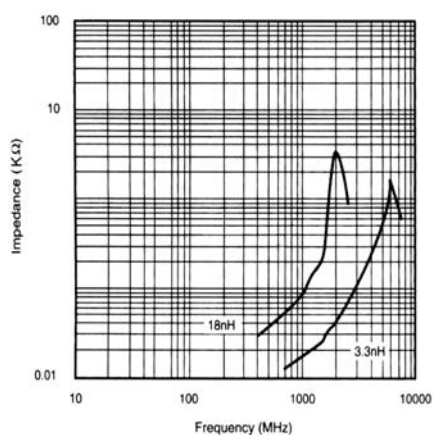
TYPICAL ELECTRICAL CHARACTERISTICS

SDCL0603 TYPE

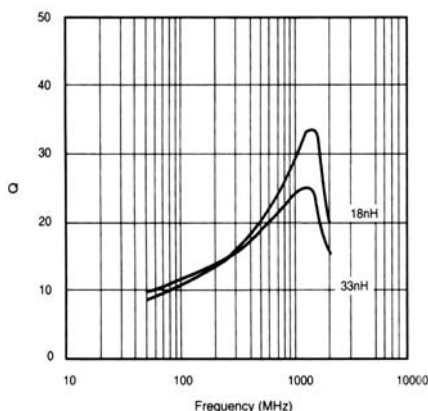
Inductance vs. Frequency Characteristics



Impedance vs. Frequency Characteristics



Q vs. Frequency Characteristics

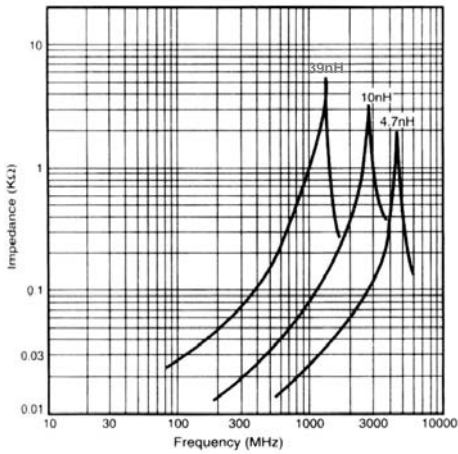


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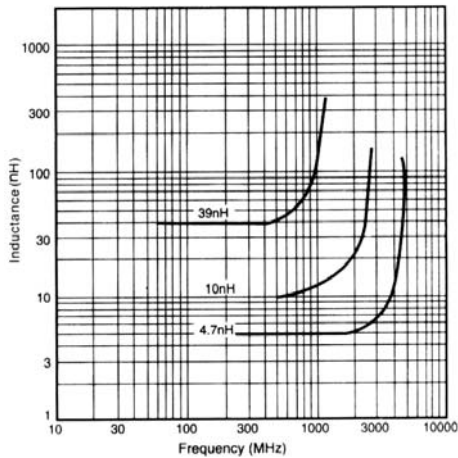
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SDCL1005 TYPE

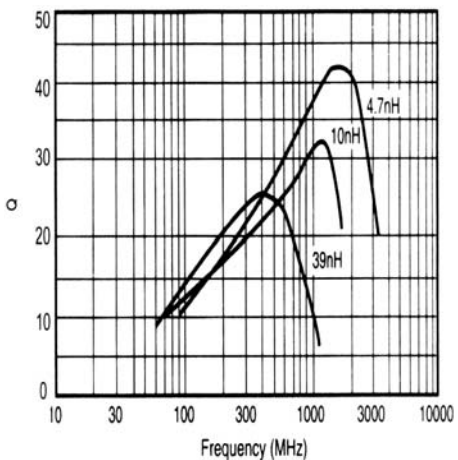
Impedance vs. Frequency Characteristics



Inductance vs. Frequency Characteristics

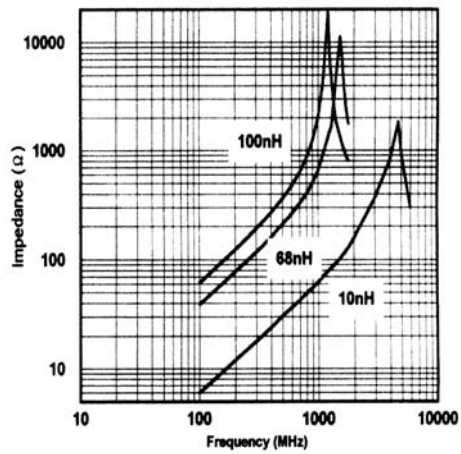


Q vs. Frequency Characteristics

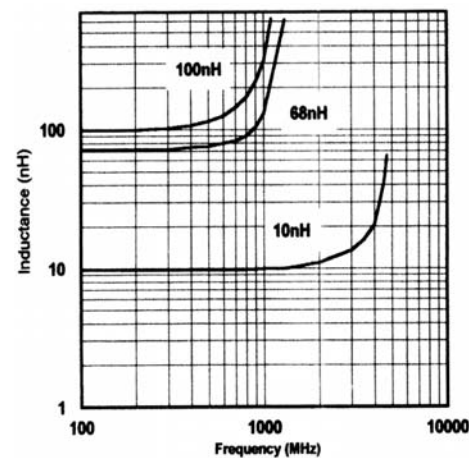


SDCL1608 TYPE

Impedance vs. Frequency Characteristics



Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics

