

承 认 书

SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
DATE	12/Mar/2025	REVISION NO.	A
PART NO.	CKNR5040B 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	
12/Mar/2025	12/Mar/2025	12/Mar/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 Province

www.gzchk.com

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



广东今凯电子科技有限公司

GUANG DONG CHK ELECTRONIC TECH Co., Ltd

ECN HISTORY LIST

[illegible]

--



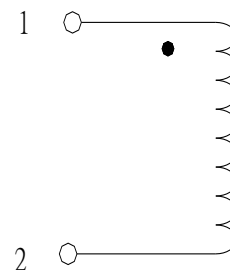
广东今凯电子科技有限公司
GUANG DONG CHK ELECTRONIC TECH Co., Ltd

CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 1/8
DESCRIPTION.	SMD POWER INDUCTOR	DRAWN NO.	0
PART NO.	CKNR5040B Series	DATE	2025/3/12

1.SHAPE & DIMENSION

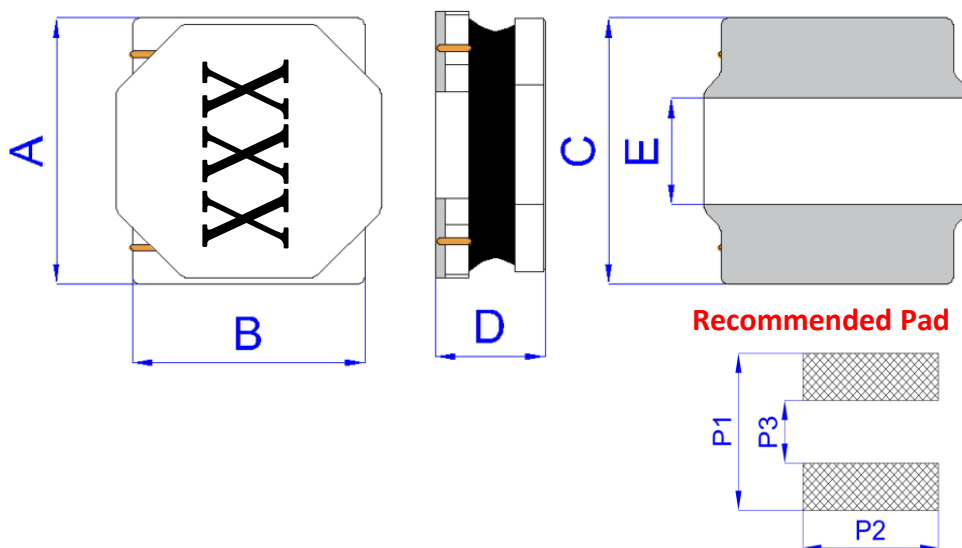
UNIT: mm

SCHEMATICS



MARKING
COLOR

BLACK



A	B	C	D	E	P1	P2	P3
5	5	5	4.2	2	4.5	5.5	1.5
±0.3	±0.3	±0.3	MAX	±0.3	Ref.	Ref.	Ref.

PART NUMBERING SYSTEM

CK NR 5040 B - 2R2 M C
1 2 3 4 5 6 7

- CHK PRODUCTION (今凯制造)
- PRODUCT CATEGORY (产品种类) NR-镍锌 NRS-合金
- DIMENSIONS (尺寸规格)
- MAERTIAL TYPE (材料类型)
- INDUCTANCE (电感量)
- TOLERANCE (公差) 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
黄大燕	黄大燕	梁智坤



广东今凯电子科技有限公司

GUANG DONG CHK ELECTRONIC TECH Co., Ltd

CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 2/8
DESCRIPTION.	SMD POWER INDUCTOR	DRAWN NO.	0
PART NO.	CKNR5040B Series	DATE	2025/3/12

2.SERIES SPECIFICATION

◆ CKNR5040B Series Specification:

Part Number	Inductance	Test Freq	DCR (mΩ)		Saturation Current (A)		Temp. Rise Current (A)	
	(μH)	(Hz)	Max	Typ	Max	Typ	Max	Typ
CKNR5040B-1R0YC	1.0	100KHz/1V	20	13	7.60	8.50	5.30	6.60
CKNR5040B-1R5YC	1.5		21	16	6.30	7.30	5.30	6.60
CKNR5040B-2R2MC	2.2		26	21	6.00	6.50	5.30	6.50
CKNR5040B-3R3MC	3.3		36	25	4.60	5.10	4.60	5.20
CKNR5040B-4R7MC	4.7		46	35	3.50	4.00	3.60	4.60
CKNR5040B-6R8MC	6.8		56	50	2.90	3.80	3.00	4.10
CKNR5040B-100MC	10		85	70	2.35	2.85	2.85	3.60
CKNR5040B-150MC	15		112	91	2.30	2.60	2.20	2.90
CKNR5040B-220MC	22		167	127	1.90	2.10	2.10	2.60
CKNR5040B-330MC	33		244	207	1.30	1.55	1.70	2.10
CKNR5040B-470MC	47		354	291	1.30	1.50	1.30	1.65
CKNR5040B-680MC	68		520	432	1.10	1.20	1.10	1.30
CKNR5040B-101MC	100		728	563	0.85	0.90	1.00	1.10

◆ TEST CONDITION

ITEM	TEST CONDITION	TEST INSTRUMENTS
L	100KHz/1V	Microtest 6377
Isat		TH1773+Microtest 6377
Irms		
DCR	25±5℃	TH2512B

*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 $\Delta T \leq 40^{\circ}\text{C}$. ($T_a = 25^{\circ}\text{C}$)

*For CKNR5040B Series size inductors, absolute maximum voltage: DC 50 V.

※此物料仅用于消费电子和车载领域，若用于航天，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
黄大燕	黄大燕	梁智坤



广东今凯电子科技有限公司

GUANG DONG CHK ELECTRONIC TECH Co., Ltd

CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 3/8
DESCRIPTION.	SMD POWER INDUCTOR	DRAWN NO.	0
PART NO.	CKNR5040B Series	DATE	2025/3/12

3.MATERIAL LIST & GENERAL SPECIFICATION

材料名称	型号及规格	制造商	环保要求	备注
ITEM	Materials	Manufacturer	EN.QU	Note
磁芯1 (Drum Core)	镍锌 (Nickel-Zinc)	DJ	RoHS	Primary
铜线 (Wire)	Polyester Wire or equivalent	ELEKTRISOLA	RoHS	
胶水 (Glue)	Phenolic epoxy resin	DAJOO	RoHS	
锡 (Solder)	107H	QD	RoHS	Primary
锡 (Solder)	107H	TF	RoHS	Alternative

GENERAL SPECIFICATION

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

APPROVED BY	CHECKED BY	DRAWN BY
黄大燕	黄大燕	梁智坤



广东今凯电子科技有限公司
GUANG DONG CHK ELECTRONIC TECH Co., Ltd

CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 4/8
DESCRIPTION.	SMD POWER INDUCTOR	DRAWN NO.	0
PART NO.	CKNR5040B Series	DATE	2025/3/12

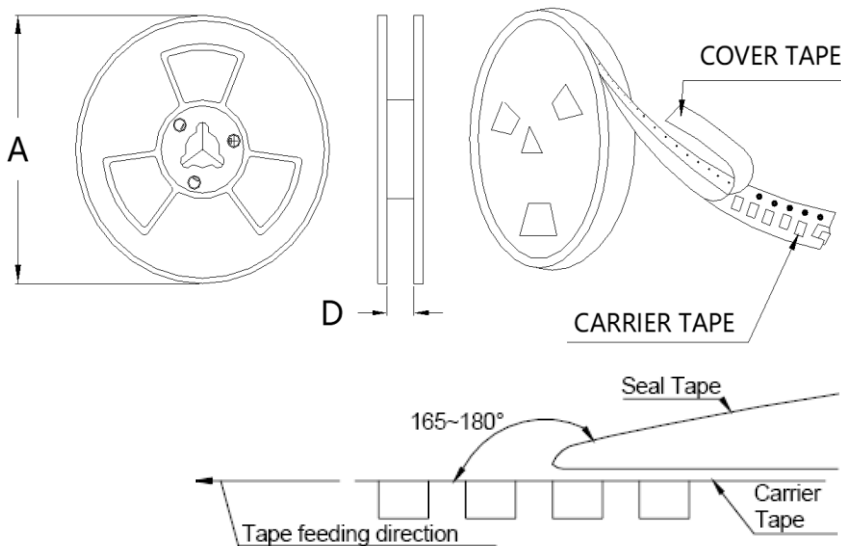
4.PACKAGING(unit: mm)

1.包装类型

2.包装尺寸

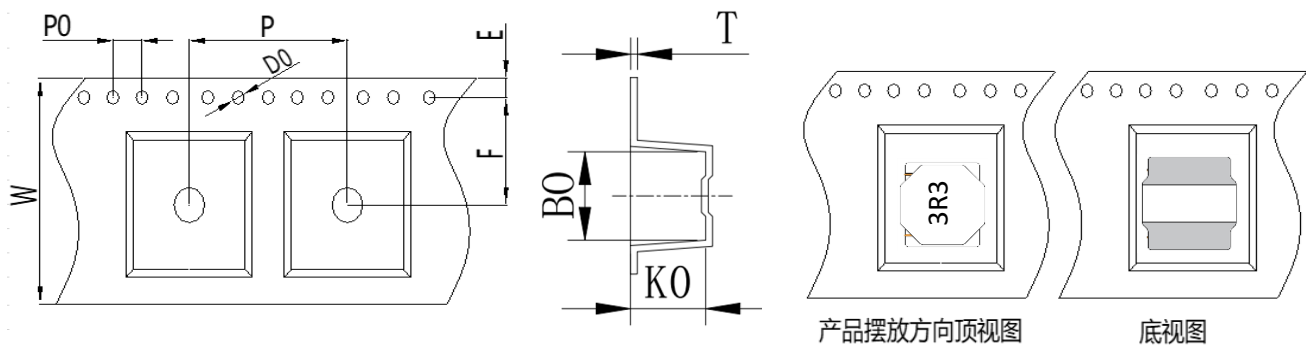
13" 盘

7" 盘



	13" 盘	7" 盘
A	$\Phi 330 \pm 2.0$	$\Phi 178 \pm 2.0$
D	12.4	

Peel-off strength:10~100gf.
Peel-off angle:165°-180°
Peel-off speed:300mm/min.



Item	W	B0	P	T	E	F	D0	P0	K0	
DIM(mm)	12.0±0.3	5.35±0.1	8.0±0.1	0.3±0.05	1.75±0.1	5.5±0.1	1.5±0.1	4.0±0.1	4.2±0.1	

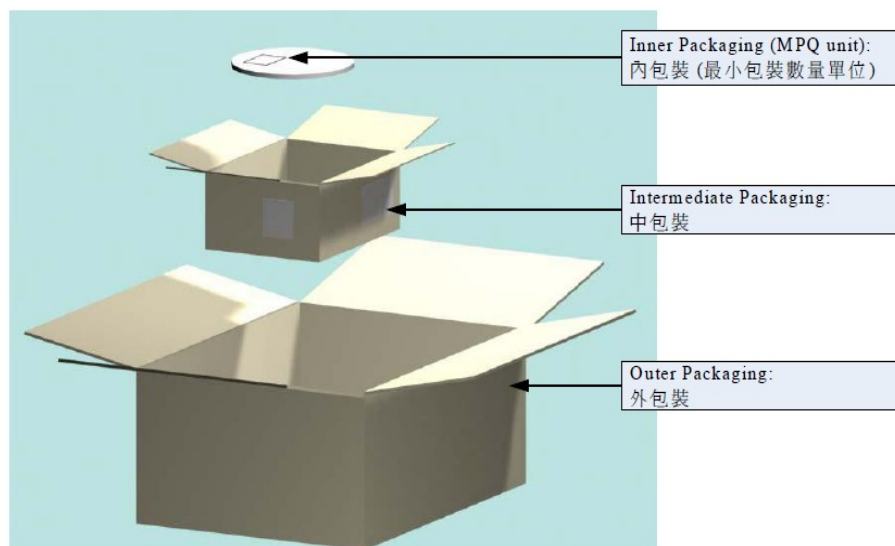
APPROVED BY	CHECKED BY	DRAFT
黄大燕	黄大燕	梁智坤



广东今凯电子科技有限公司
GUANG DONG CHK ELECTRONIC TECH Co., Ltd

CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 5/8
DESCRIPTION.	SMD POWER INDUCTOR	DRAWN NO.	0
PART NO.	CKNR5040B Series	DATE	2025/3/12

5. CARTON



1.1 外箱: 36*36*23 cm 一箱装 2内箱

1.2 内箱: 33.5*33.5*9 cm 一箱装5卷制品

1.3 外箱材质: A三A

1.4 内箱材质: A=A

1.5 每5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	1500	PCS
----	------	-----

外箱包装数量

每箱	10	卷,共	15000	PCS
----	----	-----	-------	-----

内箱包装数量

每箱	5	卷,共	7500	PCS
----	---	-----	------	-----

APPROVED BY	CHECKED BY	DRAFT
黄大燕	黄大燕	梁智坤



广东今凯电子科技有限公司
GUANG DONG CHK ELECTRONIC TECH Co., Ltd

CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 6/8
DESCRIPTION.	SMD POWER INDUCTOR	DRAWN NO.	0
PART NO.	CKNR5040B Series	DATE	2025/3/12

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

APPROVED BY	CHECKED BY	DRAFT
黄大燕	黄大燕	梁智坤



广东今凯电子科技有限公司

GUANG DONG CHK ELECTRONIC TECH Co., Ltd

CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 7/8
DESCRIPTION.	SMD POWER INDUCTOR	DRAWN NO.	0
PART NO.	CKNR5040B Series	DATE	2025/3/12

7. SOLDERING CONDITIONS

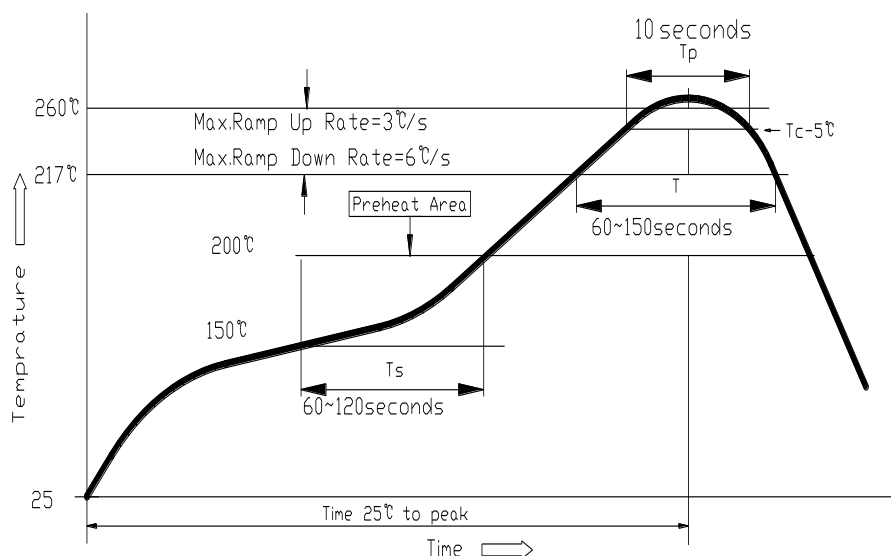
Applicable soldering process to the products is refl.

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



APPROVED BY	CHECKED BY	DRAFT
黄大燕	黄大燕	梁智坤



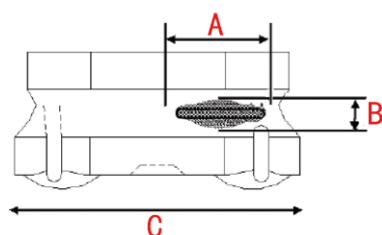
广东今凯电子科技有限公司

GUANG DONG CHK ELECTRONIC TECH Co., Ltd

CUSTOMER	0	REVISION NO.	A
CUSTOMER'S P/N	0	PAGE	P 8/8
DESCRIPTION.	SMD POWER INDUCTOR	DRAWN NO.	0
PART NO.	CKNR5040B Series	DATE	2025/3/12

8.Appearance of the standard

1.Void appearance tolerance limit



Size of voids occurring to coating resin is specified below.

①Width direction(dimension A): Acceptable when $A \leq C/2$

Nonconforming when $B \geq C/2$

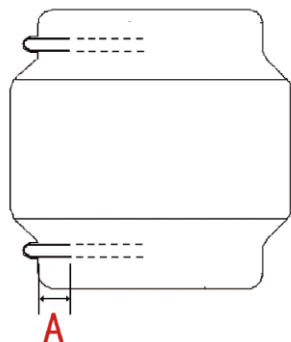
②Length direction(dimension B):Dimension b is not specified

③When total area of voids (including one exposing coil) occurring to each sides is not greater than 50% of coating resin area,that is acceptable.

2.External appearance criterion for exposed wire



Exposed end of the winding wire at the secondary side should be 3.0mm and below.



①Acceptable when $A \leq 0.8\text{mm}$

②Nonconforming when $A > 0.8\text{mm}$

APPROVED BY

黄大燕

CHECKED BY

黄大燕

DRAFT

梁智坤

承认书



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR5040B-1R0YC

PART NO. CKNR5040B Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25℃

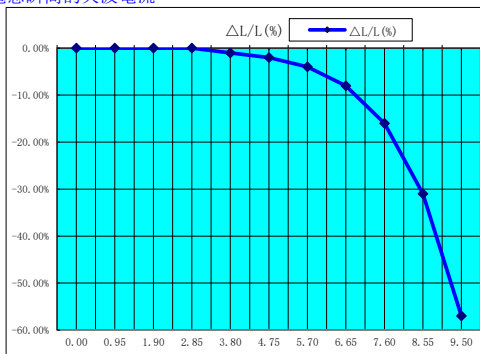
DATE 2025/3/12

TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION						DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	ΔL/L	Irms A				
SPEC.	1.0 ± 30%	19.5 Max.	7.35 Max.	ΔL/L≤-30%	4.90 ΔT≤40℃ ℃			上限 下限	長 mm 5.3 4.7 寬 mm 5.3 4.7 高 mm 4.2 MAX
TEST FREQ.	100KHz/1V		100KHz/1V						
1	0.99	13.6	0.85	-14.14%	OK				5.04 5.01 3.97
2	0.99	14.0	0.80	-19.19%	OK				5.06 5.01 3.99
3	1.00	13.0	0.85	-15.00%	OK				5.01 5.01 3.99
4	0.98	13.7	0.82	-16.33%	OK				5.05 5.01 3.98
5	0.99	14.1	0.84	-15.15%	OK				5.03 5.03 3.99
6	1.00	14.7	0.86	-14.00%	OK				5.04 5.02 3.97
7	1.01	13.6	0.85	-15.84%	OK				5.03 5.06 3.98
8	0.99	13.7	0.80	-19.19%	OK				5.02 5.03 3.96
9	0.97	13.6	0.82	-15.46%	OK				5.01 5.04 3.98
10	0.98	13.0	0.81	-17.35%	OK				5.01 5.03 3.99
AVG.	0.990	13.703	0.83	-16.17%					5.03 5.025 3.98
R	0.04	1.7	0.06	5.19%					0.05 0.05 0.03

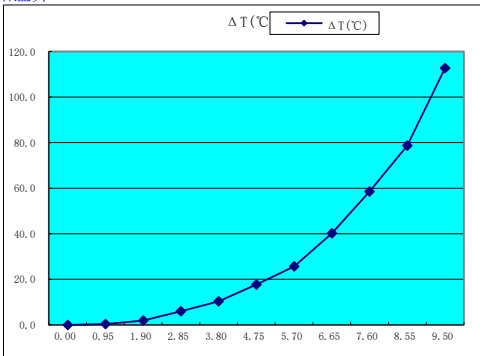
Isat(飽和電流):電感瞬間の突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	1.00	0.00%
1	0.95	1.00	0.00%
1	1.90	1.00	0.00%
1	2.85	1.00	0.00%
1	3.80	0.99	-1.00%
1	4.75	0.98	-2.00%
1	5.70	0.96	-4.00%
1	6.65	0.92	-8.00%
1	7.60	0.84	-16.00%
1	8.55	0.69	-31.00%
1	9.50	0.43	-57.00%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(℃)	ΔT(℃)
30	0.00	0.97	0.00%	31.3	0.0
30	0.95	0.96	-1.03%	31.7	0.4
30	1.90	0.96	-1.03%	33.2	1.9
30	2.85	0.96	-1.03%	37.3	6.0
30	3.80	0.96	-1.03%	41.6	10.3
30	4.75	0.95	-2.06%	49.0	17.7
30	5.70	0.94	-3.09%	57.0	25.7
30	6.65	0.88	-9.28%	71.5	40.2
30	7.60	0.63	-35.05%	89.8	58.5
30	8.55	0.24	-75.26%	110.0	78.7
30	9.50	0.16	-83.51%	144.0	112.7



承认书



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR5040B-1R5YC

PART NO. CKNR5040B Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25℃

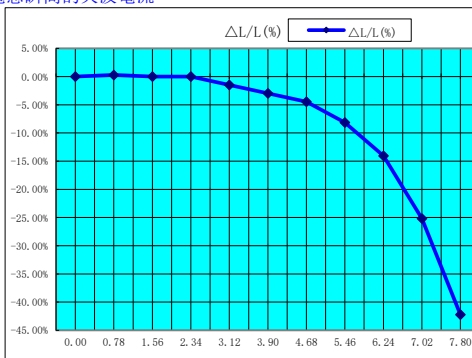
DATE 2025/3/12

TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION						DIMENSION (Unit : mm)					
MEAS. ITEM	L μh	DCR mΩ	Isat A	ΔL/L	Irms A				長 mm	寬 mm	高 mm
SPEC.	1.5 ± 30%	21 Max.	6.30 Max.	ΔL/L≤-30%	4.30 ΔT≤40℃ ℃				上限 4.7	5.3 4.7	4.2 MAX
TEST FREQ.	100KHz/1V		100KHz/1V								
1	1.37	16.7	1.21	-11.68%	OK				5.04	5.01	3.97
2	1.35	15.1	1.20	-11.11%	OK				5.06	5.01	3.99
3	1.41	16.0	1.23	-12.77%	OK				5.01	5.01	3.99
4	1.41	16.8	1.19	-15.60%	OK				5.05	5.01	3.98
5	1.39	16.7	1.18	-15.11%	OK				5.03	5.03	3.99
6	1.36	15.8	1.22	-10.29%	OK				5.04	5.02	3.97
7	1.43	16.3	1.20	-16.08%	OK				5.03	5.06	3.98
8	1.39	16.9	1.24	-10.79%	OK				5.02	5.03	3.96
9	1.41	16.5	1.21	-14.18%	OK				5.01	5.04	3.98
10	1.40	16.7	1.25	-10.71%	OK				5.01	5.03	3.99
AVG.	1.392	16.35	1.213	-12.83%					5.03	5.025	3.98
R	0.08	1.8	0.07	5.79%					0.05	0.05	0.03

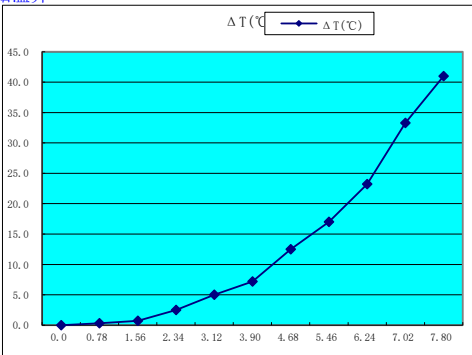
Isat(飽和電流):電感瞬間の突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	1.35	0.00%
1	0.78	1.35	0.30%
1	1.56	1.35	0.00%
1	2.34	1.35	0.00%
1	3.12	1.33	-1.48%
1	3.90	1.31	-2.96%
1	4.68	1.29	-4.44%
1	5.46	1.24	-8.15%
1	6.24	1.16	-14.07%
1	7.02	1.01	-25.19%
1	7.80	0.78	-42.22%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(℃)	ΔT(℃)
30	0.0	1.35	0.00%	28.0	0.0
30	0.78	1.30	-3.70%	28.3	0.3
30	1.56	1.27	-5.93%	28.7	0.7
30	2.34	1.27	-5.93%	30.5	2.5
30	3.12	1.25	-7.41%	33.0	5.0
30	3.90	1.23	-8.89%	35.2	7.2
30	4.68	1.21	-10.37%	40.5	12.5
30	5.46	1.13	-16.30%	45.0	17.0
30	6.24	0.95	-29.63%	51.2	23.2
30	7.02	0.64	-52.59%	61.3	33.3
30	7.80	0.41	-69.63%	69.0	41.0



承认书

SPECIFICATION FOR APPROVAL



CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR5040B-2R2MC

PART NO. CKNR5040B Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25℃

DATE 2025/3/12

TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION						DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	ΔL/L	Irms A				
SPEC.	2.2 ± 20%	26 Max.	4.90 Max.	ΔL/L≤-30%	3.80 ΔT≤40℃ ℃			上限 下限	長 mm 5.3 4.7 寬 mm 5.3 4.7 高 mm 4.2 MAX
TEST FREQ.	100KHz/1V		100KHz/1V						
1	2.06	20.1	1.89	-8.25%	OK				5.04 5.01 3.97
2	2.00	22.0	1.87	-6.50%	OK				5.06 5.01 3.99
3	2.03	22.0	1.88	-7.39%	OK				5.01 5.01 3.99
4	2.04	22.0	1.84	-9.80%	OK				5.05 5.01 3.98
5	2.03	21.2	1.80	-11.33%	OK				5.03 5.03 3.99
6	2.08	20.3	1.89	-9.13%	OK				5.04 5.02 3.97
7	2.04	21.9	1.84	-9.80%	OK				5.03 5.06 3.98
8	2.02	20.9	1.80	-10.89%	OK				5.02 5.03 3.96
9	2.10	20.1	1.79	-14.76%	OK				5.01 5.04 3.98
10	2.05	20.9	1.82	-11.22%	OK				5.01 5.03 3.99
AVG.	2.045	21.14	1.842	-9.91%					5.03 5.025 3.98
R	0.1	1.9	0.1	8.26%					0.05 0.05 0.03

Isat(飽和電流):電感瞬間の突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	2.11	0.00%
1	0.73	2.11	0.00%
1	1.46	2.11	0.00%
1	2.19	2.11	0.00%
1	2.92	2.10	-0.47%
1	3.65	2.08	-1.42%
1	4.38	2.05	-2.84%
1	5.11	2.00	-5.21%
1	5.84	1.84	-12.80%
1	6.57	1.53	-27.49%
1	7.30	1.06	-49.76%

單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(℃)	ΔT(℃)
30	0.00	2.02	0.00%	19.7	0.0
30	0.73	2.02	0.00%	19.8	0.1
30	1.46	2.02	0.00%	20.2	0.5
30	2.19	2.02	0.00%	21.6	1.9
30	2.92	2.01	-0.50%	24.0	4.3
30	3.65	2.00	-0.99%	27.5	7.8
30	4.38	1.98	-1.98%	31.5	11.8
30	5.11	1.92	-4.95%	37.1	17.4
30	5.84	1.72	-14.85%	43.5	23.8
30	6.57	1.22	-39.60%	51.7	32.0
30	7.30	0.66	-67.33%	62.4	42.7

承认书



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR5040B-3R3MC

PART NO. CKNR5040B Series

DRAWN NO.

TEST R.H. 80~85%

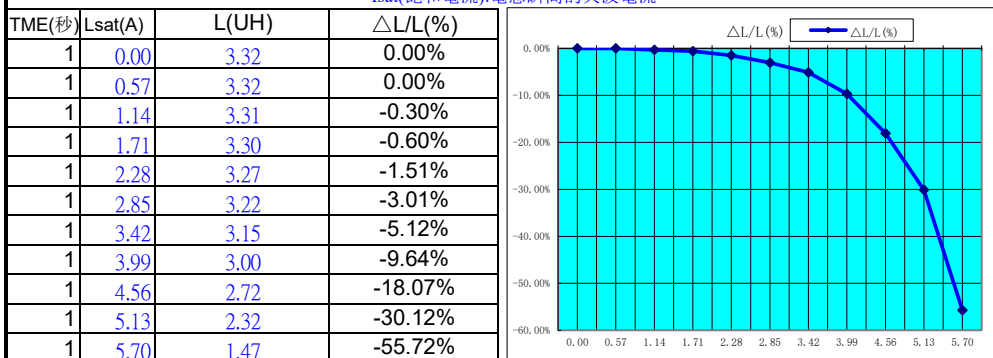
TEST TEMP. 20~25℃

DATE 2025/3/12

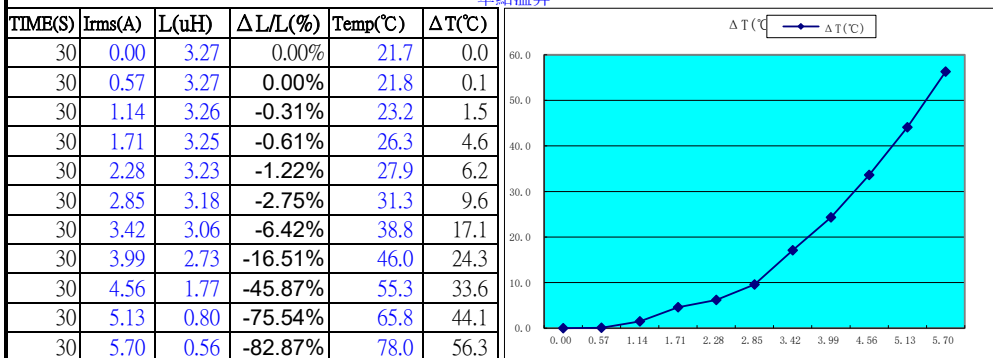
TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION						DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	ΔL/L	Irms A				
SPEC.	3.3 ± 20%	36 Max.	3.95 Max.	ΔL/L≤-30%	3.40 ΔT≤40℃ ℃			上限 下限	長 mm 5.3 4.7 寬 mm 5.3 4.7 高 mm 4.2 MAX
TEST FREQ.	100KHz/1V		100KHz/1V						
1	3.14	25.0	2.82	-10.19%	OK				5.08 5.04 3.90
2	3.19	26.3	2.82	-11.60%	OK				5.04 5.06 3.90
3	3.18	25.4	2.88	-9.43%	OK				5.30 5.08 3.86
4	3.12	24.6	2.78	-10.90%	OK				5.04 5.03 3.87
5	3.10	25.3	2.85	-8.06%	OK				5.04 5.01 3.98
6	3.11	25.2	2.84	-8.68%	OK				5.06 5.06 3.91
7	3.18	25.3	2.89	-9.12%	OK				5.08 5.07 3.86
8	3.12	25.1	2.84	-8.97%	OK				5.06 5.09 3.94
9	3.19	25.2	2.87	-10.03%	OK				5.01 5.03 3.99
10	3.13	25.6	2.84	-9.27%	OK				5.03 5.04 3.98
AVG.	3.146	25.3	2.843	-9.63%					5.074 5.051 3.919
R	0.09	1.7	0.11	3.53%					0.29 0.08 0.13

Isat(飽和電流):電感瞬間の突波電流



單點溫昇



承认书

SPECIFICATION FOR APPROVAL



CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR5040B-4R7MC

PART NO. CKNR5040B Series

DRAWN NO.

TEST R.H. 80~85%

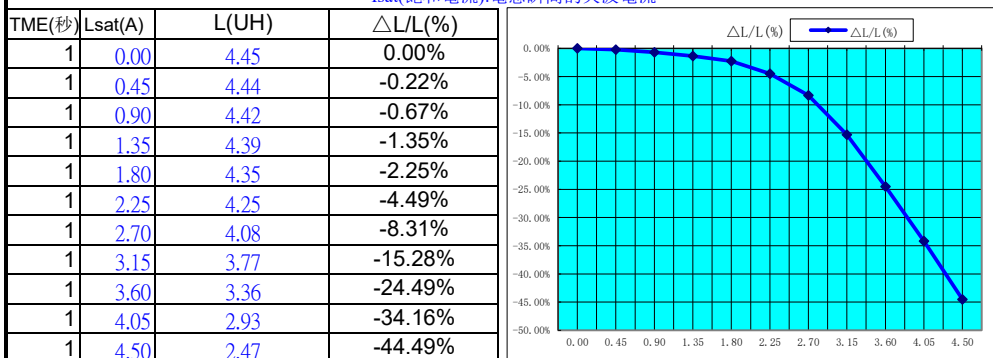
TEST TEMP. 20~25℃

DATE 2025/3/12

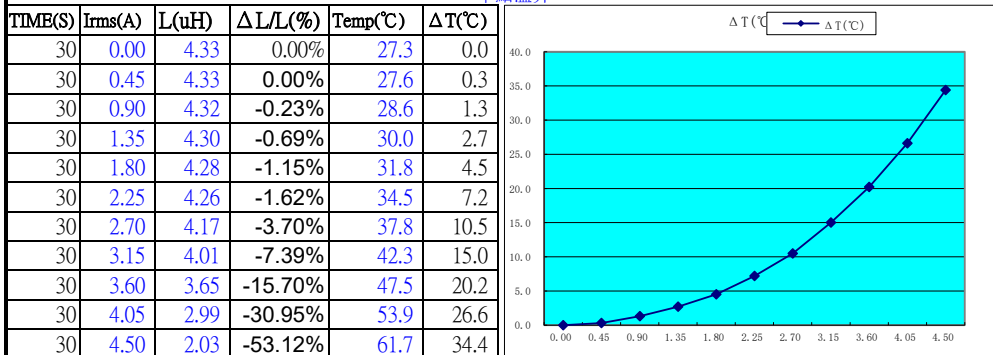
TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION						DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	ΔL/L	Irms A				
SPEC.	4.7 ± 20%	46 Max.	3.50 Max.	ΔL/L≤-30%	3.00 ΔT≤40℃ ℃			上限 下限	長 mm 5.3 4.7 寬 mm 5.3 4.7 高 mm 4.2 MAX
TEST FREQ.	100KHz/1V		100KHz/1V						
1	4.44	34.9	3.87	-12.84%	OK				5.07 5.06 4.00
2	4.40	35.1	3.92	-10.91%	OK				5.05 5.03 3.94
3	4.41	34.5	3.90	-11.56%	OK				5.04 5.05 3.90
4	4.37	34.7	3.92	-10.30%	OK				5.13 5.05 3.91
5	4.49	35.2	3.91	-12.92%	OK				5.04 5.06 3.91
6	4.45	33.6	3.82	-14.16%	OK				5.06 5.08 3.96
7	4.43	35.9	3.88	-12.42%	OK				5.03 5.09 3.95
8	4.50	35.1	3.92	-12.89%	OK				5.08 5.12 3.98
9	4.40	35.6	3.87	-12.05%	OK				5.16 5.06 3.99
10	4.44	34.8	3.82	-13.96%	OK				5.11 5.13 3.98
AVG.	4.433	34.94	3.883	-12.40%					5.077 5.073 3.952
R	0.13	2.3	0.1	3.86%					0.13 0.1 0.1

Isat(飽和電流):電感瞬間の突波電流



單點溫昇



承认书

SPECIFICATION FOR APPROVAL



CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR5040B-6R8MC

PART NO. CKNR5040B Series

DRAWN NO.

TEST R.H. 80~85%

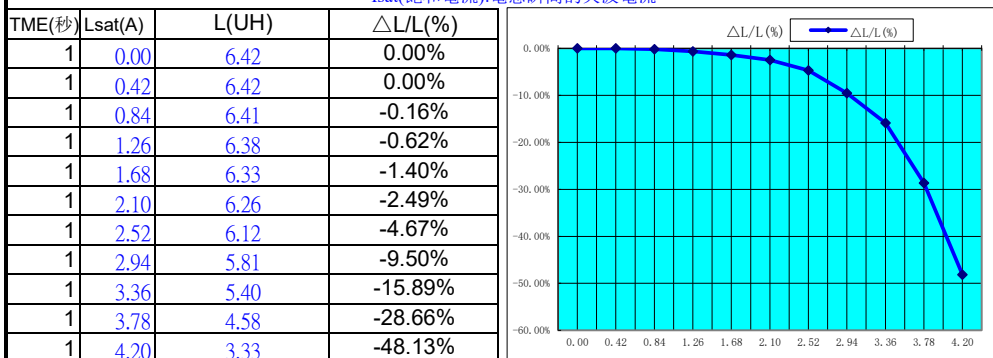
TEST TEMP. 20~25℃

DATE 2025/3/12

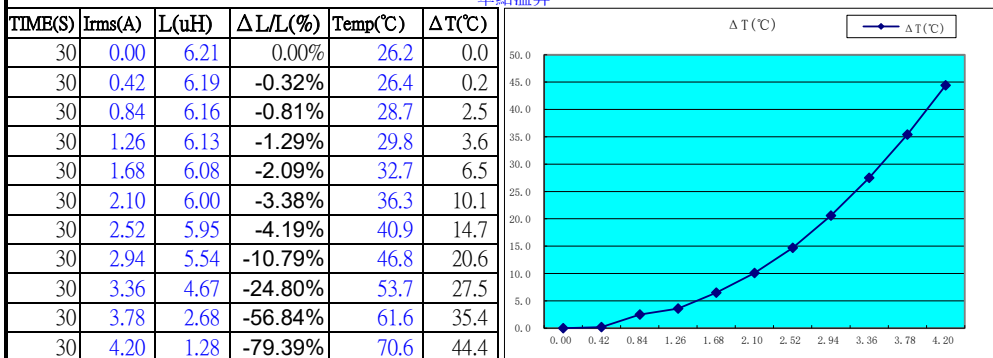
TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION						DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	ΔL/L	Irms A				
SPEC.	6.8 ± 20%	55.9 Max.	2.90 Max.	ΔL/L≤-30%	2.50 ΔT≤40℃ ℃			上限 下限	長 mm 5.3 4.7 寬 mm 5.3 4.7 高 mm 4.2 MAX
TEST FREQ.	100KHz/1V		100KHz/1V						
1	6.45	49.4	5.54	-14.11%	OK				5.07 5.00 3.96
2	6.67	49.8	5.51	-17.39%	OK				5.04 5.00 3.98
3	6.42	49.1	5.52	-14.02%	OK				5.05 5.02 3.96
4	6.45	50.7	5.56	-13.80%	OK				5.05 5.07 3.94
5	6.45	48.7	5.60	-13.18%	OK				5.03 5.00 3.98
6	6.69	49.3	5.49	-17.94%	OK				5.13 5.03 3.92
7	6.47	48.2	5.54	-14.37%	OK				5.12 5.06 3.93
8	6.70	49.5	5.52	-17.61%	OK				5.06 5.09 3.92
9	6.44	48.8	5.54	-13.98%	OK				5.02 5.08 3.95
10	6.42	48.5	5.52	-14.02%	OK				5.12 5.06 3.99
AVG.	6.516	49.2	5.534	-15.04%					5.069 5.041 3.953
R	0.28	2.5	0.11	4.76%					0.11 0.09 0.07

Isat(飽和電流):電感瞬間の突波電流



單點溫昇



承认书



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR5040B-100MC

PART NO. CKNR5040B Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25℃

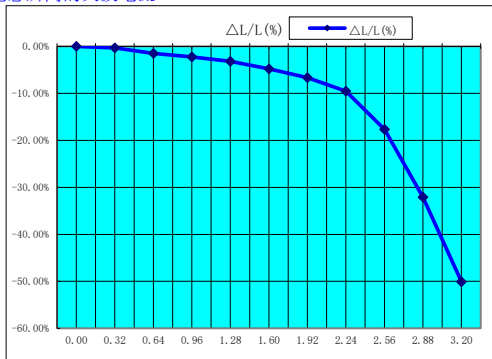
DATE 2025/3/12

TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION									DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	△L/L	Irms A					長 mm	寬 mm	高 mm
SPEC.	10.0 ± 20%	85 Max.	2.35 Max.	△L/L≤-30%	2.10 △T≤40℃ ℃				上限 下限	5.3 4.7	5.3 4.7	4.2 MAX
TEST FREQ.	100KHz/1V		100KHz/1V									
1	9.78	69.5	8.62	-11.9%	OK					5.09	5.06	3.98
2	9.99	69.1	8.59	-14.0%	OK					5.03	5.03	3.99
3	9.76	70.1	8.62	-11.7%	OK					5.06	5.02	3.96
4	9.96	69.6	8.54	-14.3%	OK					5.05	5.02	3.96
5	9.76	68.8	8.52	-12.7%	OK					5.06	5.03	3.96
6	9.54	67.8	8.51	-10.8%	OK					5.05	5.01	3.98
7	9.69	73.4	8.45	-12.8%	OK					5.09	5.06	3.95
8	9.86	71.3	8.12	-17.6%	OK					5.05	5.01	3.95
9	10.0	69.2	8.45	-15.5%	OK					5.06	5.03	3.98
10	10.1	68.9	8.26	-18.2%	OK					5.04	5.01	3.94
AVG.	9.844	69.77	8.468	-13.95%						5.058	5.028	3.965
R	0.56	5.6	0.5	7.42%						0.06	0.05	0.05

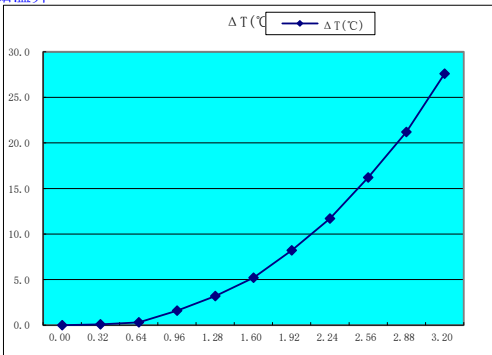
Isat(飽和電流):電感瞬間の突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	9.45	0.00%
1	0.32	9.42	-0.32%
1	0.64	9.31	-1.48%
1	0.96	9.24	-2.22%
1	1.28	9.15	-3.17%
1	1.60	9.00	-4.76%
1	1.92	8.82	-6.67%
1	2.24	8.55	-9.52%
1	2.56	7.78	-17.67%
1	2.88	6.42	-32.06%
1	3.20	4.72	-50.05%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(℃)	ΔT(℃)
30	0.00	9.68	0.00%	25.1	0.0
30	0.32	9.64	-0.41%	25.2	0.1
30	0.64	9.57	-1.14%	25.4	0.3
30	0.96	9.46	-2.27%	26.7	1.6
30	1.28	9.35	-3.41%	28.3	3.2
30	1.60	9.20	-4.96%	30.3	5.2
30	1.92	8.99	-7.13%	33.3	8.2
30	2.24	8.74	-9.71%	36.8	11.7
30	2.56	7.79	-19.52%	41.3	16.2
30	2.88	6.02	-37.81%	46.3	21.2
30	3.20	3.34	-65.50%	52.7	27.6



承认书



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR5040B-150MC

PART NO. CKNR5040B Series

DRAWN NO.

TEST R.H. 80~85%

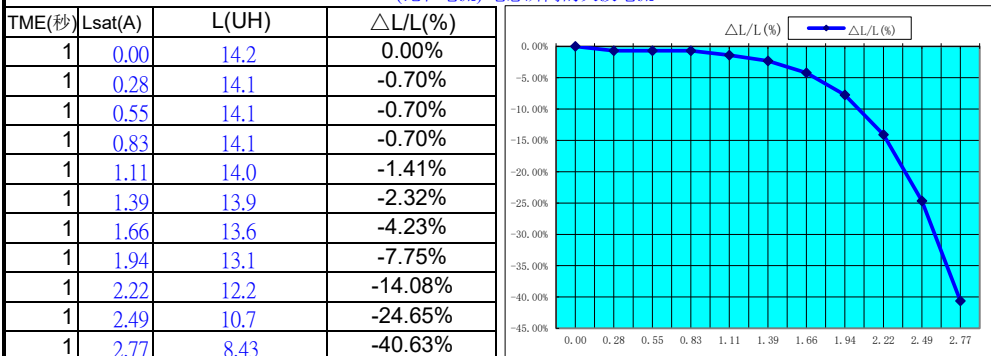
TEST TEMP. 20~25℃

DATE 2025/3/12

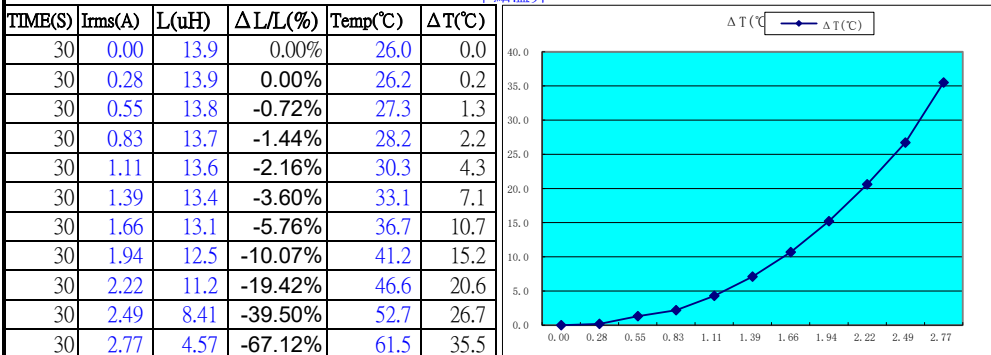
TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION									DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	ΔL/L	Irms A					長 mm	寬 mm	高 mm
SPEC.	15.0 ± 20%	111.8 Max.	2.00 Max.	ΔL/L≤-30%	2.00 ΔT≤40℃ ℃				上限 下限	5.3 4.7	5.3 4.7	4.2 MAX
TEST FREQ.	100KHz/1V		100KHz/1V									
1	14.3	91.5	12.1	-15.38%	OK					5.06	5.05	3.88
2	14.5	90.6	12.5	-13.79%	OK					5.05	5.03	3.87
3	15.2	90.3	12.1	-20.39%	OK					5.00	5.04	3.88
4	14.6	90.8	11.9	-18.49%	OK					5.05	5.02	3.89
5	15.1	91.7	12.6	-16.56%	OK					5.06	5.01	3.87
6	14.9	91.6	12.1	-18.79%	OK					5.06	5.03	3.89
7	15.4	91.2	12.3	-20.13%	OK					5.03	5.05	3.90
8	15.0	92.0	12.5	-16.67%	OK					5.02	5.02	3.86
9	14.8	90.5	12.0	-18.92%	OK					5.04	5.06	3.88
10	14.6	91.2	11.9	-18.49%	OK					5.06	5.04	3.91
AVG.	14.840	91.14	12.2	-17.76%						5.043	5.035	3.883
R	1.1	1.7	0.7	6.60%						0.06	0.05	0.05

Isat(飽和電流):電感瞬間の突波電流



單點溫昇



承认书



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR5040B-220MC

PART NO. CKNR5040B Series

DRAWN NO.

TEST R.H. 80~85%

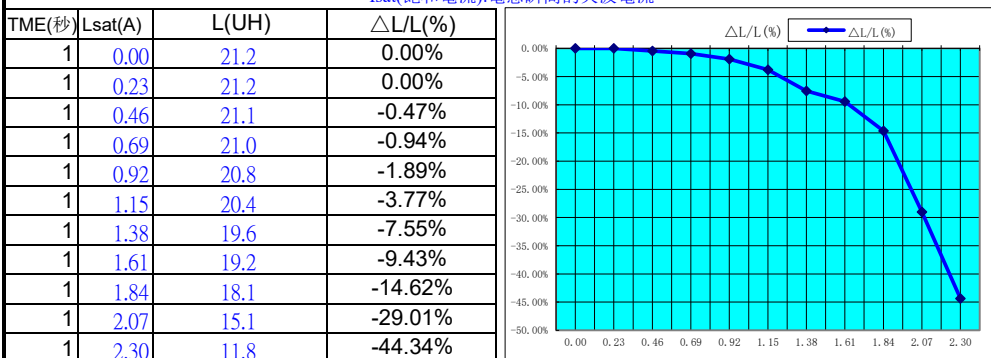
TEST TEMP. 20~25℃

DATE 2025/3/12

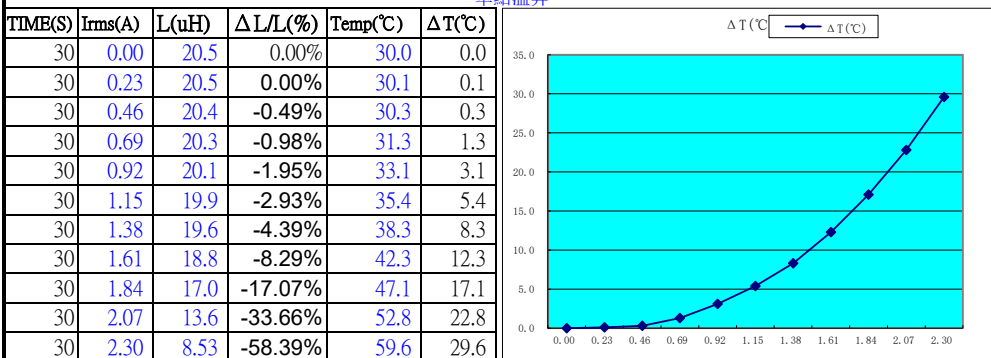
TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION									DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	△L/L	Irms A					長 mm	寬 mm	高 mm
SPEC.	22.0 ± 20%	167 Max.	1.60 Max.	△L/L≤-30%	1.50 △T≤40℃ ℃				上限 下限	5.3 4.7	5.3 4.7	4.2 MAX
TEST FREQ.	100KHz/1V		100KHz/1V									
1	20.9	127	17.70	-15.31%	OK					5.03	5.00	3.94
2	20.7	127	17.50	-15.46%	OK					5.00	5.01	3.96
3	20.9	129	17.50	-16.27%	OK					5.01	5.02	3.98
4	20.5	128	17.70	-13.66%	OK					5.03	5.03	3.95
5	20.9	126	17.80	-14.83%	OK					5.02	5.02	3.98
6	20.8	128	17.50	-15.87%	OK					5.06	5.02	4.06
7	20.9	126	17.60	-15.79%	OK					5.04	5.03	4.03
8	20.4	128	17.90	-12.25%	OK					5.04	5.06	4.10
9	20.8	127	17.60	-15.38%	OK					5.03	5.01	4.00
10	20.7	126	17.30	-16.43%	OK					5.01	5.03	3.99
AVG.	20.750	127.2	17.61	-15.12%						5.027	5.023	3.999
R	0.5	3	0.6	4.17%						0.06	0.06	0.16

Isat(飽和電流):電感瞬間的突波電流



單點溫昇



承认书

SPECIFICATION FOR APPROVAL



CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR5040B-330MC

PART NO. CKNR5040B Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25℃

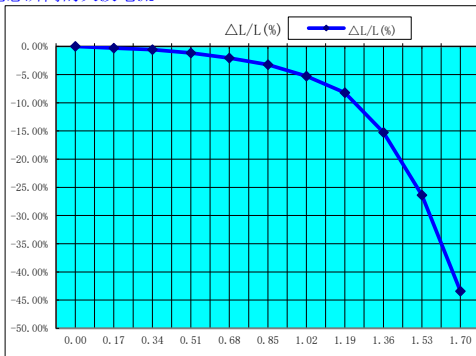
DATE 2025/3/12

TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION									DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	△L/L	Irms A					長 mm	寬 mm	高 mm
SPEC.	33.0 ± 20%	244.4 Max.	1.30 Max.	△L/L≤-30%	1.20 △T≤40℃ ℃				上限 下限	5.3 4.7	5.3 4.7	4.2 MAX
TEST FREQ.	100KHz/1V		100KHz/1V									
1	32.9	211	29.7	-9.73%	OK					5.03	5.00	3.94
2	32.8	211	29.9	-8.84%	OK					5.00	5.01	3.96
3	32.9	208	29.5	-10.33%	OK					5.01	5.02	3.98
4	35.5	207	29.3	-17.46%	OK					5.03	5.03	3.95
5	35.4	205	29.2	-17.51%	OK					5.02	5.02	3.98
6	34.3	204	29.3	-14.58%	OK					5.06	5.02	4.06
7	33.8	211	29.1	-13.91%	OK					5.04	5.03	4.03
8	34.6	207	29.8	-13.87%	OK					5.04	5.06	4.10
9	32.6	201	29.4	-9.82%	OK					5.03	5.01	4.00
10	33.9	206	29.6	-12.68%	OK					5.01	5.03	3.99
AVG.	33.870	207.1	29.48	-12.87%						5.027	5.023	3.999
R	2.9	10	0.8	8.67%						0.06	0.06	0.16

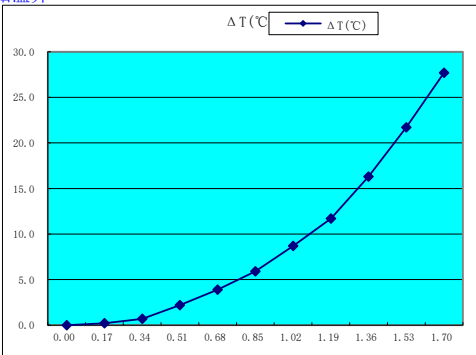
Isat(飽和電流):電感瞬間的突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	34.1	0.00%
1	0.17	34.0	-0.29%
1	0.34	33.9	-0.59%
1	0.51	33.7	-1.17%
1	0.68	33.4	-2.05%
1	0.85	33.0	-3.23%
1	1.02	32.3	-5.28%
1	1.19	31.3	-8.21%
1	1.36	28.9	-15.25%
1	1.53	25.1	-26.39%
1	1.70	19.3	-43.40%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(℃)	ΔT(℃)
30	0.00	33.0	0.00%	22.4	0.0
30	0.17	32.9	-0.30%	22.6	0.2
30	0.34	32.7	-0.91%	23.1	0.7
30	0.51	32.6	-1.21%	24.6	2.2
30	0.68	32.3	-2.12%	26.3	3.9
30	0.85	31.9	-3.33%	28.3	5.9
30	1.02	31.2	-5.45%	31.1	8.7
30	1.19	30.1	-8.79%	34.1	11.7
30	1.36	27.6	-16.36%	38.7	16.3
30	1.53	23.3	-29.39%	44.1	21.7
30	1.70	14.7	-55.45%	50.1	27.7



承认书

SPECIFICATION FOR APPROVAL



CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR5040B-470MC

PART NO. CKNR5040B Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25℃

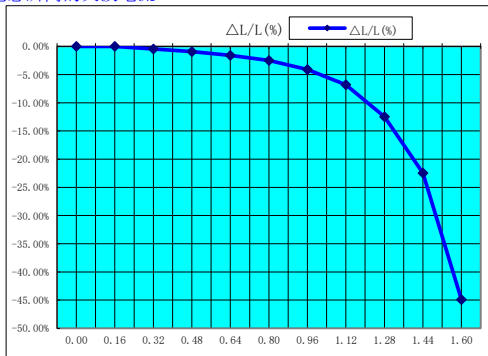
DATE 2025/3/12

TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION									DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	△L/L	Irms A					長 mm	寬 mm	高 mm
SPEC.	47.0 ± 20%	353.6 Max.	1.10 Max.	△L/L≤-30%	1.00 △T≤40℃ ℃				上限 下限	5.3 4.7	5.3 4.7	4.2 MAX
TEST FREQ.	100KHz/1V		100KHz/1V									
1	44.1	294	40.5	-8.16%	OK					5.03	5.05	3.98
2	44.8	291	40.9	-8.71%	OK					5.03	5.06	3.96
3	44.9	293	40.8	-9.13%	OK					5.03	5.03	3.95
4	45.0	291	40.8	-9.33%	OK					5.04	5.06	3.97
5	44.8	288	40.6	-9.37%	OK					5.07	5.02	3.96
6	44.0	293	39.8	-9.55%	OK					5.30	5.01	3.98
7	45.0	291	39.0	-13.33%	OK					5.06	5.09	3.95
8	44.7	296	40.1	-10.29%	OK					5.06	5.00	3.97
9	45.7	290	40.0	-12.47%	OK					5.04	5.06	3.91
10	44.3	288	38.9	-12.19%	OK					5.03	5.01	3.95
AVG.	44.730	291.5	40.14	-10.25%						5.069	5.039	3.958
R	1.7	8	2	5.17%						0.27	0.09	0.07

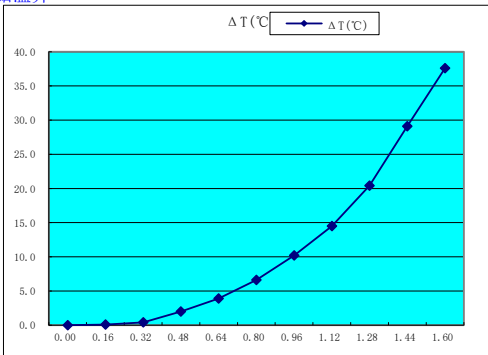
Isat(飽和電流):電感瞬間的突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	44.1	0.00%
1	0.16	44.1	0.00%
1	0.32	43.9	-0.45%
1	0.48	43.7	-0.91%
1	0.64	43.4	-1.59%
1	0.80	43.0	-2.49%
1	0.96	42.3	-4.08%
1	1.12	41.1	-6.80%
1	1.28	38.6	-12.47%
1	1.44	34.2	-22.45%
1	1.60	24.3	-44.90%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(℃)	ΔT(℃)
30	0.00	44.5	0.00%	28.6	0.0
30	0.16	44.3	-0.45%	28.7	0.1
30	0.32	44.3	-0.45%	29.0	0.4
30	0.48	44.0	-1.12%	30.6	2.0
30	0.64	43.6	-2.02%	32.5	3.9
30	0.80	42.8	-3.82%	35.2	6.6
30	0.96	41.5	-6.74%	38.8	10.2
30	1.12	39.0	-12.36%	43.1	14.5
30	1.28	33.5	-24.72%	49.0	20.4
30	1.44	22.7	-48.99%	57.7	29.1
30	1.60	11.6	-73.93%	66.2	37.6



承认书



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR5040B-680MC

PART NO. CKNR5040B Series

DRAWN NO.

TEST R.H. 80~85%

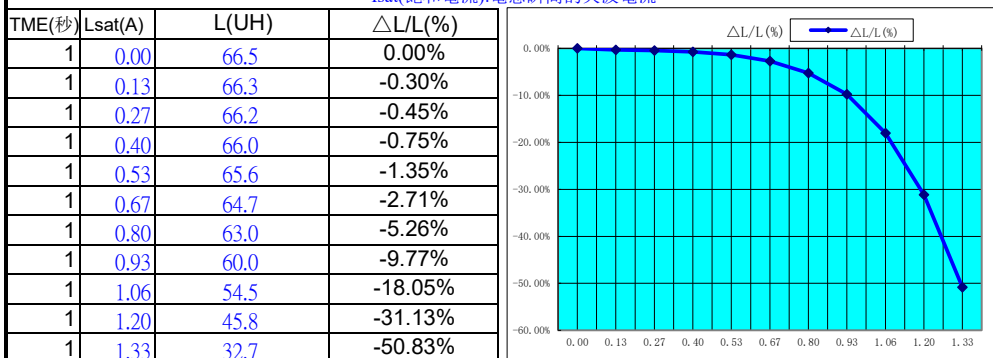
TEST TEMP. 20~25℃

DATE 2025/3/12

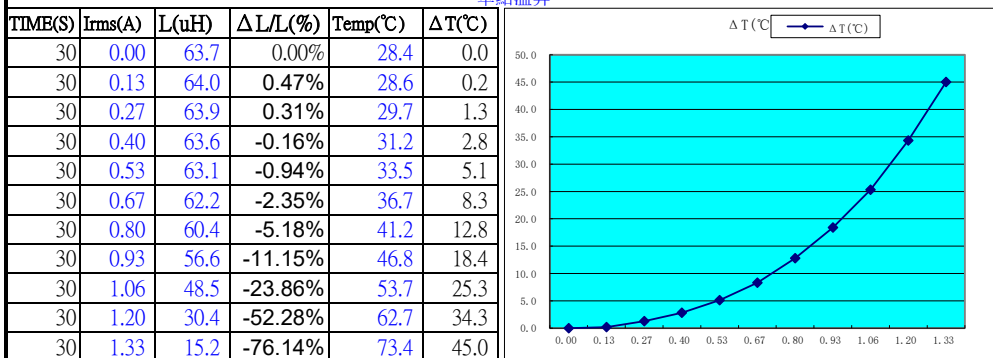
TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION									DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	ΔL/L	Irms A					長 mm	寬 mm	高 mm
SPEC.	68.0 ± 20%	520 Max.	0.9 Max.	ΔL/L≤-30%	0.80 ΔT≤40℃ ℃				上限 下限	5.3 4.7	5.3 4.7	4.2 MAX
TEST FREQ.	100KHz/1V		100KHz/1V									
1	66.6	436	52.0	-21.92%	OK					5.03	5.05	3.98
2	68.6	430	53.2	-22.45%	OK					5.03	5.06	3.96
3	67.6	432	53.1	-21.45%	OK					5.03	5.03	3.95
4	63.7	433	52.6	-17.43%	OK					5.04	5.06	3.97
5	68.9	424	53.1	-22.93%	OK					5.07	5.02	3.96
6	65.3	433	52.5	-19.60%	OK					5.30	5.01	3.98
7	66.7	434	51.2	-23.24%	OK					5.06	5.09	3.95
8	66.8	432	52.9	-20.81%	OK					5.06	5.00	3.97
9	64.7	431	52.1	-19.47%	OK					5.04	5.06	3.91
10	64.5	436	52.0	-19.38%	OK					5.03	5.01	3.95
AVG.	66.340	432.1	52.47	-20.87%						5.069	5.039	3.958
R	5.2	12	2	5.81%						0.27	0.09	0.07

Isat(飽和電流):電感瞬間の突波電流



單點溫昇



承认书

SPECIFICATION FOR APPROVAL



CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR5040B-101MC

PART NO. CKNR5040B Series

DRAWN NO.

TEST R.H. 80~85%

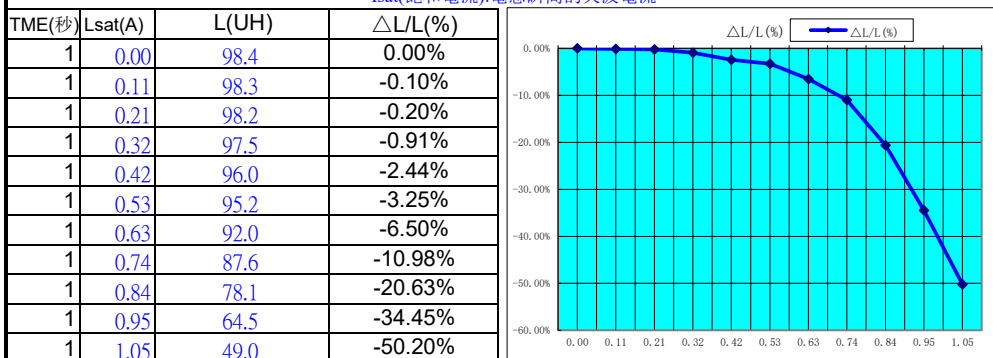
TEST TEMP. 20~25℃

DATE 2025/3/12

TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION									DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	△L/L	Irms A					長 mm	寬 mm	高 mm
SPEC.	100.0 ± 20%	728 Max.	0.75 Max.	△L/L≤-30%	0.70 △T≤40℃ ℃				上限 下限	5.3 4.7	5.3 4.7	4.2 MAX
TEST FREQ.	100KHz/1V		100KHz/1V									
1	102	564	84.7	-16.96%	OK					5.03	5.05	3.98
2	101	567	84.2	-16.63%	OK					5.03	5.06	3.96
3	100	564	84.0	-16.00%	OK					5.03	5.03	3.95
4	101	562	83.9	-16.93%	OK					5.04	5.06	3.97
5	101	558	85.1	-15.74%	OK					5.07	5.02	3.96
6	101	561	83.2	-17.62%	OK					5.30	5.01	3.98
7	101	565	83.9	-16.93%	OK					5.06	5.09	3.95
8	101	564	84.5	-16.34%	OK					5.06	5.00	3.97
9	106	563	83.5	-21.23%	OK					5.04	5.06	3.91
10	103	564	84.0	-18.45%	OK					5.03	5.01	3.95
AVG.	101.700	563.2	84.1	-17.28%						5.069	5.039	3.958
R	6	9	1.9	5.48%						0.27	0.09	0.07

Isat(飽和電流):電感瞬間の突波電流



單點溫昇

