

承 认 书

SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
DATE	20/Jan/2024	REVISION NO.	A
PART NO.	CKWLC0603 Series		
DRAWN NO.			
DESCRIPTION.	RF INDUCTOR		
Customer's Signature			
Approved by	Checked by	Drawn by	
黄大燕	黄大燕	梁智坤	
20/Jan/2024	20/Jan/2024	20/Jan/2024	



广 州 市 今 凯 电 子 有 限 公 司

GUANG ZHOU CHK ELECTRONIC Co., Ltd



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Town, Panyu District, Guangzhou, Guangdong Province

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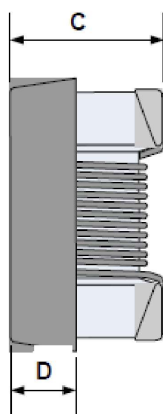
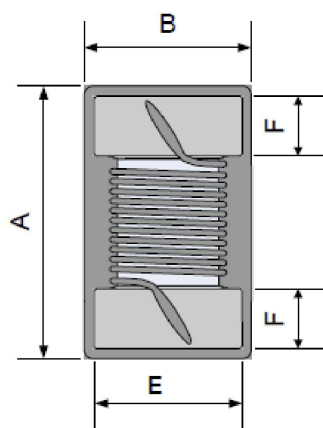
GUANG ZHOU CHK ELECTRONIC Co., Ltd

CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 1/7
DESCRIPTION.	RF INDUCTOR	DRAWN NO.	0
PART NO.	CKWLC0603 Series	DATE	2024/1/20

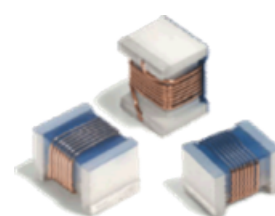
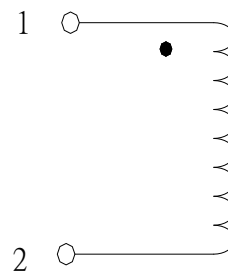
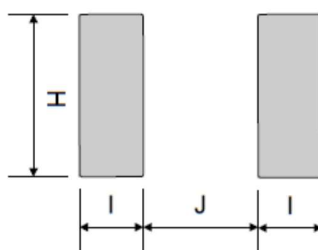
1.SHAPE & DIMENSION

UNIT: mm

SCHEMATICS



Recommended
land pattern



A	B	C	D	E	F	H	I	J	
1.68	1	0.85	0.32	0.76	0.33	1.02	0.60	0.60	
±0.1	±0.1	±0.1	±0.05	±0.05	±0.05	±0.05	±0.05	±0.05	

PART NUMBERING SYSTEM

CK WLC 0603 - 4N7 J C

1 2 3 4 5 6

1 CHK PRODUCTION (今凯制造)

2 PRODUCT CATEGORY (产品种类)

3 DIMENSIONS (尺寸规格)

4 INDUCTANCE (电感量)

5 TOLERANCE (公差)

B:±1% G:±2% J:±5% K:±10%

6 PACKAGING (包装方式)

C - 编带盘装

B - 盒装

APPROVED BY	CHECKED BY	DRAFT BY
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CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 2/7
DESCRIPTION.	RF INDUCTOR	DRAWN NO.	0
PART NO.	CKWLC0603 Series	DATE	2024/1/20

2.SERIES SPECIFICATION

◆CKWLC0603 Specification:

Part Number	Inductance	Teat Freq	DCR (Ω)	Rated Current (mA)	SRF MHz	Q Factor
	nH	MHz	Max	Max	Min	Min
CKWLC0603C1N6◇T	1.6	250	0.035	1150	>6000	18
CKWLC0603C1N7◇T	1.7	250	0.043	1000	>6000	16
CKWLC0603C1N8◇T	1.8	250	0.043	1000	>6000	18
CKWLC0603C2N2◇T	2.2	250	0.150	700	>6000	13
CKWLC0603C2N7◇T	2.7	250	0.043	1000	>6000	25
CKWLC0603C3N3◇T	3.3	250	0.059	850	>6000	25
CKWLC0603C3N6◇T	3.6	250	0.059	850	>6000	25
CKWLC0603C3N9◇T	3.9	250	0.059	850	>6000	25
CKWLC0603C4N3◇T	4.3	250	0.059	850	>6000	25
CKWLC0603C4N7◇T	4.7	250	0.065	800	>6000	25
CKWLC0603C5N1◇T	5.1	250	0.130	600	>6000	21
CKWLC0603C6N2◇T	6.2	250	0.095	700	>6000	29
CKWLC0603C6N8◇T	6.8	250	0.095	700	>6000	29
CKWLC0603C7N5◇T	7.5	250	0.095	700	>6000	33
CKWLC0603C8N2◇T	8.2	250	0.095	700	>6000	31
CKWLC0603C8N7◇T	8.7	250	0.095	700	>6000	31
CKWLC0603C9N1◇T	9.1	250	0.120	620	6000	30
CKWLC0603C9N5◇T	9.5	250	0.160	540	6000	26
CKWLC0603C10N◇T	10.0	250	0.130	600	6000	30
CKWLC0603C11N◇T	11.0	250	0.130	600	6000	35
CKWLC0603C12N◇T	12.0	250	0.130	600	6000	35
CKWLC0603C13N◇T	13.0	250	0.130	600	6000	35
CKWLC0603C15N◇T	15.0	250	0.150	550	6000	37
CKWLC0603C16N◇T	16.0	250	0.150	550	5500	37
CKWLC0603C18N◇T	18.0	250	0.150	550	5500	37
CKWLC0603C20N◇T	20.0	250	0.150	550	4900	37
CKWLC0603C22N◇T	22.0	250	0.190	490	4600	38
CKWLC0603C23N◇T	23.0	250	0.190	490	3800	40
CKWLC0603C24N◇T	24.0	250	0.190	490	3800	40

Part Number	Inductance	Teat Freq	DCR (Ω)	Rated Current (mA)	SRF MHz	Q Factor
	nH	MHz	Max	Max	Min	Min
CKWLC0603C25N◇ST	25.0	250	0.190	490	3700	40
CKWLC0603C27N◇ST	27.0	250	0.190	490	3700	38
CKWLC0603C30N◇ST	30.0	250	0.210	470	3300	38
CKWLC0603C33N◇ST	33	250	0.210	470	3200	40
CKWLC0603C36N◇ST	36	250	0.220	460	2900	40
CKWLC0603C39N◇ST	39	250	0.220	460	2800	40
CKWLC0603C43N◇ST	43	250	0.270	400	2700	40
CKWLC0603C47N◇ST	47	250	0.270	400	2600	36
CKWLC0603C51N◇ST	51	250	0.300	390	2400	35
CKWLC0603C56N◇ST	56	250	0.350	360	2400	38
CKWLC0603C62N◇ST	62	250	0.380	350	2300	36
CKWLC0603C68N◇ST	68	250	0.380	350	2200	36
CKWLC0603C72N◇ST	72	150	0.430	320	2100	34
CKWLC0603C82N◇ST	82	150	0.500	300	2000	34
CKWLC0603C91N◇ST	91	150	0.520	300	1900	34
CKWLC0603CR10◇ST	100	150	0.660	260	1800	31
CKWLC0603CR11◇ST	110	150	0.730	250	1700	32
CKWLC0603CR12◇ST	120	150	0.750	240	1600	32
CKWLC0603CR15◇ST	150	150	1.120	200	1400	32
CKWLC0603CR16◇ST	160	150	1.250	190	1400	32
CKWLC0603CR18◇ST	180	150	1.380	180	1300	25
CKWLC0603CR20◇ST	200	100	1.900	150	1250	25
CKWLC0603CR22◇ST	220	100	2.100	140	1200	25
CKWLC0603CR24◇ST	240	100	2.750	120	1100	25
CKWLC0603CR25◇ST	250	100	2.800	120	1100	25
CKWLC0603CR27◇ST	270	100	3.000	120	960	26
CKWLC0603CR33◇ST	330	100	4.200	100	800	26
CKWLC0603CR39◇ST	390	100	4.500	100	800	27
CKWLC0603CR42◇ST	420	100	5.400	90	800	27
CKWLC0603CR47◇ST	470	100	5.700	90	700	27
CKWLC0603CR56◇ST	560	100	8.100	70	650	27

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CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 3/7
DESCRIPTION.	RF INDUCTOR	DRAWN NO.	0
PART NO.	CKWLC0603 Series	DATE	2024/1/20

3.MATERIAL LIST & GENERAL SPECIFICATION

材料名称	型号及规格	制造商	备注
ITEM	Materials	Manufacturer	Note
磁芯 (Drum Core)	陶瓷	TZD	NA
铜线 (Wire)	聚酯亚胺漆包线	ELEKTRISOLA	NA

GENERAL SPECIFICATION	
Electrical specifications :	at 20~25℃
Operation Temperature :	-40~+125℃
Storage Temperature :	-40~+125℃

◆TEST CONDITION

ITEM	TEST CONDITION	TEST INSTRUMENTS
L	250MHz	HP4286A
Isat		VR116+VR7210
DCR		502BC
SRF		E5071C ENA

*The operating temperature is 25℃

*Isat: For Inductance drop 30% from its value without current

*Irms: The value of D.C current when the temperature rise is $\Delta T \leq 40^{\circ}\text{C}$. ($T_a=25^{\circ}\text{C}$)

※此物料仅用于消费电子领域，若用于车载，航天，军事领域引起的一切品质和责任问题，我司既不承担※

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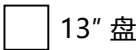
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CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 4/7
DESCRIPTION.	RF INDUCTOR	DRAWN NO.	0
PART NO.	CKWLC0603 Series	DATE	2024/1/20

4.PACKAGING(unit: mm)

1.包装类型

2.包装尺寸



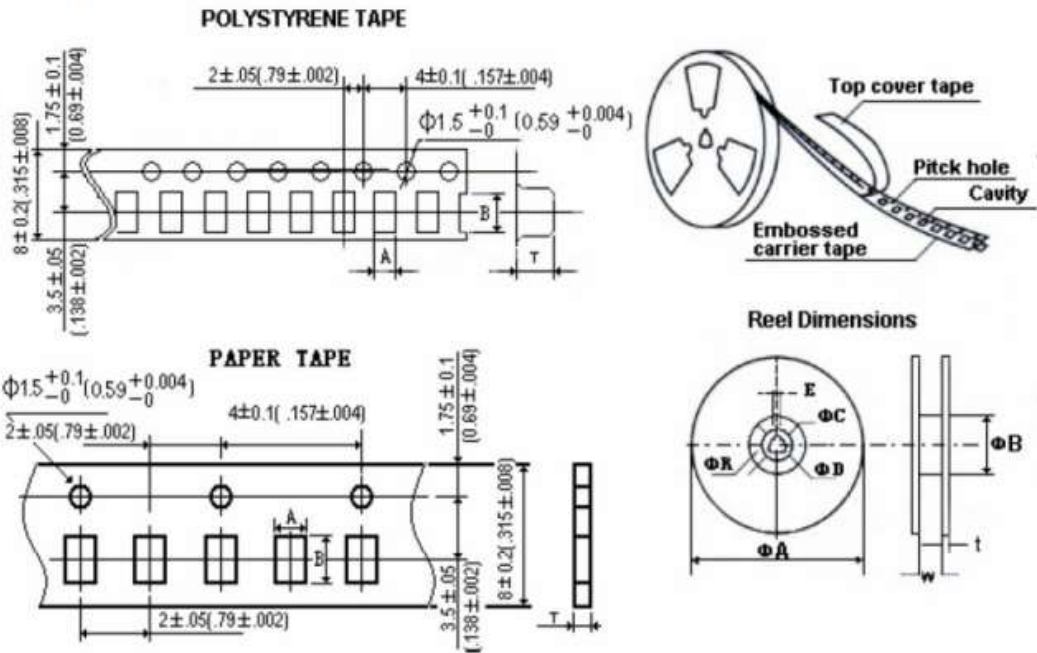
13" 盘



7" 盘

◆ Packaging Style

1、Tape



		A	B	T
纸带	0402	0.74	1.23	0.60
	0603	1.15	1.83	0.95
	0805	1.85	2.40	1.45
	1008	2.73	2.90	2.34
	1210	2.96	3.60	2.40
胶带	1812	3.22	4.82	3.15

unit: (mm)

unit	ΦA	ΦB	ΦC	ΦD	E	W	t	R
mm	178	60	13	21	2	10	2	1
	330	75	13	23	2	12	2	1

2、Packaging Quantity

Dimension	1005 (0402)	1608 (0603)	2012 (0805)	2520 (1008)	3225 (1210)	4532 (1812)
Quantity(Pcs)	10000	4000	2000	2000	2000	2000

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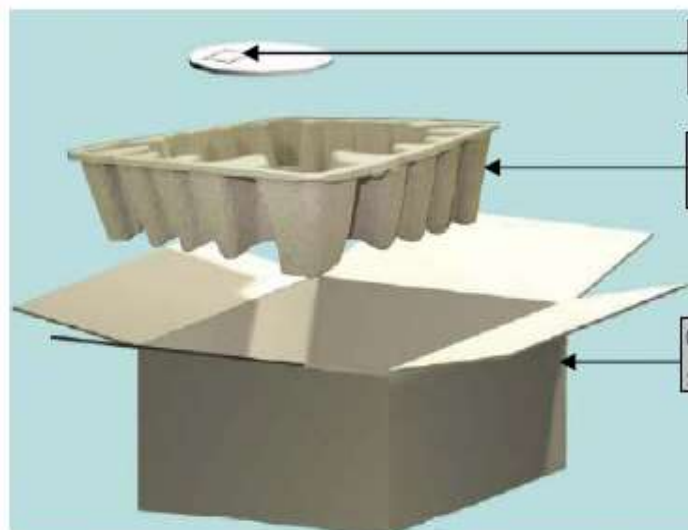


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CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 5/7
DESCRIPTION.	RF INDUCTOR	DRAWN NO.	0
PART NO.	CKWLC0603 Series	DATE	2024/1/20

5. CARTON



Innei Packaging (MPQ unit):
内包装 (最小包装数量单位)

Interm ediate Packaging:
中包装

Outer packaging:
外包装

1.1 外箱: 40*40.*17 cm 一纸托装一箱

1.2 内箱: CAG002(装7寸卷盘TRAY盘)

1.3 外箱材质: A三A

1.4 内箱材质: A=A

1.5 每10卷制品用一只静电袋包装

1.6 每一静电袋内放一只袋干燥剂

1.7 每一卷上面依标签样式的要求贴上标签明细

1.8 出货内外箱贴上该箱内实际内容明细

1.9 出货标签规格如下: 尺寸=长度:39mm 宽度:29mm

(如: 客户有特殊要求时, 则依客户要求实施.)

储存条件及期限:

温度: 20-25℃

湿度: ≤70%

时间: 六个月

卷轴包装数量

每卷	10000	PCS
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外箱包装数量

每箱	40	卷,共	400000	PCS
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CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 6/7
DESCRIPTION.	RF INDUCTOR	DRAWN NO.	0
PART NO.	CKWLC0603 Series	DATE	2024/1/20

6. RELIABILITY TEST

Test Items		Test Conditions	Criteria
1	Low temperature storage	Placed at -40°C for 500 hours, then measured at room ambient temperature after placing 24hours	Inductance shall be within $\pm 10\%$ of the initial value.
2	High temperature storage	Placed at +125°C for 500 hours, then measured at room ambient temperature after placing 24 hours	Inductance shall be within $\pm 10\%$ of the initial value.
3	Thermal shock	Condition for 1 cycle: -40°C,30min.~+125°C,30min Number of cycles:5	Inductance shall be within $\pm 10\%$ of the initial value.
4	Humidity resistance	Placed at 90 to 95%RH,+50°C for 500 hours, then measured at room ambient temperature after placing 24 hours.	Inductance shall be within $\pm 10\%$ of the initial value. Insulation resistance > 100M Ω at DC
5	Drop	Drop specimen three times on concrete floor from a height of 1 meter which mounted on test board	Inductance shall be within $\pm 10\%$ of the initial value.
6	Vibration	Frequency::10~55~10Hz Amplitude:1.5mm or 10G Sweep time: 1 oct/min Test Directions: X,Y,Z Test Time: 2 hours each direction	Inductance shall be within $\pm 10\%$ of the initial value.
7	Terminal strength	Add static load 4.9N(500gf) to inductor through hole of test board for 10 $\pm$ 2 sec.	No detachment of terminal pin and no breakage of wire
8	Soldering heat resistance	Dip Inductor's terminal in solder bath of following conditions: 1) 260 $\pm$ 5°C, 10 $\pm$ 1 sec, 2) 350 $\pm$ 10°C, 3.5 $\pm$ 0.5 sec	Inductance shall be within $\pm 10\%$ of the initial value. Apperance: No damage

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CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 7/7
DESCRIPTION.	RF INDUCTOR	DRAWN NO.	0
PART NO.	CKWLC0603 Series	DATE	2024/1/20

7. SOLDERING CONDITIONS

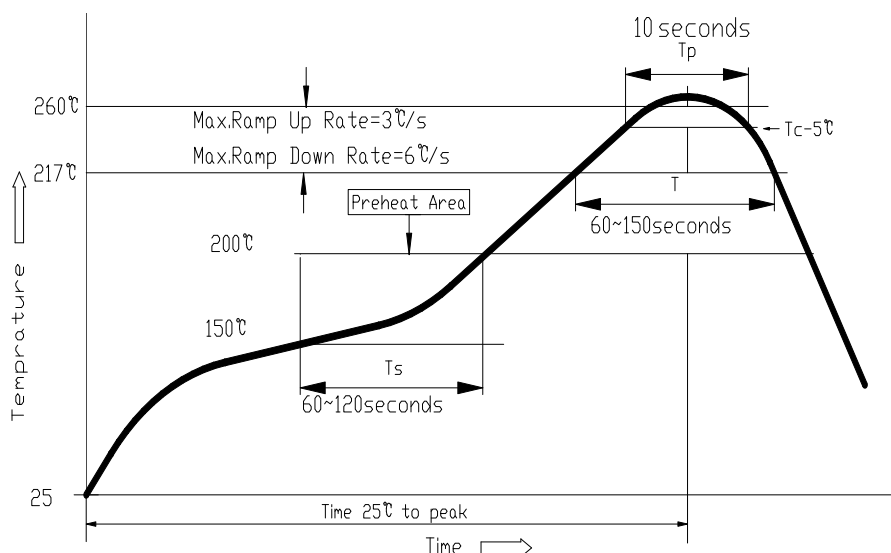
Applicable soldering process to the products is refl.

9.1 Soldering Materials

(1) Solder:Sn-3.0Ag-0.5Cu

(2) Flux:Use rosin-based flux,but not strongly acidic flux (with xhlorine exceeding 0.2wt%).Do not use water-soluble flux.

9.2 Reflow Soldering Profile



9.3 Soldering Iron

Reworking with electric soldering iron must preheating at 150°C for 1 minute is required,and do not directly touch the core with the tip of the soldering iron.The reworking soldering conditions are as follows.

- ①Temperature of soldering iron tip:350°C;
- ② Soldering iron power output:≤30W;
- ③ Diameter of soldering iron end:≤1.0mm;
- ④Soldering time:<3 s



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