承　　认　　书

SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
DATE	25/Jun/2025	REVISION NO.	B
PART NO.	CKWLF0603ES Series		
DRAWN NO.			
DESCRIPTION.	RF INDUCTOR		
Customer's Signature			

Approved by	Checked by	Drawn by
梁智坤	黄大燕	赵龙宇
25/Jun/2025	25/Jun/2025	25/Jun/2025

广 东 今 凯 电 子 科 技 有 限 公 司

GUANG DONG CHK ELECTRONIC TECH Co., Ltd

广东省佛山市顺德区北滘万洋科创园二区3栋

Building 3, District 2, Beijiao Wanyang Science and Technology Innovation Park, Shunde District, Foshan City, Guangdong

www.gzchk.com

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GUANG DONG CHK ELECTRONIC TECH Co., Ltd

ECN HISTORY LIST

REV	DATE	DESCRIPTION	CHECK	APPROVED
A	1月20日	新规作成	黄大燕	梁智坤
B	6月25日	增加SRF及更新参数	黄大燕	梁智坤

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CUSTOMER	0	REVISION NO.	B
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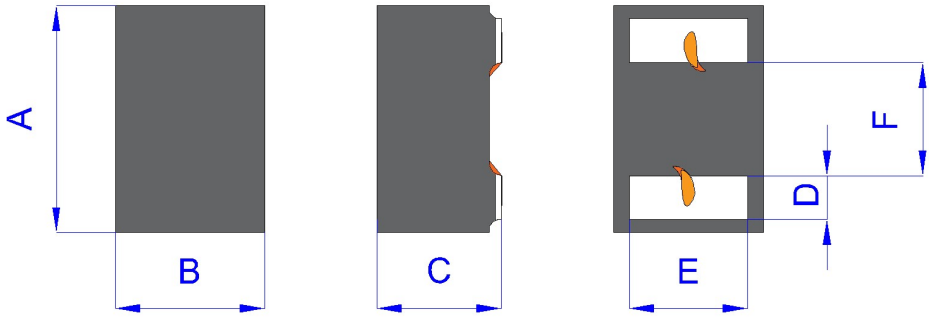
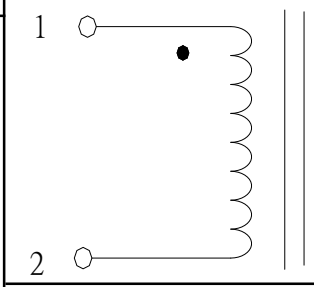
DESCRIPTION.	RF INDUCTOR	DRAWN NO.	0
PART NO.	CKWLF0603ES Series	DATE	2025/6/25

1.SHAPE & DIMENSION

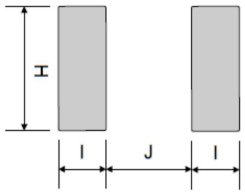
UNIT: mm



SCHEMATICS



Recommended land pattern



A	B	C	D	E	F	H	I	J
1.8	1.3	1.2	0.36	0.88	0.85	1.02	0.60	0.60
MAX	MAX	MAX	Ref	Ref	Ref	±0.05	±0.05	±0.05

PART NUMBERING SYSTEM

CK	WLF	0603	ES	-	100	M	C
1	2	3	4		5	6	7

1 CHK PRODUCTION (今凯制造)
2 PRODUCT CATEGORY （产品种类）
3 DIMENSIONS （尺寸规格）
4 MATERIAL TYPE （材料种类）
5 INDUCTANCE （电感量）
6 TOLERANCE （公差） K:±10% M:±20%
7 PACKAGING （包装方式） C - 编带盘装

APPROVED BY	CHECKED BY	DRAFT BY
梁智坤	梁智坤	赵龙宇

CUSTOMER	0	REVISION NO.	B
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DESCRIPTION.	RF INDUCTOR	DRAWN NO.	0
PART NO.	CKWLF0603ES Series	DATE	2025/6/25

2.SERIES SPECIFICATION

◆CKWLF0603ES Specification:

Part Number	Inductance	Test Freq	DCR(mΩ)		Rated Current (A)	SRF MHz	Q
	uH	MHz	Max	Typ	Max	Min	Min
CKWLF0603ES-1R0MC	1.0	1MHz	195	160	0.55	150	18
CKWLF0603ES-2R2MC	2.2	1MHz	390	330	0.45	90	18
CKWLF0603ES-4R7MC	4.7	1MHz	560	530	0.35	50	18
CKWLF0603ES-100MC	10	1MHz	1300	1200	0.20	30	18

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PART NO.	CKWLF0603ES Series	DATE	2025/6/25

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)	铁氧体	DC/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	1MHz	Microtest 6377
Isat		TH1773
DCR		TH2512B
SRF		4991A

*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 △T≦40℃.(Ta=25℃)

※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※

APPROVED BY	CHECKED BY	DRAWN BY
梁智坤	梁智坤	赵龙宇

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DESCRIPTION.	RF INDUCTOR	DRAWN NO.	0
PART NO.	CKWLF0603ES Series	DATE	2025/6/25

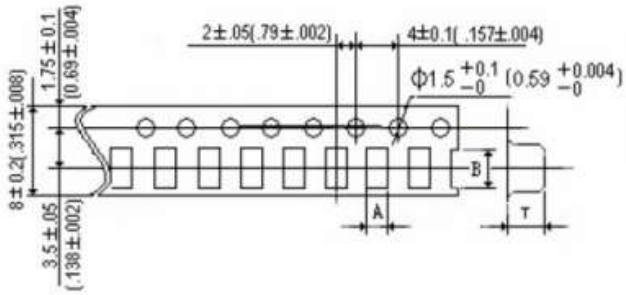
4.PACKAGING(unit: mm)

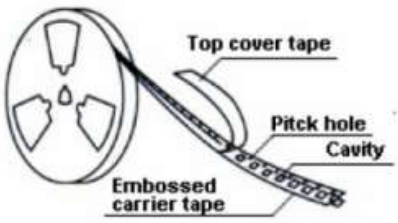
1.包装类型 **2.包装尺寸** ☐ 13″ 盘 ■ 7″ 盘

◆ **Packaging Style**

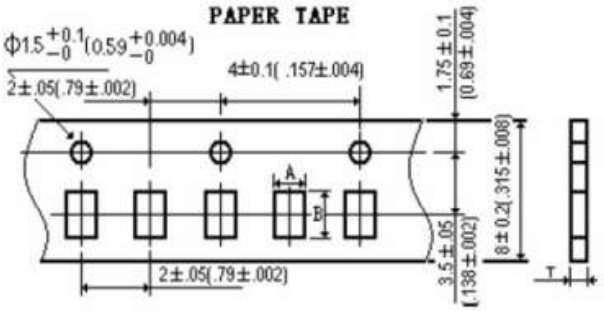
1、Tape

POLYSTYRENE TAPE

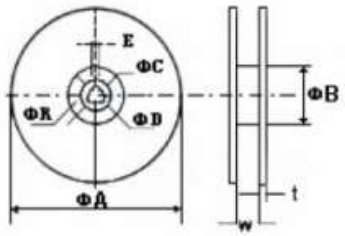




PAPER TAPE



Reel Dimensions



		A	B	T
纸带	0402	0.74	1.23	0.60
胶带	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
	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

APPROVED BY	CHECKED BY	DRAFT
梁智坤	梁智坤	赵龙宇

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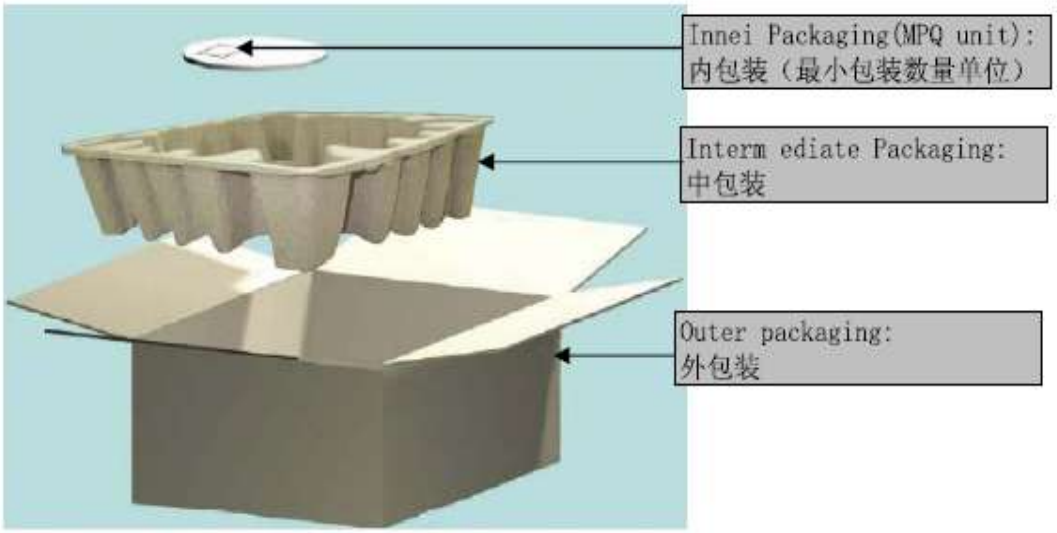
PART NO.	CKWLF0603ES Series	DATE	2025/6/25

5. CARTON



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 外箱材質: A三A
1.4 内箱材質: 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.)

卷轴包装数量		
每卷	3000	PCS

外箱包装数量				
每箱	40	卷,共	120000	PCS

储存条件及期限：
温度：20-25℃
湿度：≦70%
时间：六个月

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梁智坤	梁智坤	赵龙宇

CUSTOMER	0	REVISION NO.	B
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PART NO.	CKWLF0603ES Series	DATE	2025/6/25

6. RELIABILITY TEST

	Test Items	Test Conditions	Criteria
1	Low temperature storage	Placed at -40℃ for 500 hours, then measured at room ambient temperature after placing 24hours	Inductance shall be within ± 10% of the initial value.
2	High temperature storage	Placed at +125℃ for 500 hours, then measured at room ambient temperature after placing 24 hours	Inductance shall be within ± 10% of the initial value.
3	Thermal shock	Condition for 1 cycle: -40℃,30min.~+125℃,30min Number of cycles:5	Inductance shall be within ± 10% of the initial value.
4	Humidity resistance	Placed at 90 to 95%RH,+50℃ for 500 hours, then measured at room ambient temperature after placing 24 hours.	Inductance shall be within ± 10% of the initial value. Insulation resistance > 100MΩ 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 ± 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 ± 10% of the initial value.
7	Terminal strength	Add static load 4.9N(500gf) to inductor through hole of test board for 10±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±5℃, 10±1 sec, 2) 350±10℃, 3.5±0.5 sec	Inductance shall be within ± 10% of the initial value. Apperance: No damage

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梁智坤	梁智坤	赵龙宇

CUSTOMER	0	REVISION NO.	B
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PART NO.	CKWLF0603ES Series	DATE	2025/6/25

7. SOLDERING CONDITIONS

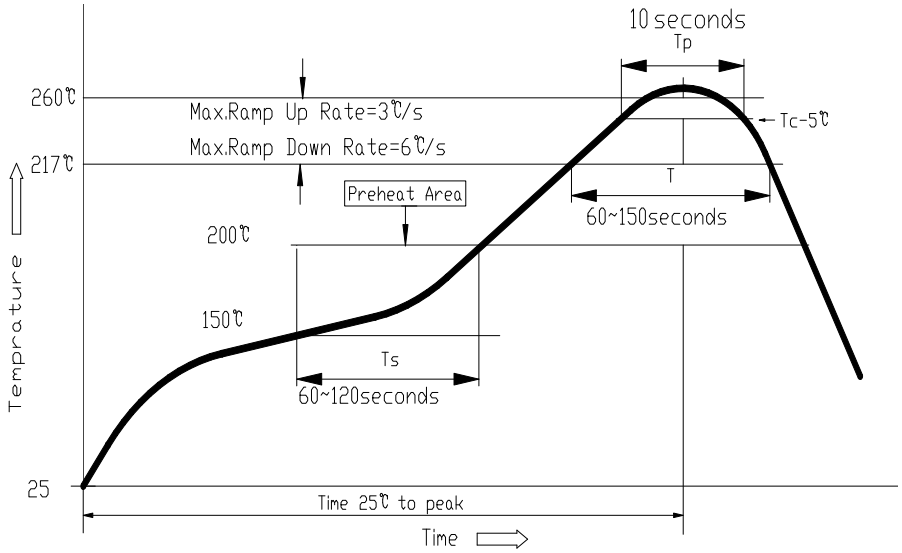
Applicable soldering process to the products is refl.

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

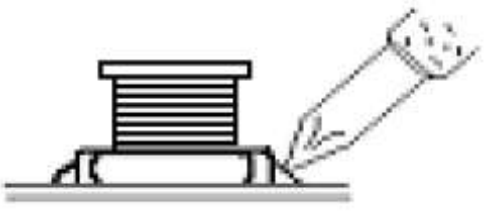
Reworking with electric solding iron must preheating at 150℃ for 1 minute is required,and do not directly touch the core with the tip of the soldering iron.The reworking soldering conditions are as follows.

①Temperature of soldering iron tip:350℃；

② Soldering iron power output:≤30W；

③ Diameter of soldering iron end:≤1.0mm；

④Soldering time:＜3 s



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梁智坤	梁智坤	赵龙宇

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SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
JINKAI P/N:	CKWLF0603ES-1R0MC	**TEST R.H.**	80~85%
PART NO.	CKWLF0603ES Series	**TEST TEMP.**	20~25℃
DRAWN NO.		**DATE**	2021/11/18

TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION									DIMENSION (Unit：mm)		
MEAS. ITEM	L μh	DCR mΩ	ISAT A	△L/L					長 mm	寬 mm	高 mm
SPEC.	1.00 uH 20%	195 Max	0.55 Typ						1.8 MAX	1.3 MAX	1.3 MAX
TEST FREQ.	1MHZ										
1	1.00	159	0.780	-21.61%					1.75	1.17	1.16
2	0.99	160	0.760	-23.23%					1.73	1.15	1.17
3	0.99	162	0.780	-21.45%					1.75	1.14	1.19
4	1.00	153	0.790	-21.00%					1.73	1.16	1.17
5	0.96	150	0.750	-21.88%					1.76	1.17	1.14
6	0.93	155	0.740	-20.43%					1.74	1.17	1.16
7	0.92	154	0.720	-21.74%					1.75	1.16	1.17
8	0.90	157	0.730	-18.89%					1.73	1.15	1.18
9	0.91	153	0.710	-21.98%					1.75	1.15	1.16
10	0.93	155	0.720	-22.58%					1.74	1.14	1.15
AVG.	**0.9528**	**155.8**	**0.748**	**-21.48%**					**1.743**	**1.156**	**1.165**
R	**0.1**	**12**	**0.08**	**4.34%**					**0.03**	**0.03**	**0.05**

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SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
JINKAI P/N:	CKWLF0603ES-2R2MC	**TEST R.H.**	80~85%
PART NO.	CKWLF0603ES Series	**TEST TEMP.**	20~25℃
DRAWN NO.		**DATE**	2021/11/18

TEST DATA FOR PREPRODUCTION SAMPLE

	TEST RESOLUTION								DIMENSION (Unit：mm)		
MEAS. ITEM	L μh	DCR mΩ	ISAT A	△L/L					長 mm	寬 mm	高 mm
SPEC.	2.20 uH 20%	390 Max	0.45 Typ						1.8 MAX	1.3 MAX	1.3 MAX
TEST FREQ.	1MHZ										
1	2. 18	330	1.79	-17.89%					1. 76	1. 16	1.16
2	2. 15	335	1.78	-17.21%					1. 75	1. 18	1.15
3	2. 16	336	1.76	-18.52%					1. 72	1. 17	1.14
4	2. 14	334	1.77	-17.29%					1. 73	1. 19	1.17
5	2. 20	336	1.78	-19.09%					1. 72	1. 17	1.18
6	2. 21	338	1.78	-19.46%					1. 75	1. 16	1.16
7	2. 16	337	1.79	-17.13%					1. 73	1. 15	1.15
8	2. 18	335	1.76	-19.27%					1. 74	1. 16	1.17
9	2. 17	334	1.77	-18.43%					1. 72	1. 17	1.16
10	2. 19	336	1.78	-18.72%					1. 74	1. 18	1.17
AVG.	**2.174**	**335.1**	**1.776**	**-18.30%**					**1.736**	**1.169**	**1.161**
R	**0.07**	**8**	**0.03**	**2.33%**					**0.04**	**0.04**	**0.04**

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SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
JINKAI P/N:	CKWLF0603ES-4R7MC	**TEST R.H.**	80~85%
PART NO.	CKWLF0603ES Series	**TEST TEMP.**	20~25℃
DRAWN NO.		**DATE**	2021/11/18

TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION									**DIMENSION (Unit：mm)**		
MEAS. ITEM	L μh	DCR mΩ	ISAT A	△L/L					長 mm	寬 mm	高 mm
SPEC.	4.70 uH 20%	560 Max	0.3 Typ						1.8 MAX	1.3 MAX	1.3 MAX
TEST FREQ.	1MHZ										
1	5.15	538	4.48	-13.01%					1.76	1.17	1.17
2	5.11	525	4.44	-13.11%					1.75	1.14	1.16
3	5.14	537	4.36	-15.18%					1.73	1.15	1.15
4	5.22	527	4.54	-13.03%					1.73	1.17	1.18
5	5.15	542	4.48	-13.01%					1.73	1.16	1.17
6	5.19	530	4.51	-13.10%					1.75	1.17	1.16
7	5.20	526	4.47	-14.04%					1.74	1.15	1.17
8	5.23	528	4.55	-13.00%					1.74	1.18	1.18
9	5.31	526	4.56	-14.12%					1.73	1.19	1.17
10	5.10	527	4.43	-13.14%					1.75	1.18	1.19
AVG.	**5.18**	**530.6**	**4.482**	**-13.47%**					**1.741**	**1.166**	**1.17**
R	**0.21**	**17**	**0.2**	**2.17%**					**0.03**	**0.05**	**0.04**

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RoHS Compliance

SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
JINKAI P/N:	CKWLF0603ES-100MC	**TEST R.H.**	80~85%
PART NO.	CKWLF0603ES Series	**TEST TEMP.**	20~25℃
DRAWN NO.		**DATE**	2021/11/18

TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION									DIMENSION (Unit：mm)		
MEAS. ITEM	L μh	DCR Ω	ISAT A	△L/L					長 mm	寬 mm	高 mm
SPEC.	10.0 uH 20%	1.3 Max	0.2 Typ						1.8 MAX	1.3 MAX	1.3 MAX
TEST FREQ.	1MHz										
1	9.79	1.200	8.02	-18.08%					1.77	1.17	1.15
2	9.81	1.230	7.98	-18.65%					1.74	1.16	1.14
3	9.78	1.190	7.89	-19.33%					1.76	1.15	1.17
4	9.96	1.240	8.15	-18.17%					1.78	1.17	1.18
5	9.84	1.230	8.14	-17.28%					1.75	1.18	1.16
6	9.73	1.250	7.85	-19.32%					1.76	1.16	1.15
7	9.89	1.260	8.22	-16.89%					1.74	1.14	1.15
8	9.91	1.220	8.21	-17.15%					1.75	1.16	1.17
9	9.98	1.250	8.25	-17.33%					1.73	1.17	1.16
10	9.99	1.270	8.26	-17.32%					1.74	1.15	1.18
AVG.	**9.868**	**1.234**	**8.097**	**-17.95%**					**1.752**	**1.161**	**1.161**
R	**0.26**	**0.08**	**0.41**	**2.44%**					**0.05**	**0.04**	**0.04**

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SPECIFICATION FOR APPROVAL

CUSTOMER	
CUSTOMER'S P/N	
JINKAI P/N:	CKWLF0603ES-150MC
PART NO.	CKWLF0603ES Series
DRAWN NO.	

TEST R.H.	80~85%
TEST TEMP.	20~25℃
DATE	2021/11/18

TEST DATA FOR PREPRODUCTION SAMPLE

	TEST RESOLUTION								DIMENSION (Unit：mm)		
MEAS. ITEM	L μh	DCR Ω	ISAT A	△L/L					長 mm	寬 mm	高 mm
SPEC.	15.0 uH 20%	2.34 Max	0.15 Typ						1.8 MAX	1.3 MAX	1.3 MAX
TEST FREQ.	1MHz										
1	14.4	1.90	11.3	-21.53%					1.77	1.16	1.15
2	14.3	1.98	11.1	-22.38%					1.76	1.17	1.16
3	14.3	1.96	11.0	-23.08%					1.74	1.15	1.19
4	14.5	1.96	11.2	-22.76%					1.75	1.17	1.17
5	14.5	1.97	11.0	-24.28%					1.77	1.18	1.18
6	14.4	1.98	11.3	-21.53%					1.76	1.19	1.15
7	14.4	1.95	11.4	-20.83%					1.75	1.17	1.17
8	14.5	1.96	11.2	-22.76%					1.76	1.16	1.16
9	14.5	1.95	11.1	-23.45%					1.77	1.14	1.16
10	14.4	1.98	11.2	-22.22%					1.76	1.17	1.17
AVG.	**14.42**	**1.959**	**11.178**	**-22.48%**					**1.759**	**1.166**	**1.166**
R	**0.2**	**0.08**	**0.42**	**3.44%**					**0.03**	**0.05**	**0.04**

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SPECIFICATION FOR APPROVAL

CUSTOMER	
CUSTOMER'S P/N	
JINKAI P/N:	CKWLF0603ES-220MC
PART NO.	CKWLF0603ES Series
DRAWN NO.	

TEST R.H.	80~85%
TEST TEMP.	20~25℃
DATE	2021/11/18

TEST DATA FOR PREPRODUCTION SAMPLE

	TEST RESOLUTION								DIMENSION (Unit：mm)		
MEAS. ITEM	L μh	DCR Ω	ISAT A	△L/L					長 mm	寬 mm	高 mm
SPEC.	22.0 uH 20%	2.86 Max	0.1 Typ						1.8 MAX	1.3 MAX	1.3 MAX
TEST FREQ.	1MHZ										
1	21.2	2.21	16.5	-22.17%					1.74	1.15	1.15
2	21.4	2.25	16.8	-21.50%					1.75	1.16	1.14
3	21.3	2.26	16.4	-23.00%					1.77	1.17	1.17
4	21.2	2.27	16.9	-20.28%					1.78	1.15	1.16
5	21.4	2.28	16.7	-21.96%					1.74	1.16	1.15
6	21.2	2.26	16.5	-22.17%					1.76	1.18	1.15
7	21.5	2.29	16.6	-22.79%					1.74	1.19	1.18
8	21.5	2.24	16.3	-24.19%					1.75	1.17	1.17
9	21.6	2.25	16.7	-22.69%					1.73	1.16	1.14
10	21.4	2.27	16.6	-22.43%					1.77	1.15	1.15
AVG.	**21.37**	**2.258**	**16.6**	**-22.32%**					**1.753**	**1.164**	**1.156**
R	**0.4**	**0.08**	**0.6**	**3.90%**					**0.05**	**0.04**	**0.04**