

承 认 书

SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
DATE	19/Jan/2024	REVISION NO.	A
PART NO.	CKPM201610	Series	
DRAWN NO.			
DESCRIPTION.	SMD POWER INDUCTOR		
Customer's Signature			
Approved by	Checked by	Drawn by	
黄大燕	黄大燕	梁智坤	
19/Jan/2024	19/Jan/2024	19/Jan/2024	



广 州 市 今 凯 电 子 有 限 公 司

GUANG ZHOU CHK ELECTRONIC Co., Ltd

广东省广州市番禺区石基镇旧水坑开发路4号一栋2楼

2nd floor, Building 4, JiuShuiKeng Development Road, Shiji
Town, Panyu District, Guangzhou, Guangdong Province

www.gzchk.com

TEL: (020) 34567411

FAX: (020) 39946195



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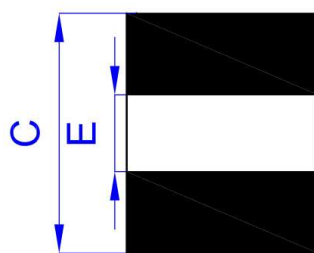
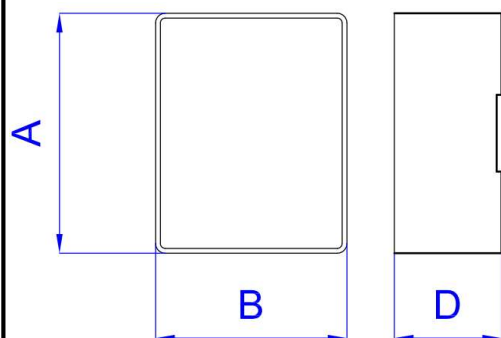
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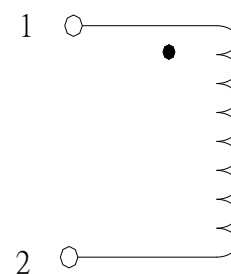
1.SHAPE & DIMENSION

UNIT: mm

SCHEMATICS



Recommended
land pattern



MARKING
COLOR

NA

A	B	C	D	E	P1	P2	P3
2.0	1.6	2.1	1	0.6	2	1.6	0.5
±0.2	±0.2	±0.2	Max	±0.2	Typ.	Typ.	Typ.

PART NUMBERING SYSTEM

CK PM 201610 B S - 2R2 M C

1 2 3 4 5 6 7 8

- CHK PRODUCTION (今凯制造)
- PRODUCT CATEGORY (产品种类)
- DIMENSIONS (尺寸规格)
- COATING COLOR (外观颜色) B- Black G-Gray
- SIZE TOLERANCE (尺寸公差) S - ±0.2mm D - ±0.1mm
- INDUCTANCE (电感量)
- TOLERANCE (公差) K:±10% M:±20% N:±25% Y:±30%
- PACKAGING (包装方式) C - 编带盘装 B - 盒装

APPROVED BY	CHECKED BY	DRAFT BY
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2.SERIES SPECIFICATION

◆ CKPM201610 Series Specification:

Part Number	Inductance	Teat Freq	DCR ($m\Omega$) $\pm 30\%$		Saturation Current (A)		Temp. Rise Current (A)	
	(μH)	(Hz)	Typ	Max	Typ	Max	Typ	Max
CKPM201610BS-R10MC	0.10	1MHz/1V	7.0	12.0	9.0	8.4	8.5	8.0
CKPM201610BS-R15MC	0.15	1MHz/1V	8.0	14.0	8.7	8.0	7.6	7.0
CKPM201610BS-R22MC	0.22	1MHz/1V	11.0	18.0	8.2	7.5	6.9	6.3
CKPM201610BS-R24MC	0.24	1MHz/1V	12.0	19.0	8.0	7.4	6.8	6.2
CKPM201610BS-R33MC	0.33	1MHz/1V	17.0	22.0	7.0	6.5	5.7	5.3
CKPM201610BS-R47MC	0.47	1MHz/1V	22.0	25.0	6.3	5.5	5.5	5.0
CKPM201610BS-R68MC	0.68	1MHz/1V	25.0	3.2	5.2	4.7	4.6	4.3
CKPM201610BS-1R0MC	1.00	1MHz/1V	35.0	43.0	4.6	4.2	4.5	4.1
CKPM201610BS-1R5MC	1.50	1MHz/1V	80.0	100.0	4.3	3.9	2.0	3.0
CKPM201610BS-2R2MC	2.20	1MHz/1V	120.0	130.0	3.0	2.8	2.5	2.1
CKPM201610BS-3R3MC	3.30	1MHz/1V	140.0	170.0	2.3	2.0	1.7	1.5
CKPM201610BS-4R7MC	4.70	1MHz/1V	190.0	220.0	1.9	1.7	1.6	1.4
CKPM201610BS-100MC	10.00	1MHz/1V	483.0	580.0	1.40	1.1	1.0	0.7

◆ TEST CONDITION

ITEM	TEST CONDITION	TEST INSTRUMENTS
L	1MHz/1V	Microtest 6377
Isat		TH1773+Microtest 6377
Irms		
DCR	25 $\pm$ 5 $^{\circ}$ C	TH2512B

*The operating temperature is 25 $^{\circ}$ C

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

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

*For CKPM201610 size inductors, absolute maximum voltage: DC 25 V.

※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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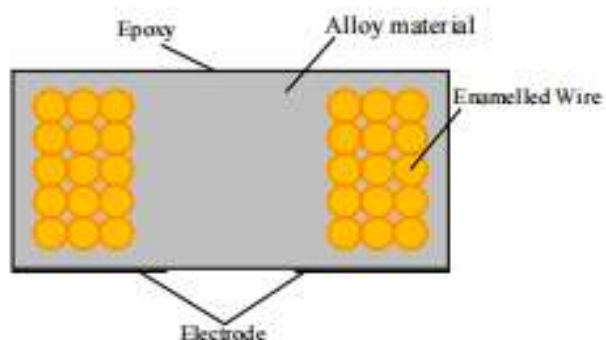
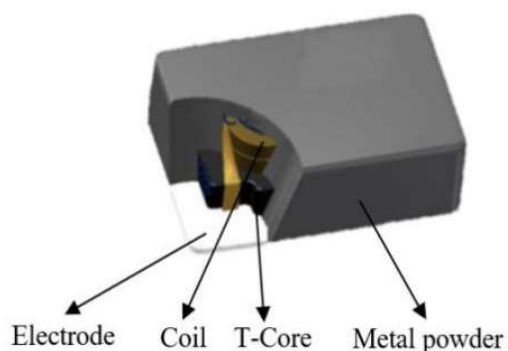
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3.MATERIAL LIST & GENERAL SPECIFICATION

材料名称	型号及规格	环保要求	备注
ITEM	Materials	EN.QU	Note
本体 Body	合金材料 Alloy Material	RoHS	
线圈 Winding	漆包线 Enamelled Wire	RoHS	
涂层 Shield	环氧树脂 Epoxy	RoHS	
电极 Electrode	底层—铜层 Base Plating—Cu	RoHS	
	镀层—镍层 Base Plating—Ni	RoHS	
	镀层—锡层 Base Plating—Sn	RoHS	

GENERAL SPECIFICATION

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



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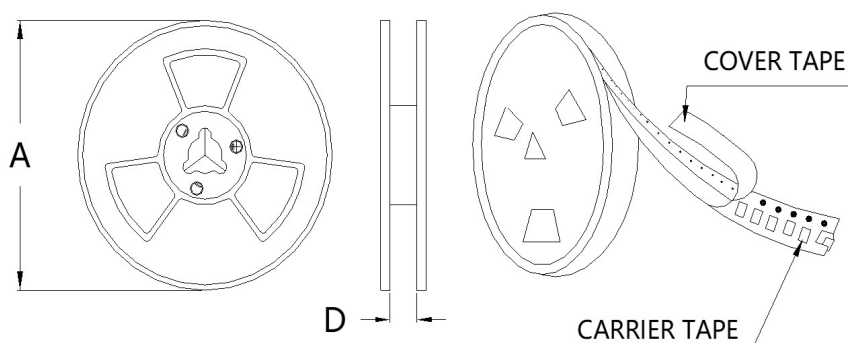
4.PACKAGING(unit: mm)

1.包装类型

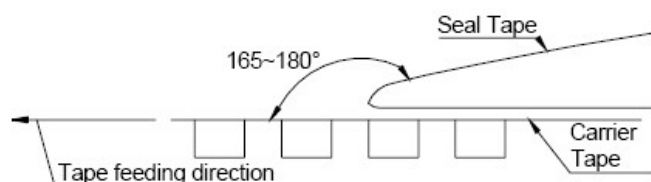
2.包装尺寸

13" 盘

7" 盘



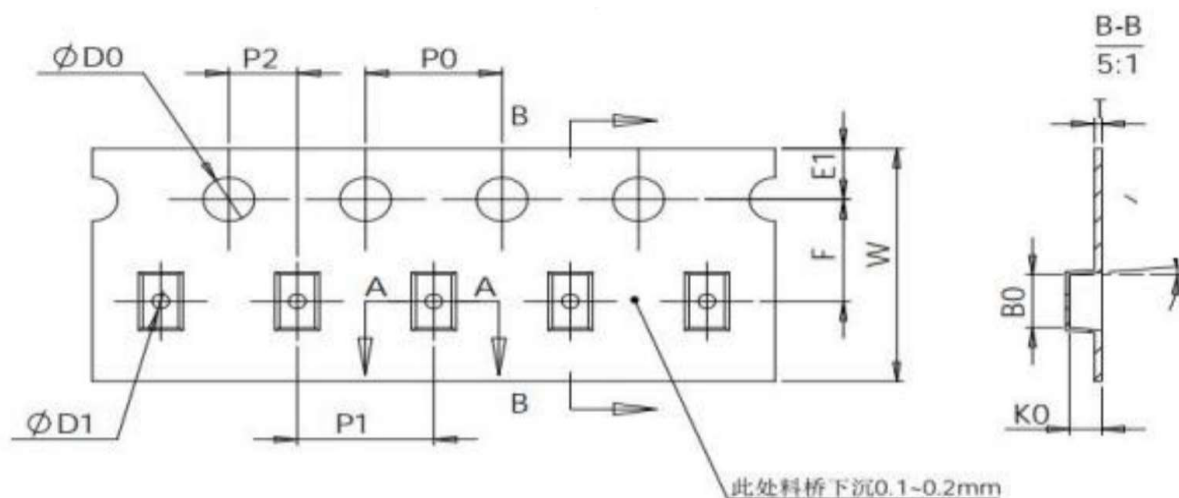
	13" 盘	7" 盘
A	$\Phi 330 \pm 2.0$	$\Phi 178 \pm 2.0$
D	8.4	



Peel-off strength:10~100gf.

Peel-off angle:165°-180°

Peel-off speed:300mm/min.



Item	W	A0	B0	D0	D1	E	F	K0	P0	P2	P1	T
DIM(mm)	8	1.95	2.35	1.5	1	1.75	3.5	1.15	4	2	4	0.25
Tolrence	± 0.1	± 0.1	± 0.1	± 0.1	± 0.2	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1	± 0.05

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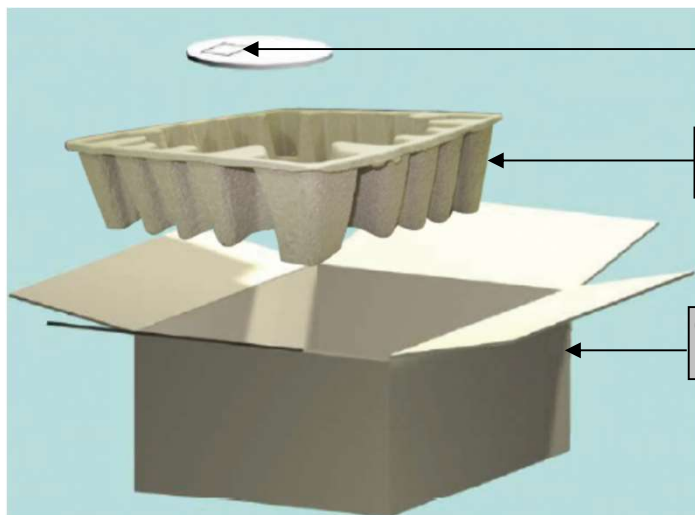


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5. CARTON



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) 一箱装40卷制品
- 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

卷轴包装数量

每卷	3000	PCS
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外箱包装数量

每箱	40	卷,共	120000	PCS
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储存条件及期限:

温度: 20-25℃

湿度: ≤70%

时间: 六个月

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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

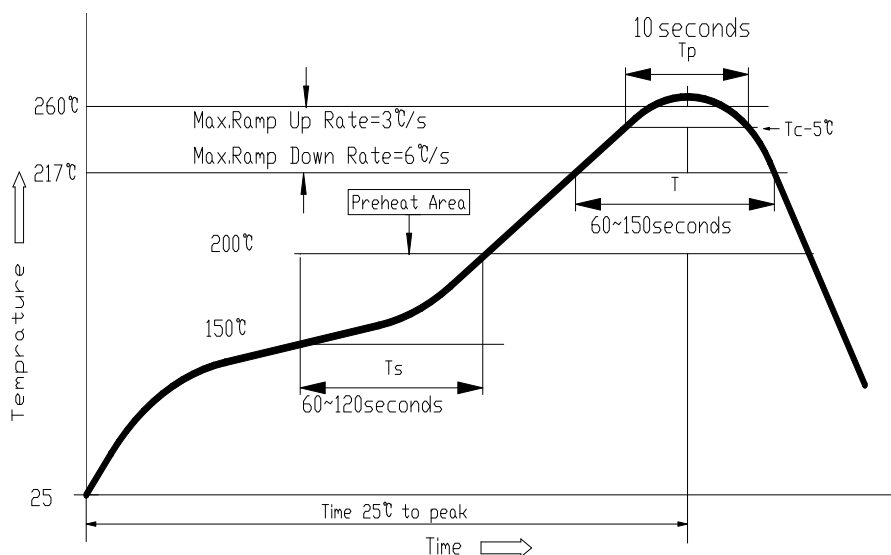
Applicable soldering process to the products is refl.

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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8.Appearance of the standard

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