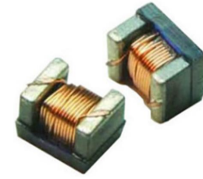




WIRE WOUND CHIP FERRITE INDUCTOR 高频绕线铁氧体电感 CKCW Series

● FEATURES 特性

1. High Q value and high self-resonant frequency with Ferrite material.
高Q值高SRF的铁氧体材料.
2. Small chip suitable for surface mounting.
小尺寸，表面贴装.
3. Tight inductance tolerance and high reliability.
高精度，高可靠性.



铁氧体 (Ferrite)

● APPLICATIONS 用途

1. Mobile phone TD-LTE/5G communication. 移动电话，TD-LTE，5G通讯.
2. High frequency circuit in communication equipments. 高频线路的通讯设备.
3. Bluetooth，W-LAN，Broadband network. 蓝牙，无线宽带网络.

● PART NUMBERING SYSTEM 品名系统

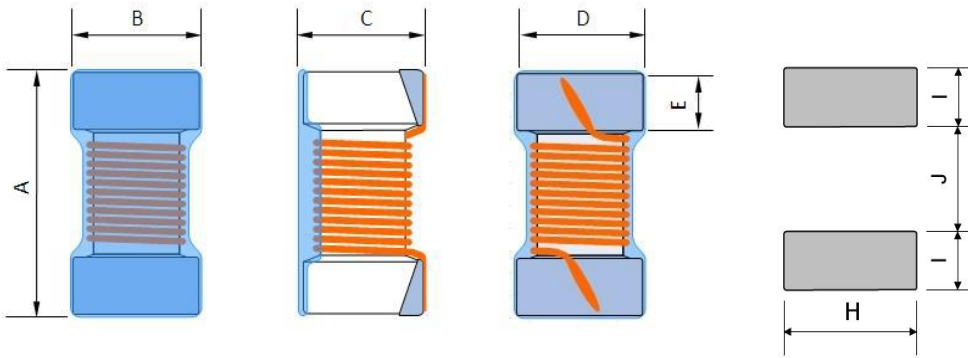
CKCW 0402 - 220nH / J

(1) (2) (3) (4)

(1) Type 型号 (2) External Dimensions 外形尺寸 (3) Indutance 电感值

(4) Indutance Tolerance 电感值公差 (J:±5% K:±10% M:±20%)

● SHAPES AND DIMENSIONS 外形尺寸 (Unit:mm)



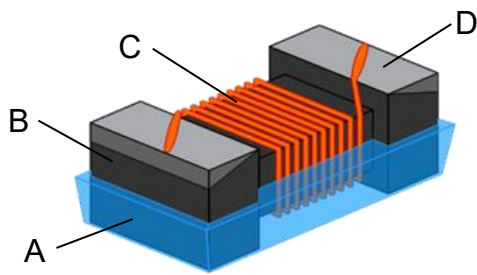
Land Pattern

TYPE(型号)	A	B	C	D	E	H	I	J
CKCW0402	1.1±0.1	0.6±0.1	0.55±0.1	0.5±0.1	0.2±0.1	0.65 ref	0.35 ref	0.50 ref
CKCW0603	1.8 Max	1.12 Max	1.02 Max	0.76 Typ	0.33 Typ	1.02 ref	0.64 ref	0.64 ref
CKCW0805	2.29 Max	1.73 Max	1.55 Max	1.27 Typ	0.5 Typ	1.78 ref	1.02 ref	0.76 ref

* Electrode Coplanarity:0.1mm Max.



● **STRUCTURE AND MATERIAL 结构与材料**



Part	Components(组件)	Material(材料)
A	Coating	Ultraviolet epoxy resin
B	Core	Ferrite
C	Wire	Polyurethane enameled copper wire
D	Electrodes	Ag/Ag-Pd with Ni and Sn plating

● **TEMPERATURE RATING 额定温度**

1. Operating temperature range (individual chip without packing): -25°C to +125°C

工作温度范围: -25°C ~ +125°C

2. Storage temperature range (packaging conditions): -10°C~+40°C and RH 70% (Max.)

储存温度范围(包装条件): -10°C~+40°C, 相对湿度70%(最大值)

● **TEST AND MEASUREMENT PROCEDURES 测试项目与测试条件**

1. Inductance 电感值(L)

Test equipment: Keysight E4991B / Agilent 16197A or equivalent

测试设备: Keysight E4991B / Agilent 16197A仪表或同等仪表

Test signal: -13dBm or 10mA

测试信号: -13dBm或10mA

2. DC Resistance (DCR) 直流电阻

Test equipment: Agilent34420A / Agilent 4338B or equivalent

测试设备: Agilent34420A / Agilent 4338B或同等产品

3. Q Factor Q值(Q)

Test equipment: Keysight E4991B / Agilent 16197A or equivalent

测试设备: Keysight E4991B / Agilent 16197A或同等产品

4. Self-Resonant Frequency 自谐振频率(SRF)

Test equipment: Keysight E4991B / Agilent 16197A / HP 8753E or equivalent

测试设备: Keysight E4991B/Agilent 16197A/HP 8753E或同等产品

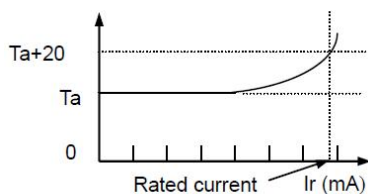
Test signal: -20dBm or 50 mV

测试信号: -20dBm或50mV

5. Rated Current 额定电流(I_{rms})

I_{rms} is direct electric current as chip surface temperature rose just 20 against chip initial surface temperature (T_a)

电感加载直流电, 电感表面温度相比于电感初始表面温度升高20度

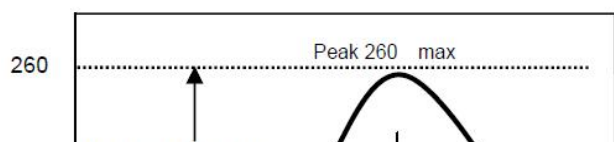


● **Reflow Soldering 回流焊**

Re-flowing Profile

Preheat condition: 150~200 /60~120sec.

Allowed time above 217C: 60~90sec.

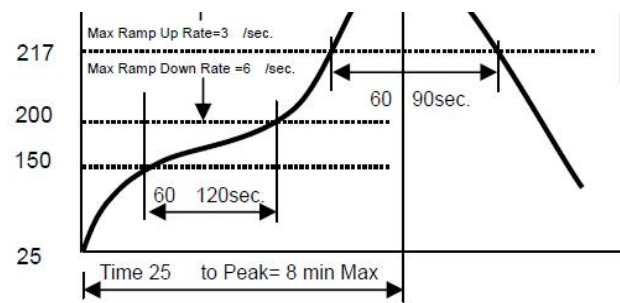


Max temp: 260

Max time at max temp: 10sec

Solder paste: Sn/3.0Ag/0.5Cu

Allowed Reflow time: 2 times max





● SPECIFICATION TABLE 规格特性表

CKCW0402

PART NUMBER 品名	Inductance 电感值	Tolerance 公差	Quality Factor 品质因数	L/Q Test Freq. L/Q测试频率	Max. DC Resistance 最大直流电阻	Max. Rated Current 最大额定电流	Self-re Freq 自谐振
Symbol	L	J,K,M	Q (Typ)	Freq.	DCR	I _{rms}	SRF
Units	nH	/	/	MHz	Ω	mA	M
CKCW0402-22nH/□	22nH	J,K,M	10	7.9	0.060	1400	25
CKCW0402-33nH/□	33nH	J,K,M	10	7.9	0.060	1400	23
CKCW0402-100nH/□	100nH	J,K,M	9	7.9	0.160	900	14
CKCW0402-160nH/□	160nH	J,K,M	11	7.9	0.280	560	12
CKCW0402-220nH/□	220nH	J,K,M	11	7.9	0.530	380	11
CKCW0402-330nH/□	330nH	J,K,M	11	7.9	0.560	350	8
CKCW0402-470nH/□	470nH	J,K,M	11	7.9	0.730	310	6
CKCW0402-560nH/□	560nH	J,K,M	11	7.9	0.920	200	6

※□: Please specify the inductance tolerance code (J=±5%, K=±10%, M=±20%).

Resonant frequency 共振频率
(Min)
1Hz
500
300
400
200
150
20
50
00



CKCW0603

PART NUMBER 品名	Inductance 电感值	Tolerance 公差	Quality Factor 品质因数	L/Q Test Freq. L/Q测试频率	Max. DC Resistance 最大直流电阻	Max. Rated Current 最大额定电流	Self-resonant Frequency 自谐振频率
Symbol	L		Q (Typ)	Freq.	DCR	I _{rms}	SRF (Min)
Units				MHz	Ω	mA	MHz
CKCW0603-47nH/□	47nH	K,M	12	7.9	0.060	1200	2350
CKCW0603-100nH/□	100nH	K,M	12	7.9	0.110	1000	1370
CKCW0603-150nH/□	150nH	J,K,M	12	7.9	0.120	1000	1260
CKCW0603-220nH/□	220nH	J,K,M	12	7.9	0.300	700	850
CKCW0603-390nH/□	390nH	J,K,M	12	7.9	0.510	500	620
CKCW0603-470nH/□	470nH	K,M	12	7.9	0.370	470	670
CKCW0603-560nH/□	560nH	J,K,M	12	7.9	0.460	450	760
CKCW0603-1uH/□	1uH	J,K,M	18	7.9	0.940	280	410
CKCW0603-1.5uH/□	1.5uH	J,K,M	17	7.9	1.300	240	340
CKCW0603-2.2uH/□	2.2uH	J,K,M	12	7.9	1.500	280	180
CKCW0603-3.3uH/□	3.3uH	J,K,M	17	7.9	1.800	200	60
CKCW0603-4.7uH/□	4.7uH	J,K,M	12	7.9	2.700	200	100
CKCW0603-6.8uH/□	6.8uH	J,K,M	12	7.9	3.900	200	40
CKCW0603-8.2uH/□	8.2uH	J,K,M	12	7.9	3.800	190	40
CKCW0603-10uH/□	10uH	J,K,M	10	2.5	4.80	180	30
CKCW0603-15uH/□	15uH	J,K,M	17	7.9	9.500	90	20
CKCW0603-22uH/□	22uH	J,K,M	17	7.9	11.400	70	20
CKCW0603H-1.0uH/□	1.0uH	J,K,M	12	7.9	0.320	800	390
CKCW0603H-2.2uH/□	2.2uH	J,K,M	12	7.9	0.500	600	50
CKCW0603H-4.7uH/□	4.7uH	J,K,M	12	7.9	0.98	420	51
CKCW0603H-10uH/□	10uH	J,K,M	13	2.5	2.40	300	36

※□: Please specify the inductance tolerance code (J=±5%, K=±10%, M=±20%).



CKCW0805

PART NUMBER 品名	Inductance 电感值	Tolerance 公差	Quality Factor 品质因数	L/Q Test Freq. L/Q测试频率	Max. DC Resistance 最大直流电阻	Max. Rated Current 最大额定电流	Self-resonant Frequency 自谐振频率
Symbol	L		Q	Freq.	DCR	I _{rms}	SRF (Min)
Units				MHz	Ω	mA	MHz
CKCW0805-220nH/□	220nH	J,K,M	10	7.9	0.15	1100	480
CKCW0805-330nH/□	330nH	J,K,M	10	10	0.15	1100	500
CKCW0805-470nH/□	470nH	J,K,M	12	7.9	0.31	720	500
CKCW0805-1uH/□	1uH	J,K,M	12	7.9	0.41	800	400
CKCW0805-1.2uH/□	1.2uH	J,K,M	20	7.9	0.83	700	330
CKCW0805-1.5uH/□	1.5uH	J,K,M	10	7.9	1.20	400	300
CKCW0805-2.2uH/□	2.2uH	J,K,M	12	7.9	0.31	400	170
CKCW0805-3.3uH/□	3.3uH	J,K,M	15	7.9	1.80	300	90
CKCW0805-4.7uH/□	4.7uH	J,K,M	12	7.9	2.05	250	85
CKCW0805-6.8uH/□	6.8uH	J,K,M	12	7.9	2.60	230	55
CKCW0805-10uH/□	10uH	J,K,M	10	2.5	3.20	150	30
CKCW0805-15uH/□	15uH	J,K,M	10	2.5	4.20	100	16
CKCW0805-22uH/□	22uH	J,K,M	10	2.5	6.00	80	14
CKCW0805-47uH/□	47uH	J,K,M	10	2.5	13.80	55	14
CKCW0805H-2.2uH/□	2.2uH	J,K,M	12	7.9	0.310	1040	80
CKCW0805H-10uH/□	10uH	J,K,M	14	2.5	1.17	290	25
CKCW0805H-47uH/□	47uH	J,K,M	10	2.5	4.42	160	14

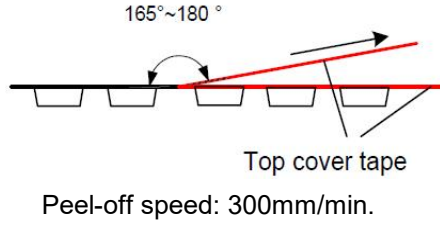
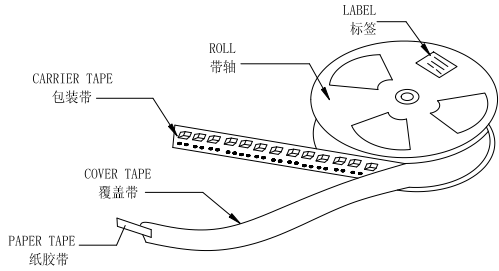
※□: Please specify the inductance tolerance code (J=±5%, K=±10%, M=±20%).



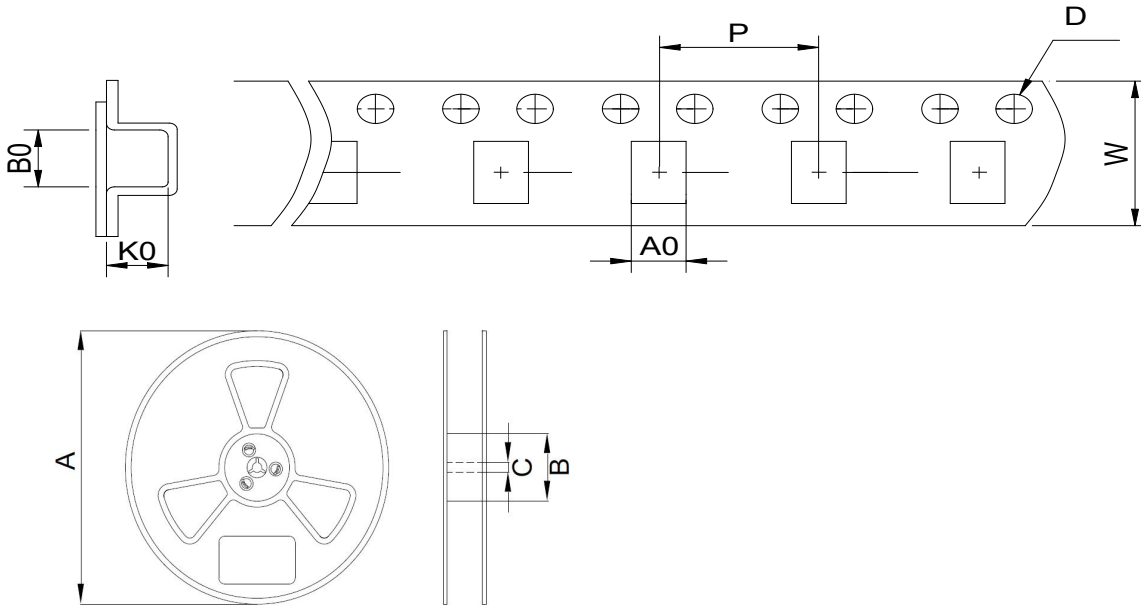
● **PACKAGING SPECIFICATION 包装规格**

1. Packaging - Cover Tape

The force for tearing off cover tape is 10 to 100 grams in the arrow direction.



2. Packaging - Tape & Reel



TYPE(型号)	Tape Dimension 载带尺寸(mm)						Reel Dimension 卷盘尺寸 (mm)			Quantity (Pcs/Reel) 数量 (个/卷)
	W	A0	B0	K0	D	P	A	B	C	
CKCW0402	8	0.66	1.2	0.67	1.5	4	178	58	13	10Kpcs
CKCW0603	8	1.1	1.75	1.1	1.5	4	178	58	13	4Kpcs
CKCW0805	8	1.55	2.45	1.5	1.5	4	178	58	13	2Kpcs