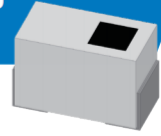


叠层片式陶瓷电感—SDCL0402Q-P01 系列

Multilayer Chip Ceramic Inductor—SDCL0402Q-P01 Series



工作温度
Operating Temp

◆ $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (Including self-heating)

特征 Features

- ◆ 迭层独石结构、高度可靠性
- ◆ 高自谐振频率
- ◆ 良好的可焊性和耐焊性
- ◆ 高的 Q 值
- ◆ Monolithic structure for high reliability
- ◆ High self-resonant frequency
- ◆ Excellent solderability and high heat resistance
- ◆ High Q factor

用途 Applications

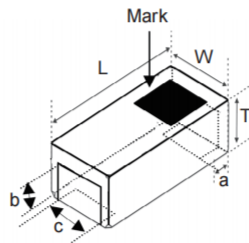
- ◆ 通讯电子设备等的射频线路
- ◆ RF circuit in telecommunication and other equipments

产品型号 Product Identification

1	2	3	4	5	6	7
SDCL	0402	Q	3N0	B	P	01

1	分类 Type	2	外形尺寸 (L×W) (mm) External Dimensions (L×W) (mm)	3	特性代号 Characteristics Code
SDCL	片式陶瓷电感 Chip Ceramic Inductor	0402 [01005]	0.4×0.2		Q
4	公称电感量 Nominal Inductance	5	电感公差 Inductance Tolerance	6	包装 Packing
Example	Nominal Value	B	±0.1nH	P	塑带 Plastic
3N0	3.0nH	C	±0.2nH		
16N	16nH	S	±0.3nH	7	系列代号 Serial Code
※R= 小数点, N=nH		H	±3%		01
		J	±5%		

外观尺寸 Shape and Dimensions



Type	L	W	T	a	b	c
SDCL0402Q-P01 [01005]	0.4 ± 0.02 [.016 ± .0008]	0.2 ± 0.02 [.008 ± .0008]	0.23 ± 0.02 [.009 ± .0008]	0.11 ± 0.03 [.005 ± .0010]	0.11 ± 0.03 [.005 ± .0010]	0.17 ± 0.03 [.006 ± .0010]

Unit: mm [inch]

规格特性 Specifications

SDCL0402Q-P01 Series

型号 Part Number	电感量 Inductance	品质因子 Min. Quality Factor	测试频率 L, Q Test Freq.	Typical Q @ Freq. (GHz)					自谐振频率 Min. Self- resonant Frequency	直流电阻 Max. DC Resistance	额定电流 Max. Rated Current
				0.5	0.8	1.8	2.0	2.4			
单位 Units	nH	-	MHz	-					MHz	Ω	mA
符号 Symbol	L	Q	Freq	Q					S.R.F	DCR	Ir
SDCL0402Q0N3 □ P01	0.3	14	500	/	/	/	/	/	17000	0.03	990
SDCL0402Q0N4 □ P01	0.4	14	500	/	/	/	/	/	17000	0.04	990
SDCL0402Q0N5 □ P01	0.5	14	500	/	/	/	/	/	17000	0.04	990
SDCL0402Q0N6 □ P01	0.6	14	500	20	25	36	38	45	16600	0.05	900
SDCL0402Q0N7 □ P01	0.7	14	500	20	25	36	38	45	16600	0.05	900
SDCL0402Q0N8 □ P01	0.8	14	500	20	25	37	39	46	16600	0.07	900
SDCL0402Q0N9 □ P01	0.9	14	500	19	25	36	38	45	15500	0.1	600
SDCL0402Q1N0 □ P01	1.0	14	500	19	25	36	38	45	15500	0.1	600
SDCL0402Q1N1 □ P01	1.1	14	500	19	25	36	38	45	15500	0.11	550
SDCL0402Q1N2 □ P01	1.2	14	500	19	24	35	37	44	15500	0.11	550
SDCL0402Q1N3 □ P01	1.3	14	500	19	24	35	37	44	15500	0.11	550
SDCL0402Q1N4 □ P01	1.4	14	500	19	25	36	38	45	15000	0.12	450
SDCL0402Q1N5 □ P01	1.5	14	500	19	24	35	37	43	15000	0.12	450
SDCL0402Q1N6 □ P01	1.6	14	500	19	23	35	36	43	15000	0.15	450
SDCL0402Q1N7 □ P01	1.7	14	500	19	24	35	36	43	15000	0.15	450
SDCL0402Q1N8 □ P01	1.8	14	500	19	24	35	37	44	13000	0.15	450
SDCL0402Q1N9 □ P01	1.9	14	500	19	24	35	37	44	12000	0.16	450
SDCL0402Q2N0 □ P01	2.0	14	500	19	25	35	38	45	11000	0.16	450
SDCL0402Q2N1 □ P01	2.1	14	500	19	25	35	37	44	11000	0.16	450
SDCL0402Q2N2 □ P01	2.2	14	500	19	25	35	37	43	10500	0.18	400
SDCL0402Q2N3 □ P01	2.3	14	500	19	24	34	36	43	10500	0.18	400
SDCL0402Q2N4 □ P01	2.4	14	500	19	25	37	39	46	10500	0.2	400
SDCL0402Q2N5 □ P01	2.5	14	500	19	24	35	36	43	10000	0.2	400
SDCL0402Q2N6 □ P01	2.6	14	500	19	24	35	36	43	10000	0.2	400
SDCL0402Q2N7 □ P01	2.7	14	500	19	24	37	39	43	9500	0.23	350
SDCL0402Q2N8 □ P01	2.8	14	500	19	24	37	40	46	9500	0.23	350
SDCL0402Q2N9 □ P01	2.9	14	500	19	24	36	39	45	9500	0.23	350
SDCL0402Q3N0 □ P01	3.0	14	500	19	25	36	38	45	9500	0.26	350
SDCL0402Q3N1 □ P01	3.1	14	500	19	25	35	37	43	9000	0.26	350
SDCL0402Q3N2 □ P01	3.2	14	500	19	24	35	37	44	9000	0.26	350
SDCL0402Q3N3 □ P01	3.3	14	500	19	25	36	38	45	9000	0.26	350
SDCL0402Q3N4 □ P01	3.4	14	500	19	24	35	38	44	9000	0.26	350
SDCL0402Q3N5 □ P01	3.5	14	500	19	25	36	38	45	8700	0.28	350
SDCL0402Q3N6 □ P01	3.6	14	500	19	24	35	37	44	8700	0.28	350
SDCL0402Q3N7 □ P01	3.7	14	500	19	24	35	37	44	8700	0.28	350
SDCL0402Q3N8 □ P01	3.8	14	500	19	24	34	36	42	8700	0.28	350
SDCL0402Q3N9 □ P01	3.9	14	500	18	23	33	35	39	8700	0.3	350
SDCL0402Q4N0 □ P01	4.0	14	500	18	23	33	35	40	8000	0.3	350
SDCL0402Q4N1 □ P01	4.1	14	500	18	23	33	35	40	7500	0.3	350
SDCL0402Q4N2 □ P01	4.2	14	500	18	23	34	36	41	7000	0.3	350
SDCL0402Q4N3 □ P01	4.3	14	500	18	22	33	35	40	7000	0.3	350
SDCL0402Q4N7 □ P01	4.7	14	500	18	23	34	36	42	7000	0.4	300
SDCL0402Q5N1 □ P01	5.1	14	500	17	22	32	34	37	6600	0.4	300
SDCL0402Q5N6 □ P01	5.6	14	500	17	22	31	33	36	6100	0.4	300
SDCL0402Q6N2 □ P01	6.2	14	500	17	22	32	33	38	6000	0.45	300
SDCL0402Q6N8 □ P01	6.8	14	500	17	21	30	32	35	5700	0.52	250
SDCL0402Q7N5 □ P01	7.5	14	500	16	20	29	31	34	5500	0.68	230
SDCL0402Q8N2 □ P01	8.2	14	500	17	21	30	32	35	5300	0.68	230
SDCL0402Q9N1 □ P01	9.1	14	500	16	20	29	32	35	5000	0.8	170
SDCL0402Q10N □ P01	10	14	500	16	20	29	31	34	4500	0.85	170
SDCL0402Q11N □ P01	11	14	500	16	21	28	30	31	4200	0.9	170
SDCL0402Q12N □ P01	12	14	500	16	20	27	28	29	4000	0.93	170

规格特性 Specifications

SDCL0402Q-P01 Series

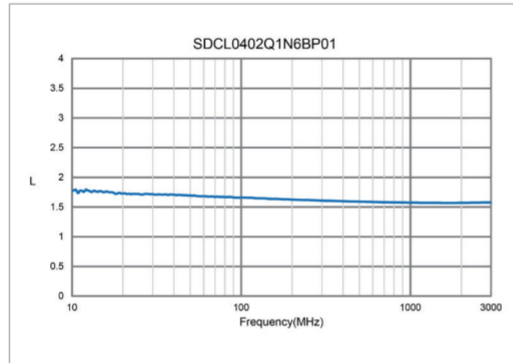
型号 Part Number	电感量 Inductance	品质因子 Min. Quality Factor	测试频率 L, Q Test Freq.	Typical Q @ Freq. (GHz)					自谐振频率 Min. Self- resonant Frequency	直流电阻 Max. DC Resistance	额定电流 Max. Rated Current
				0.5	0.8	1.8	2.0	2.4			
单位 Units	nH	-	MHz	-					MHz	Ω	mA
符号 Symbol	L	Q	Freq	Q					S.R.F	DCR	I _r
SDCL0402Q13N □ P01	13	12	500	15	18	25	26	27	3800	1.2	160
SDCL0402Q15N □ P01	15	12	500	15	18	24	25	25	3500	1.8	140
SDCL0402Q16N □ P01	16	12	500	15	18	24	25	25	3500	1.8	140
SDCL0402Q18N □ P01	18	9	500	11	15	18	20	19	3000	2.5	140
SDCL0402Q20N □ P01	20	9	500	11	15	18	20	19	2700	2.8	140
SDCL0402Q22N □ P01	22	9	500	11	14	17	20	18	2300	3.5	120

※ □ : 请指定电感量精度。当 $L \leq 4.2\text{nH}$ 时, 选择 $B = \pm 0.1\text{nH}$, $C = \pm 0.2\text{nH}$ 或 $S = \pm 0.3\text{nH}$; 当 $4.2\text{nH} < L < 5.6\text{nH}$ 时, 选择 $H = \pm 3\%$, $J = \pm 5\%$ 或 $S = \pm 0.3\text{nH}$; 当 $L \geq 5.6\text{nH}$ 时, 选择 $H = \pm 3\%$, $J = \pm 5\%$ 。

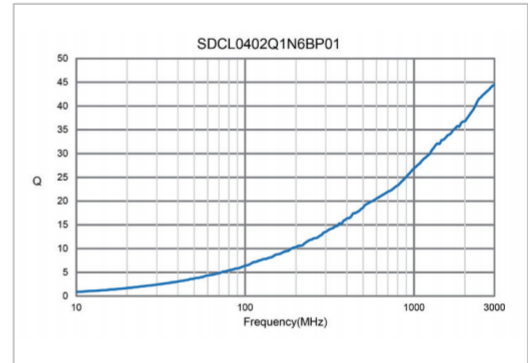
※ □ : Please specify the inductance tolerance. For $L \leq 4.2\text{nH}$, choose $B = \pm 0.1\text{nH}$, $C = \pm 0.2\text{nH}$ or $S = \pm 0.3\text{nH}$; For $4.2\text{nH} < L < 5.6\text{nH}$, choose $H = \pm 3\%$, $J = \pm 5\%$ or $S = \pm 0.3\text{nH}$; For $L \geq 5.6\text{nH}$, choose $H = \pm 3\%$, $J = \pm 5\%$ 。

电气特性 Typical Electrical Characteristics

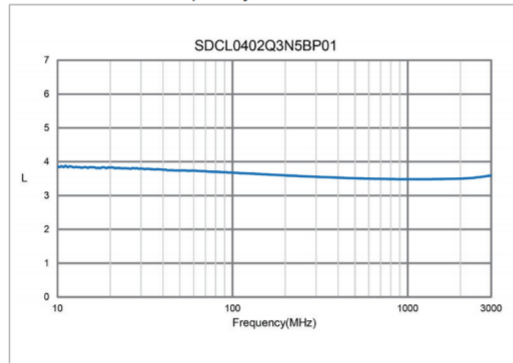
SDCL0402Q1N6BP01 Inductance vs. Frequency Characteristics



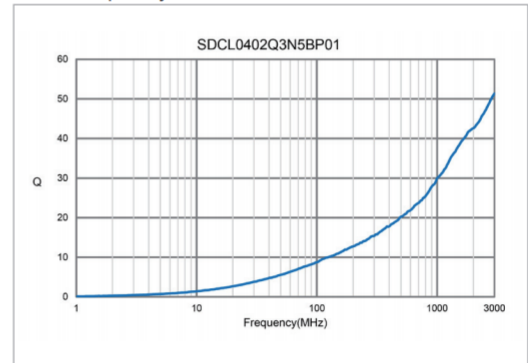
Q vs. Frequency Characteristics



SDCL0402Q3N5BP01 Inductance vs. Frequency Characteristics

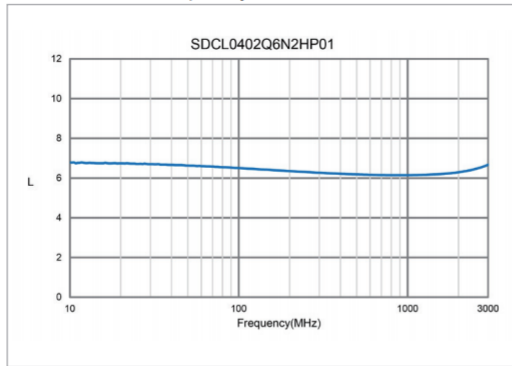


Q vs. Frequency Characteristics

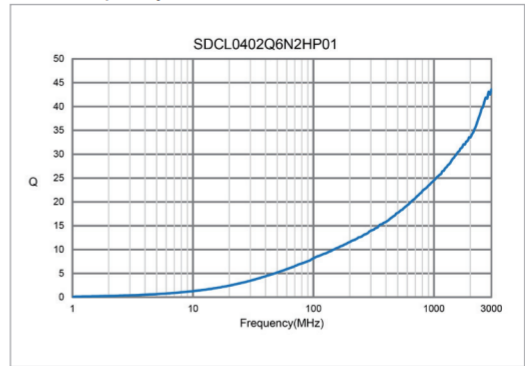


电气特性
Typical
Electrical
Characteristics

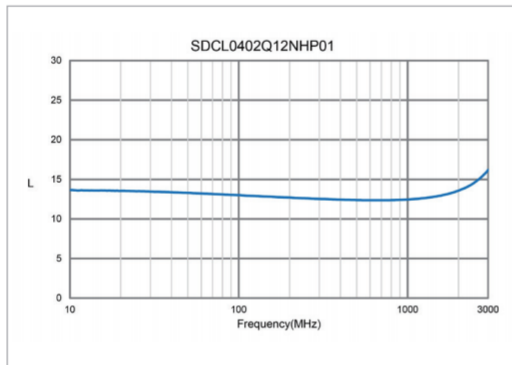
SDCL0402Q6N2HP01
Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics



SDCL0402Q12NHP01
Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics

