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### SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N	09011305000006A		
DATE	15/Nov/2022	REVISION NO.	A
PART NO.	CKMD0410 Series		
DRAWN NO.			
DESCRIPTION.	SMD POWER INDUCTOR		
Customer's Signature			

Approved by	Checked by	Drawn by
黄大燕	林树英	林树英
15/Nov/2022	15/Nov/2022	15/Nov/2022



### 广州市今凯电子有限公司

GUANG ZHOU CHK ELECTRONIC Co., Ltd

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TEL: (020) 34567411 FAX: (020) 39946195



### GUANG ZHOU CHK ELECTRONIC Co., Ltd

### ECN HISTORY LIST

				1
REV	DATE	DESCRIPTION	CHECK	APPROVED
A	2022.11.15	新规作成	林树英	黄大燕

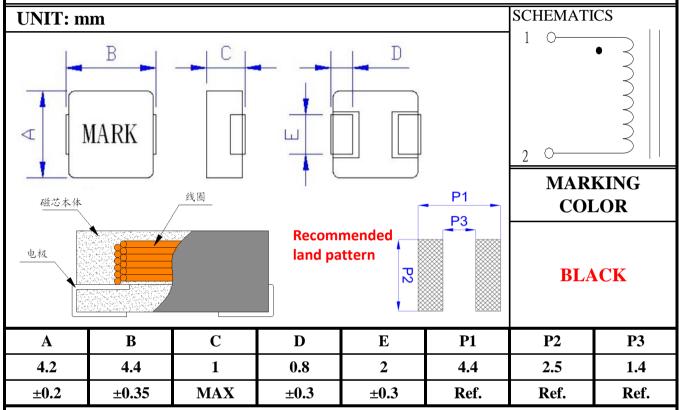
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### 广州市今凯电子有限公司

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PART NO.	CKMD0410 Series	DATE	2022/11/15

#### 1.SHAPE & DIMENSION



#### PART NUMBERING SYSTEM

CK MD 0410 B - 2R2 M C 1 2 3 4 5 6 7

- 1 CHK PRODUCTION (今凯制造)
- 2 PRODUCT CATEGORY (产品种类) MD Molding
- 3 DIMENSIONS (尺寸规格)
- 4 MATERIAL TYPE (材料类别)
- 5 INDUCTANCE (电感量)
- 6 TOLERANCE (公差) M:±20% N:±25% Y:±30%
- 7 PACKAGING (包装方式) C-编带盘装 B-盒装

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## CH (

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#### 2.SERIES SPECIFICATION

#### ◆CKMD0410 Series Specification:

Part Number	Inductance	Teat Freq	DCR(	(mΩ) 30%	Saturation Current (A)	Temp.Rise Current (A)
	( µ H)	(Hz)	Max	Тур	Тур	Тур
CKMD0410-3R3MC	3.30	100KHz/1V	130	110	3.0	2.8
CKMD0410-6R8MC	6.80	100KHz/1V	255	210	2.8	1.8
CKMD0410-100MC	10.00	100KHz/1V	312	265	1.9	1.7
		-			-	

#### ◆TEST CONDITION

ITEM	TEST CONDITION	TEST INSTRUMENTS
L		Microtest 6378
Isat	100KHz/1V	Microtest 6378
Irms		Microtest 6220
DCR	20°C	RM3544-01

<sup>\*</sup>The operating temperature is  $25\,^{\circ}\!\!\mathrm{C}$ 

<sup>※</sup>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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<sup>\*</sup>Isat: For Inductance drop 30% from its value without current

<sup>\*</sup>Irms: The value of D.C current when the temperature rise is  $\triangle T \le 40^{\circ}$ C. (Ta=25°C)



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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)	合金粉	AT	NA
铜线(Wire)	聚酯亚胺漆包线	ELEKTRISOLA	NA
料片 (Base)	银白色料片	BD	NA
油墨(Ink)	黑色油墨	TXQ	NA

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

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#### 广州市今凯电子有限公司 GUANG ZHOU CHK ELECTRONIC Co., Ltd CUSTOMER REVISION NO. 0 A CUSTOMER'S P/N 09011305000006A PAGE P 4/7 DESCRIPTION. SMD POWER INDUCTOR DRAWN NO. 0 PART NO. CKMD0410 Series DATE 2022/11/15 4.PACKAGING(unit: mm) 1.包装类型 2.包装尺寸 13" 盘 7" 盘 2.0±0.5 13" 盘 7"盘 COVER TAPE Ф330±2.0 Φ178±2.0 Α EMBOSSED CARRIER \*CARRIER TAPE WIDTH: D Seal Tape 165~180° Peel-off strength:20~140gf. Peel-off angle:165°-180° Carrier Tape Peel-off speed:300mm/min. Tape feeding direction <u>A</u>0 K0 0 0 80 空25格 空25格 客户使用方向 尺寸 Р W В0 A0 ΚO $12.0\pm0.3$ $4.0\pm0.2$ 4.9±0.2 1.7±0.15 $8.0\pm0.1$ C G T В D N A 13 12±0.3 13 100 330 21 16

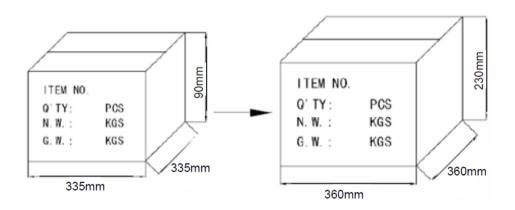
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### 5. CARTON



# Carton dimensions and packing quantity 包装箱尺寸与包装数量

Inner Carton: 335\*335\*90mm Out Carton: 360\*360\*230mm

<b>Product Series</b>	Quantity / Reel	Inner Carton	Out Carton
1 Toduct Series	Qualitity / IXCCI	Quantity	Quantity
产品系列	每卷包装数	内盒包装数	外箱包装数
CKMD0410	3000pcs/Reel	12000pcs/箱	36000pcs/箱

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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 ± 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 ± 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 ± 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 ± 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°C, 10±1 sec, 2) 350±10°C, 3.5±0.5 sec	Inductance shall be within ± 10% of the initial value. Apperance: No damage

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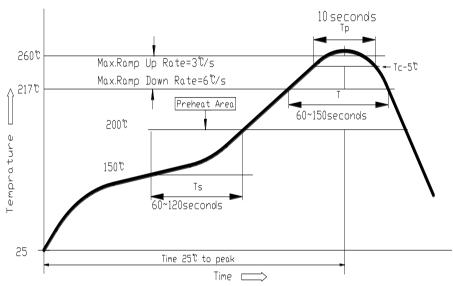
#### 7. SOLDERING CONDITIONS

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 solding 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;
- 4 Soldering time: <3 s



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