

# MINIATURE SMD CHIP CHOKE COILS

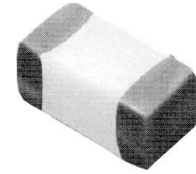
片式陶瓷电感—CL 系列

## Chip Ceramic Inductor – CL Series

Operating Temp. :

CL1005 series: -55°C ~ +125°C

CL1608&2012 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、适合于流焊和再流焊

### FEATURES

- Monolithic Structure for high reliability
- High self-resonant frequency
- Excellent solderability and high heat resistance for either flow or re-flow soldering

### 用途

- 移动电话、寻呼机、家用电器、计算机  
数字无绳电话、对讲机

### APPLICATIONS

- For high frequency applications including cellular phone, pager, computer, digital wireless phone

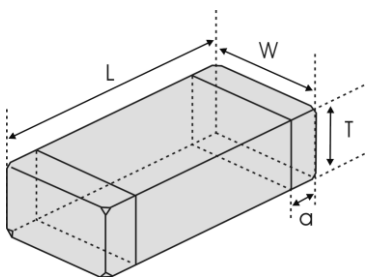
### 产品型号

### PRODUCT IDENTIFICATION

CL	1608	C	10N	J	I	(f)																										
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### 外观尺寸

### SHAPE AND DIMENSIONS



Unit:mm[inch]

Type	L	W	T	A
CL1005 [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]
CL1608 [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]			
CL2012 [0805]	2.0 (+0.3, -0.1) [.079 (+.012, -.004)]	1.25±0.2 [.049±.008]	0.85±0.2 [.033±.008]	0.5±0.3 [.020±.012]
			1.0(+0.2, -0.3) [.039(+.008,-.012)]	

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## 规格特性

## SPECIFICATIONS

### CL1005 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						S.R.F	DCR	Ir	T
CL1005C1N0S	1.0	8	100	11	21	25	33	35	52	6000	0.10	400	0.5±0.15 [.020±.006]
CL1005C1N2S	1.2	8	100	11	21	25	33	35	52	6000	0.10	400	
CL1005C1N5S	1.5	8	100	11	21	25	33	35	52	6000	0.13	400	
CL1005C1N8S	1.8	8	100	10	18	21	29	32	49	6000	0.14	400	
CL1005C2N2S	2.2	8	100	10	17	21	28	31	47	6000	0.16	400	
CL1005C2N7S	2.7	8	100	10	17	21	28	31	46	5500	0.17	400	
CL1005C3N3S	3.3	8	100	10	17	21	28	31	46	5500	0.19	400	
CL1005C3N9S	3.9	8	100	10	17	21	28	31	45	5200	0.22	400	
CL1005C4N7S	4.7	8	100	10	17	21	28	31	45	4800	0.24	400	
CL1005C5N6S	5.6	8	100	10	17	21	25	29	44	4600	0.27	400	
CL1005C6N8□	6.8	8	100	10	18	21	26	30	44	4000	0.32	300	
CL1005C8N2□	8.2	8	100	10	18	21	26	30	43	3600	0.37	300	
CL1005C10N□	10	8	100	10	18	21	26	30	42	3200	0.42	300	
CL1005C12N□	12	8	100	10	17	21	24	27	33	2800	0.50	300	
CL1005C15N□	15	8	100	10	17	20	23	26	27	2500	0.55	300	
CL1005C18N□	18	8	100	10	17	20	21	23	9	2200	0.65	300	
CL1005C22N□	22	8	100	10	18	21	22	23	-	2000	0.80	200	
CL1005C27N□	27	8	100	10	18	20	21	22	-	1600	0.90	200	
CL1005C33N□	33	8	100	10	18	20	21	21	-	1300	1.00	200	
CL1005C39N□	39	8	100	10	18	19	20	17	-	1200	1.20	150	
CL1005C47N□	47	8	100	10	18	19	18	-	-	1000	1.30	150	
CL1005C56N□	56	8	100	10	18	19	13	-	-	900	1.60	150	
CL1005C68N□	68	8	100	10	18	19	13	-	-	900	2.10	150	
CL1005C82N□	82	8	100	10	18	19	13	-	-	900	2.40	150	
CL1005CR10□	100	8	100	10	18	19	13	-	-	900	2.60	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.

### CL1608 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						S.R.F	DCR	Ir	T
CL1608C1N5S	1.5	8	100	12	22	37	38	68	85	6000	0.10	500	0.8±0.15 [.031±.006]
CL1608C1N8S	1.8	8	100	12	21	33	35	61	85	6000	0.12	500	
CL1608C2N2S	2.2	8	100	12	26	40	39	60	85	6000	0.20	500	
CL1608C2N7S	2.7	8	100	12	23	27	37	47	85	6000	0.20	500	
CL1608C3N3S	3.3	8	100	12	23	27	36	47	77	6000	0.20	500	
CL1608C3N9S	3.9	8	100	12	25	28	38	47	73	6000	0.20	500	
CL1608C4N7S	4.7	8	100	12	26	30	38	49	81	6000	0.20	500	
CL1608C5N6S	5.6	8	100	12	26	29	35	34	28	5000	0.30	500	
CL1608C6N8□	6.8	8	100	12	23	27	35	40	63	4500	0.30	500	
CL1608C8N2□	8.2	8	100	12	22	26	33	39	50	4000	0.30	500	
CL1608C10N□	10	8	100	14	25	31	38	45	64	3500	0.50	300	
CL1608C12N□	12	8	100	14	24	28	35	39	50	2800	0.50	300	
CL1608C15N□	15	8	100	14	22	27	34	40	45	2300	0.60	300	
CL1608C18N□	18	8	100	14	24	28	35	38	37	2200	0.60	300	
CL1608C22N□	22	8	100	15	27	32	38	43	36	2000	0.60	300	

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CL1608C27N□	27	8	100	15	26	29	36	44	25	1700	0.80	300
CL1608C33N□	33	8	100	15	26	30	35	34	6	1500	0.80	300
CL1608C39N□	39	8	100	15	22	25	28	28	-	1300	0.80	300
CL1608C47N□	47	8	100	15	25	29	30	25	-	1200	1.00	300
CL1608C56N□	56	8	100	15	28	31	31	25	-	1000	1.00	300
CL1608C68N□	68	8	100	15	22	25	22	15	-	900	1.00	300
CL1608C82N□	82	8	100	15	23	24	22	-	-	800	1.00	300
CL1608CR10□	100	8	100	15	25	27	16	-	-	700	1.20	300
CL1608CR12□*	120	8	50	15	24	23	-	-	-	600	1.40	200
CL1608CR15□*	150	8	50	15	19	16	-	-	-	500	1.60	200
CL1608CR18□*	180	8	50	15	18	12	-	-	-	400	1.90	200
CL1608CR22□*	220	8	50	15	16	-	-	-	-	350	2.40	200

※□: 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 the others: 1.60±0.15mm

## 规格特性

## SPECIFICATIONS

### CL2012 TYPE

Part Number 型号	Inductance 电感量	Min. Quality Factor 品质因子	L <sub>Q</sub> Test Freq. L <sub>Q</sub> 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						S.R.F	DCR	I <sub>r</sub>	T
CL2012C1N5S	1.5	10	100	10	23	46	54	85	100	6000	0.10	600	0.85±0.2 [.033±.008]
CL2012C1N8S	1.8	10	100	13	24	46	55	85	100	6000	0.10	600	
CL2012C2N2S	2.2	10	100	13	25	46	56	85	100	6000	0.10	600	
CL2012C2N7S	2.7	10	100	13	25	42	45	76	100	6000	0.10	600	
CL2012C3N3S	3.3	10	100	15	28	48	52	85	100	6000	0.13	600	
CL2012C3N9S	3.9	10	100	15	28	49	55	85	100	5400	0.15	600	
CL2012C4N7S	4.7	10	100	15	28	48	53	85	100	4500	0.20	400	
CL2012C5N6S	5.6	10	100	15	30	44	45	78	95	4000	0.23	400	
CL2012C6N8□	6.8	10	100	15	30	40	45	69	96	3650	0.25	400	
CL2012C8N2□	8.2	10	100	15	28	42	45	69	96	3000	0.28	400	
CL2012C10N□	10	10	100	15	28	43	45	71	72	2500	0.30	300	
CL2012C12N□	12	10	100	15	28	43	45	50	52	2450	0.35	300	
CL2012C15N□	15	10	100	15	30	43	43	56	56	2000	0.40	300	
CL2012C18N□	18	10	100	15	26	40	42	59	28	1750	0.45	300	
CL2012C22N□	22	13	100	17	31	45	45	59	28	1700	0.50	300	
CL2012C27N□	27	15	100	17	31	45	45	54	14	1550	0.55	300	
CL2012C33N□	33	15	100	17	27	41	40	44	6	1350	0.60	300	
CL2012C39N□	39	15	100	17	31	42	31	20	-	1300	0.65	300	
CL2012C47N□	47	15	100	17	24	33	31	29	-	1200	0.70	300	
CL2012C56N□	56	15	100	17	34	43	35	25	-	1150	0.75	300	
CL2012C68N□	68	15	100	17	28	37	29	-	-	1000	0.80	300	
CL2012C82N□	82	15	100	17	29	30	27	-	-	850	0.90	300	
CL2012CR10□	100	15	100	17	27	36	-	-	-	600	1.00	300	
CL2012CR12□	120	15	50	17	27	34	-	-	-	500	1.50	300	
CL2012CR15□	150	13	50	17	27	26	-	-	-	500	1.50	300	
CL2012CR18□	180	13	50	17	25	20	-	-	-	400	2.10	300	
CL2012CR22□	220	12	50	17	22	-	-	-	-	350	2.10	300	
CL2012CR27□	270	12	50	17	20	-	-	-	-	300	3.00	200	
CL2012CR33□	330	12	50	17	-	-	-	-	-	250	3.00	200	
CL2012CR39□	390	10	50	17	-	-	-	-	-	250	3.50	200	
CL2012CR47□	470	10	50	17	-	-	-	-	-	200	3.50	200	

Note: Recommended tested condition: HP4291B/Level -20dBm or 50mV

※□: 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.