

承 认 书

SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
DATE	28/Sep/2023	REVISION NO.	A
PART NO.	CKWLF0402 Series		
DRAWN NO.			
DESCRIPTION.	RF INDUCTOR		
Customer's Signature			
Approved by	Checked by	Drawn by	
黄大燕	黄大燕	梁智坤	
28/Sep/2023	28/Sep/2023	28/Sep/2023	



广 州 市 今 凯 电 子 有 限 公 司

GUANG ZHOU CHK ELECTRONIC Co., Ltd

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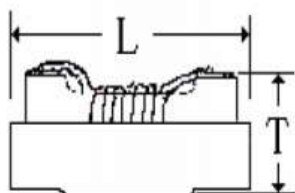
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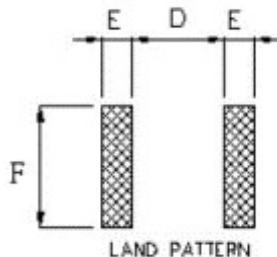
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PART NO.	CKWLF0402 Series	DATE	2023/9/28

1.SHAPE & DIMENSION

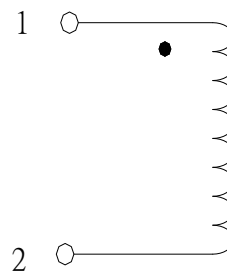
UNIT: mm



Recommended
land pattern



SCHEMATICS



MARKING
COLOR

L	W	T	E	F	D		
1.19	0.66	0.64	0.4	0.64	0.64		
Max	MAX	MAX	Typ	Typ	Typ		

PART NUMBERING SYSTEM

CK WLF 0402 - 4R7 K 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)

K:±10% M:±20% N:±25% Y:±30%

6 PACKAGING (包装方式)

C - 编带盘装

B - 盒装

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2.SERIES SPECIFICATION

◆CKWLF0402 Specification:

Part Number	Inductance	Teat Freq	DCR(Ω) $\pm$ 30%	Saturation Current (mA)	SRF Mhz
	(μ H)	(Hz)	Max	Max	Min
CKWLF0402-R10KC	0.10	7.9MHz/0.5V	0.16	900	1400
CKWLF0402-R11KC	0.11	7.9MHz/0.5V	0.20	850	1000
CKWLF0402-R14KC	0.14	7.9MHz/0.5V	0.26	630	1220
CKWLF0402-R15KC	0.15	7.9MHz/0.5V	0.26	630	1220
CKWLF0402-R18KC	0.18	7.9MHz/0.5V	0.28	560	1150
CKWLF0402-R20KC	0.20	7.9MHz/0.5V	0.44	400	1000
CKWLF0402-R22KC	0.22	7.9MHz/0.5V	0.53	380	1150
CKWLF0402-R25KC	0.25	7.9MHz/0.5V	0.36	520	900
CKWLF0402-R27KC	0.27	7.9MHz/0.5V	0.90	360	860
CKWLF0402-R33KC	0.33	7.9MHz/0.5V	0.56	350	820
CKWLF0402-R36KC	0.36	7.9MHz/0.5V	0.90	250	810
CKWLF0402-R39KC	0.39	7.9MHz/0.5V	1.00	200	760
CKWLF0402-R47KC	0.47	7.9MHz/0.5V	1.10	200	650
CKWLF0402-R56KC	0.56	7.9MHz/0.5V	1.20	200	600
CKWLF0402-R82KC	0.82	7.9MHz/0.5V	5.85	90	385
CKWLF0402-1R0KC	1.00	7.9MHz/0.5V	6.50	90	200
CKWLF0402-2R2KC	2.20	7.9MHz/0.5V	1.80	90	100
CKWLF0402-4R7KC	4.70	7.9MHz/0.5V	4.80	15	50

◆TEST CONDITION

ITEM	TEST CONDITION	TEST INSTRUMENTS
L	7.9MHz/0.5V	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※

APPROVED BY	CHECKED BY	DRAWN BY
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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)	镍锌	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℃

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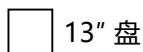
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4.PACKAGING(unit: mm)

1.包装类型

2.包装尺寸



13" 盘

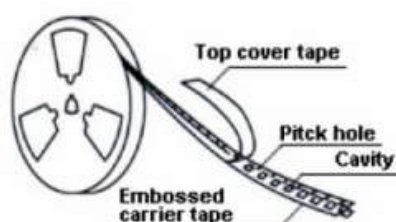
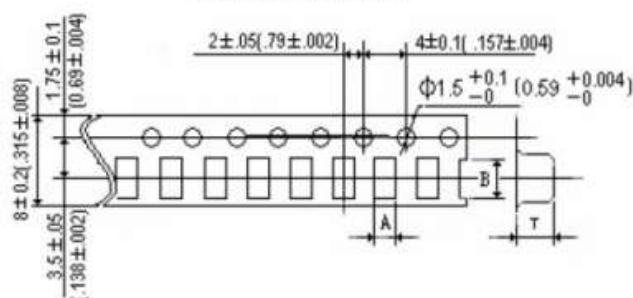


7" 盘

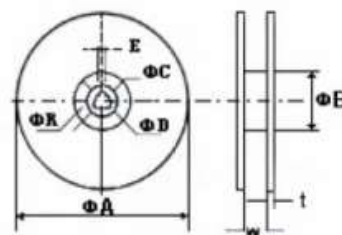
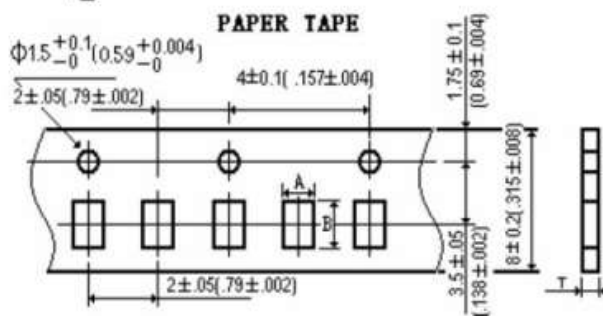
◆ Packaging Style

1、Tape

POLYSTYRENE TAPE



Reel Dimensions



unit: (mm)

		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
	1812	3.22	4.82	3.15

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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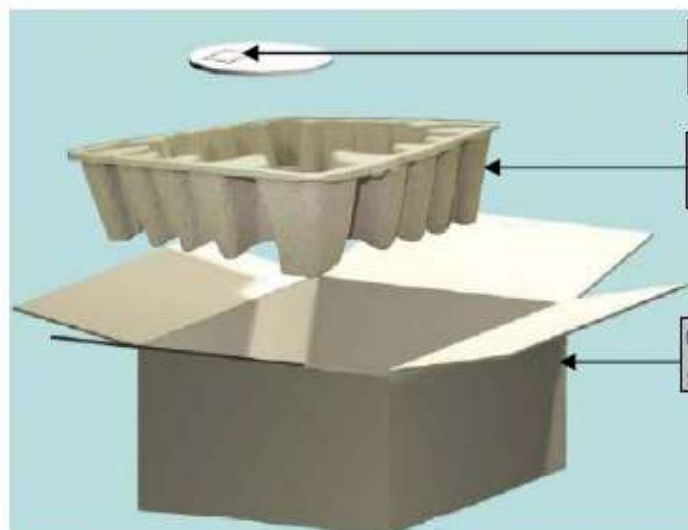


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5. CARTON



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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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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7. SOLDERING CONDITIONS

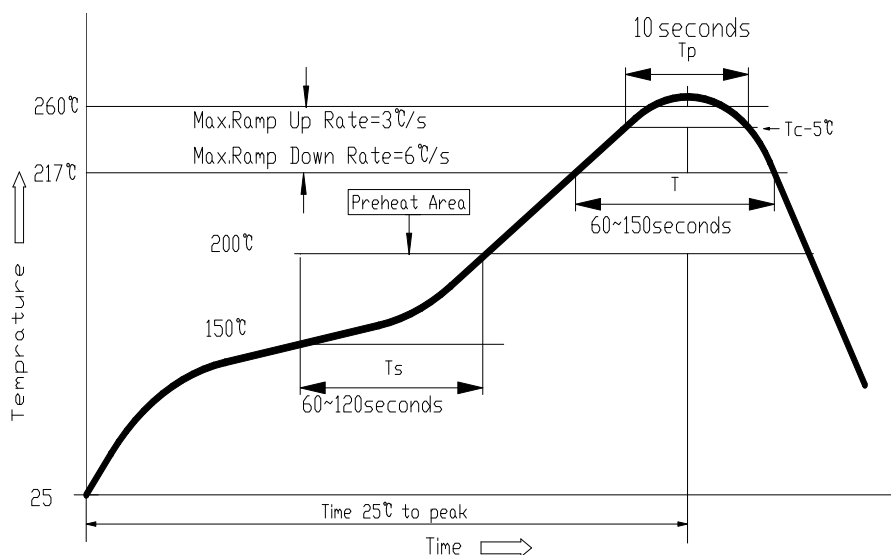
Applicable soldering process to the products is refl.

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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