

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

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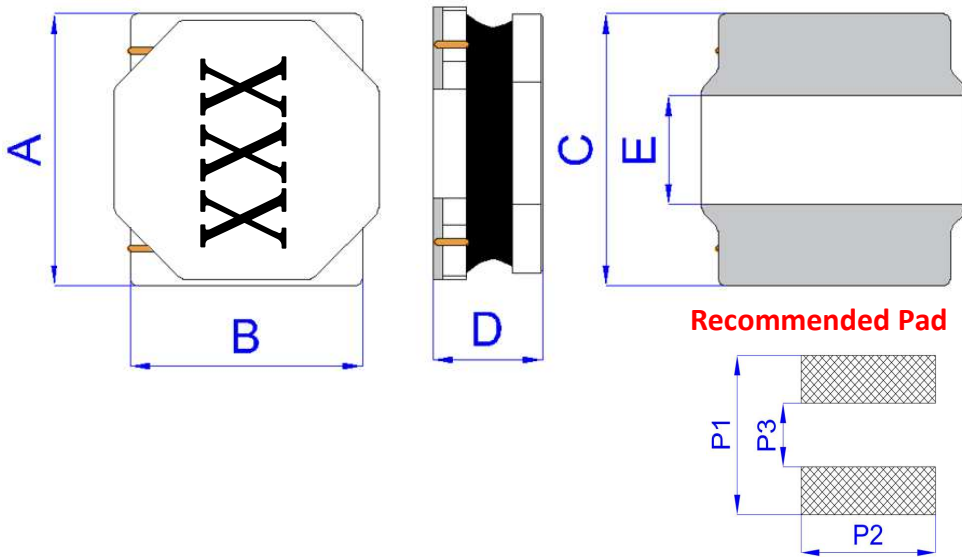
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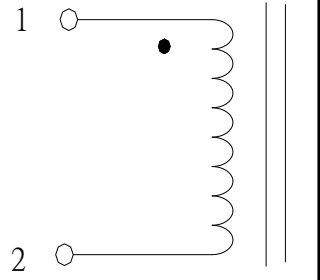
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DESCRIPTION.	SMD POWER INDUCTOR	DRAWN NO.	0
PART NO.	CKNR5040B Series	DATE	2025/3/12

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

- 1 **CHK PRODUCTION (今凯制造)**
- 2 **PRODUCT CATEGORY (产品种类)** NR-镍锌 NRS-合金
- 3 **DIMENSIONS (尺寸规格)**
- 4 **MAERTIAL TYPE (材料类型)**
- 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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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°C	TH2512B

*The operating temperature is 25°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 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※

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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°C
Operation Temperature :	-40~+125°C
Storage Temperature :	-40~+125°C

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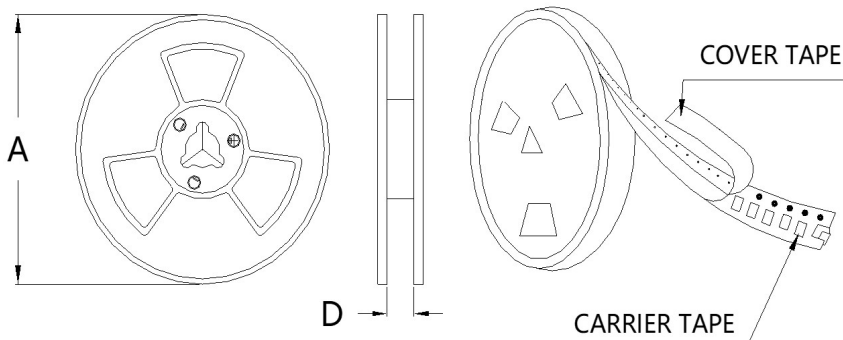
4.PACKAGING(unit: mm)

1.包装类型

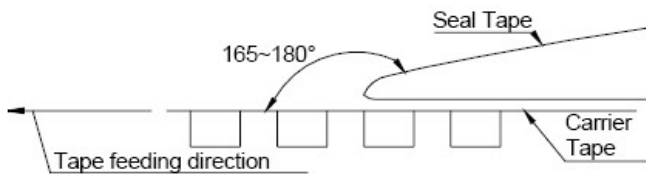
2.包装尺寸

□ 13" 盘

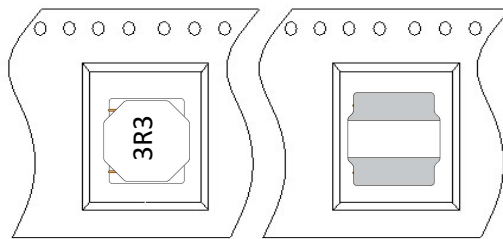
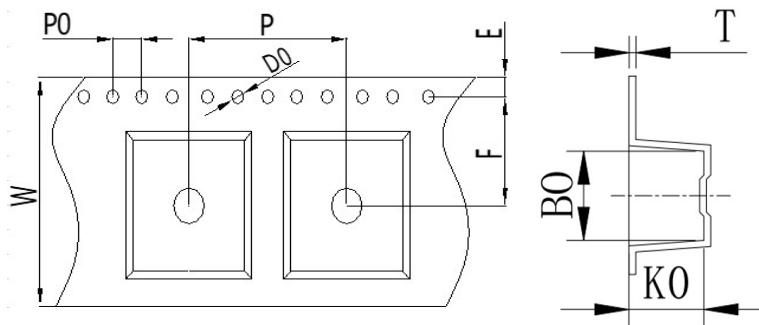
■ 7" 盘



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



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



产品摆放方向顶视图

底视图

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	

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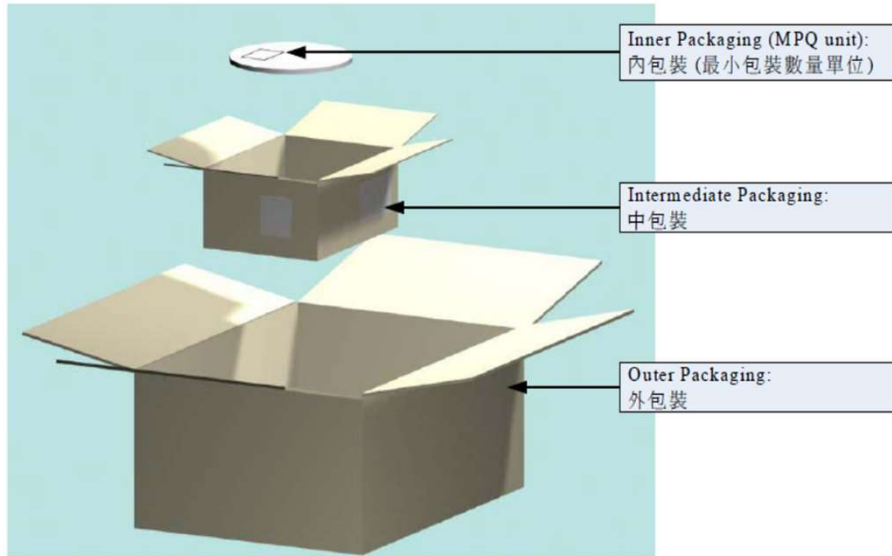


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5. CARTON



- 1.1 外箱: 36*36*23 cm 一箱裝 2內箱
- 1.2 內箱: 33.5*33.5*9 cm 一箱裝5卷制品
- 1.3 外箱材質: A三A
- 1.4 內箱材質: A=A
- 1.5 每5卷制品用一只静电袋包裝
- 1.6 每一静电袋內放一只袋干燥剂
- 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內实际内容明细
- 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
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外箱包装数量

每箱	10 卷,共	15000	PCS
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内箱包装数量

每箱	5 卷,共	7500	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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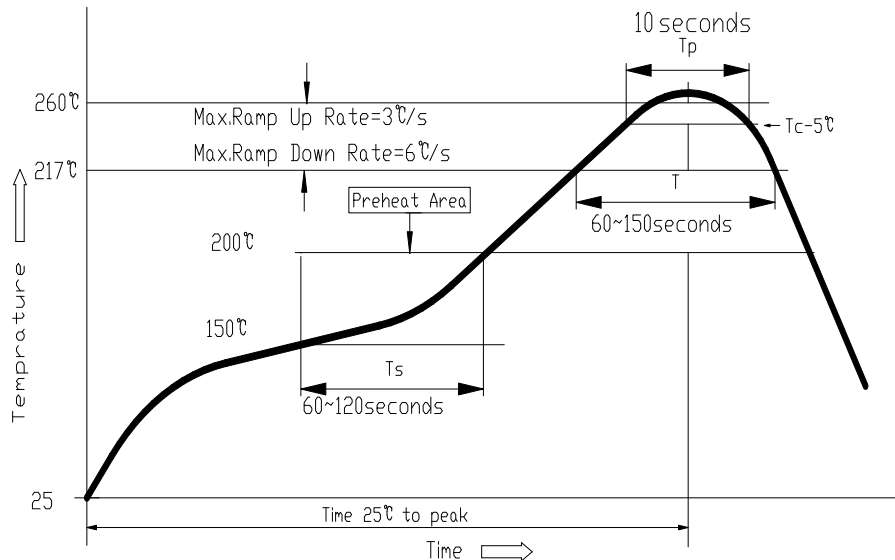
7. SOLDERING CONDITIONS

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 chlorine 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.

- ① Temperature 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



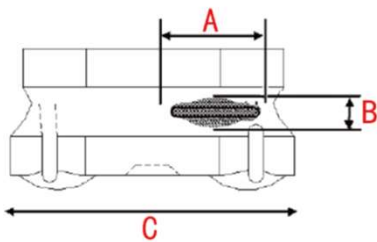
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8.Appearance of the standard

1.Void appearance tolerance limit



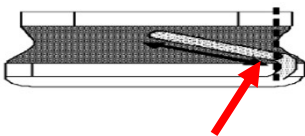
Size of voids occurring to coating resin is specified below.

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

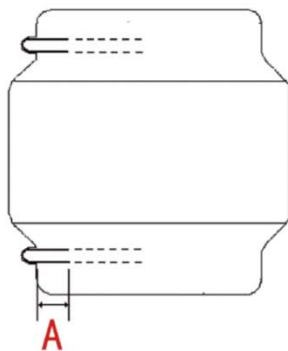
②Length direction(dimension B):Dimension b is not specified

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 $A > 0.8\text{mm}$

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SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
JINKAI P/N:	CKNR5040B-1R0YC	TEST R.H.	80~85%
PART NO.	CKNR5040B Series	TEST TEMP.	20~25°C
DRAWN NO.		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.	1.0 ± 30%	19.5 Max.	7.35 Max.	ΔL/L≤-30%	4.90 ΔT≤40°C °C				上限 5.3	5.3	4.2
TEST FREQ.	100KHz/1V		100KHz/1V						下限 4.7	4.7	MAX
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):電感瞬間的突波電流

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%

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TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(°C)	ΔT(°C)
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

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CUSTOMER				TEST R.H.	80~85%
CUSTOMER'S P/N				TEST TEMP.	20~25°C
JINKAI P/N:	CKNR5040B-1R5YC			DATE	2025/3/12
PART NO.	CKNR5040B Series				
DRAWN NO.					

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°C		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):電感瞬間的突波電流

TME(秒)	Isat(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%

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TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(°C)	ΔT(°C)
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

承認書



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°C
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.	2.2 ± 20%	26 Max.	4.90 Max.	ΔL/L≤-30%	3.80 ΔT≤40°C °C				上限 4.7	5.3 4.7	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(°C)	ΔT(°C)
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

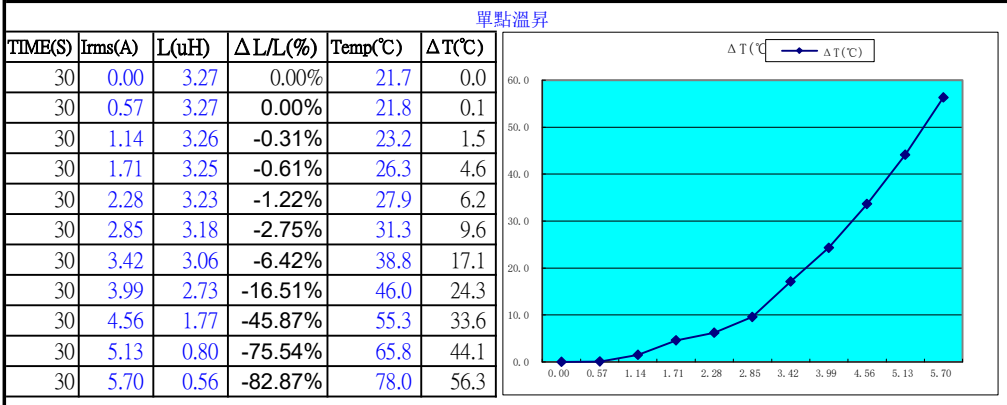
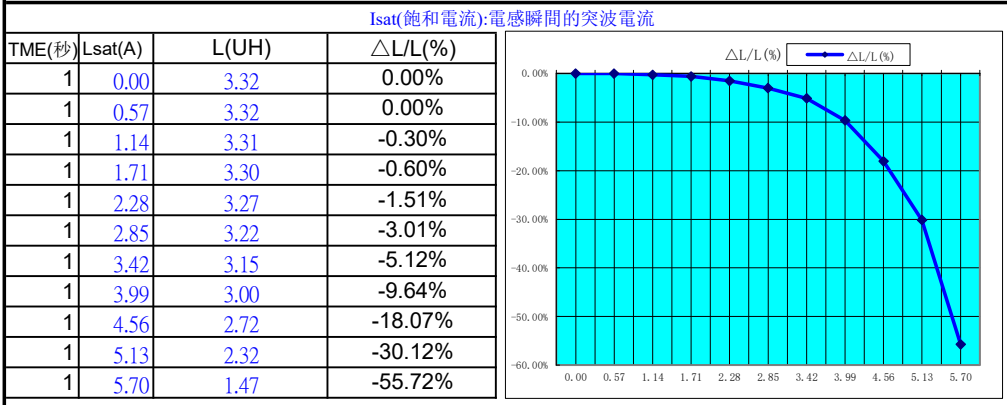
承認書



SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
JINKAI P/N:	CKNR5040B-3R3MC	TEST R.H.	80~85%
PART NO.	CKNR5040B Series	TEST TEMP.	20~25°C
DRAWN NO.		DATE	2025/3/12

TEST DATA FOR PREPRODUCTION SAMPLE						DIMENSION (Unit : mm)		
MEAS. ITEM	TEST RESOLUTION					長 mm	寬 mm	高 mm
	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°C	上限 4.7	4.7	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



承認書



SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
JINKAI P/N:	CKNR5040B-4R7MC	TEST R.H.	80~85%
PART NO.	CKNR5040B Series	TEST TEMP.	20~25°C
DRAWN NO.		DATE	2025/3/12

TEST RESOLUTION						DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	ΔL/L	Irms A		長 mm	寬 mm	高 mm
SPEC.	4.7 ± 20%	46 Max.	3.50 Max.	ΔL/L≤-30%	3.00 ΔT≤40°C		上限 4.7	5.3 4.7	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):電感瞬間的突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	4.45	0.00%
1	0.45	4.44	-0.22%
1	0.90	4.42	-0.67%
1	1.35	4.39	-1.35%
1	1.80	4.35	-2.25%
1	2.25	4.25	-4.49%
1	2.70	4.08	-8.31%
1	3.15	3.77	-15.28%
1	3.60	3.36	-24.49%
1	4.05	2.93	-34.16%
1	4.50	2.47	-44.49%

單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(°C)	ΔT(°C)
30	0.00	4.33	0.00%	27.3	0.0
30	0.45	4.33	0.00%	27.6	0.3
30	0.90	4.32	-0.23%	28.6	1.3
30	1.35	4.30	-0.69%	30.0	2.7
30	1.80	4.28	-1.15%	31.8	4.5
30	2.25	4.26	-1.62%	34.5	7.2
30	2.70	4.17	-3.70%	37.8	10.5
30	3.15	4.01	-7.39%	42.3	15.0
30	3.60	3.65	-15.70%	47.5	20.2
30	4.05	2.99	-30.95%	53.9	26.6
30	4.50	2.03	-53.12%	61.7	34.4

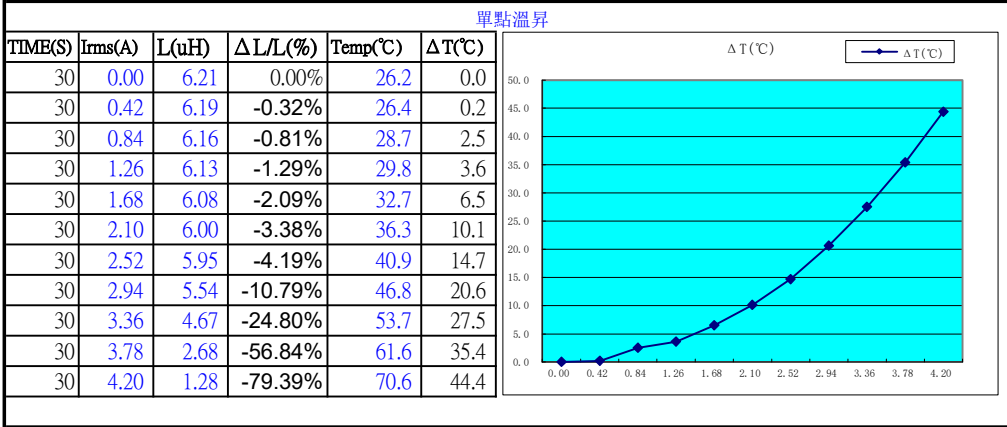
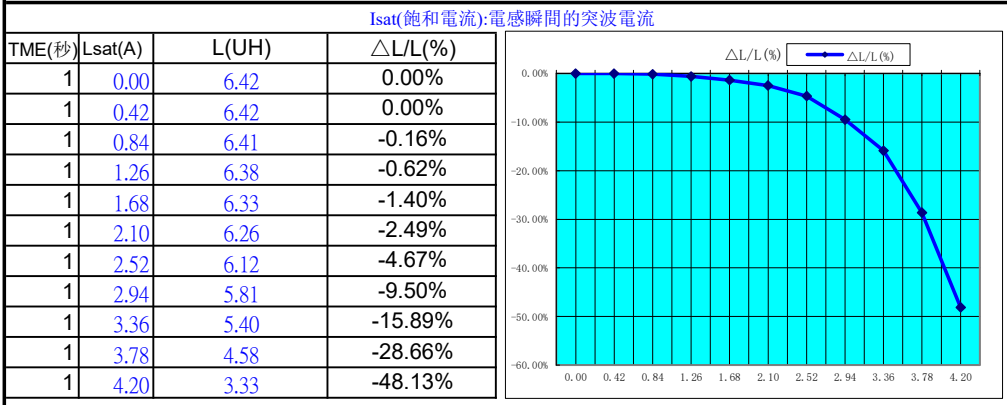
承認書



SPECIFICATION FOR APPROVAL

CUSTOMER				TEST R.H.	80~85%
CUSTOMER'S P/N				TEST TEMP.	20~25°C
JINKAI P/N:	CKNR5040B-6R8MC			DATE	2025/3/12
PART NO.	CKNR5040B Series				
DRAWN NO.					

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.	6.8 ± 20%	55.9 Max.	2.90 Max.	ΔL/L≤-30%	2.50 ΔT≤40°C		上限 4.7	5.3 4.7	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



承认书



SPECIFICATION FOR APPROVAL

CUSTOMER				TEST R.H.	80~85%
CUSTOMER'S P/N				TEST TEMP.	20~25°C
JINKAI P/N:	CKNR5040B-100MC			DATE	2025/3/12
PART NO.	CKNR5040B Series				
DRAWN NO.					

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.	10.0 ± 20%	85 Max.	2.35 Max.	ΔL/L≤-30%	2.10 ΔT≤40°C °C		上限 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):電感瞬間的突波電流

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(°C)	ΔT(°C)
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

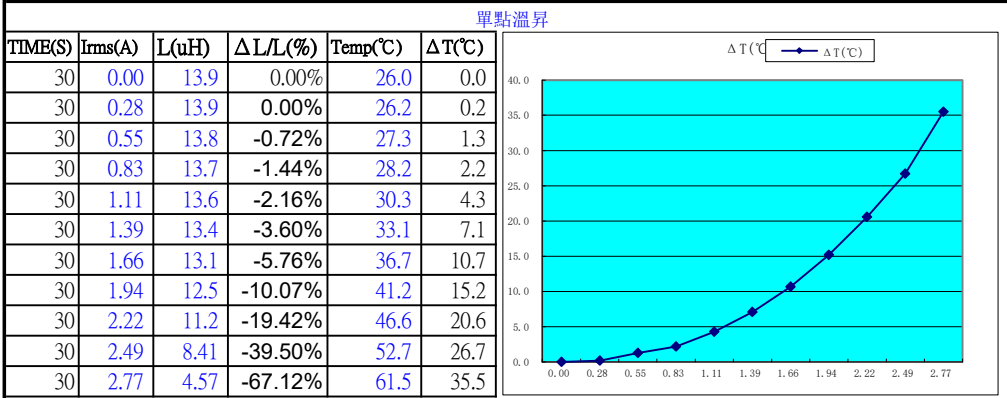
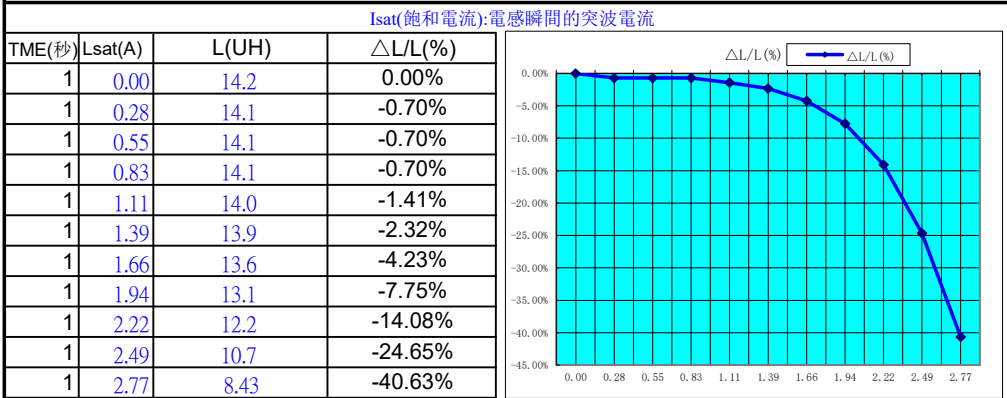
承认书



SPECIFICATION FOR APPROVAL

CUSTOMER				TEST R.H.	80~85%
CUSTOMER'S P/N				TEST TEMP.	20~25°C
JINKAI P/N:	CKNR5040B-150MC			DATE	2025/3/12
PART NO.	CKNR5040B Series				
DRAWN NO.					

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°C		上限 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



承認書



SPECIFICATION FOR APPROVAL

CUSTOMER				TEST R.H.	80~85%
CUSTOMER'S P/N				TEST TEMP.	20~25°C
JINKAI P/N:	CKNR5040B-220MC			DATE	2025/3/12
PART NO.	CKNR5040B Series				
DRAWN NO.					

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.	22.0 ± 20%	167 Max.	1.60 Max.	ΔL/L≤-30%	1.50 ΔT≤40°C °C		上限 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

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	21.2	0.00%
1	0.23	21.2	0.00%
1	0.46	21.1	-0.47%
1	0.69	21.0	-0.94%
1	0.92	20.8	-1.89%
1	1.15	20.4	-3.77%
1	1.38	19.6	-7.55%
1	1.61	19.2	-9.43%
1	1.84	18.1	-14.62%
1	2.07	15.1	-29.01%
1	2.30	11.8	-44.34%

單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(°C)	ΔT(°C)
30	0.00	20.5	0.00%	30.0	0.0
30	0.23	20.5	0.00%	30.1	0.1
30	0.46	20.4	-0.49%	30.3	0.3
30	0.69	20.3	-0.98%	31.3	1.3
30	0.92	20.1	-1.95%	33.1	3.1
30	1.15	19.9	-2.93%	35.4	5.4
30	1.38	19.6	-4.39%	38.3	8.3
30	1.61	18.8	-8.29%	42.3	12.3
30	1.84	17.0	-17.07%	47.1	17.1
30	2.07	13.6	-33.66%	52.8	22.8
30	2.30	8.53	-58.39%	59.6	29.6

承認書



SPECIFICATION FOR APPROVAL

CUSTOMER				TEST R.H.	80~85%
CUSTOMER'S P/N				TEST TEMP.	20~25°C
JINKAI P/N:	CKNR5040B-330MC			DATE	2025/3/12
PART NO.	CKNR5040B Series				
DRAWN NO.					

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.	33.0 ± 20%	244.4 Max.	1.30 Max.	ΔL/L≤-30%	1.20 ΔT≤40°C °C		上限 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):電感瞬間の突波電流

TME(秒)	Isat(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(°C)	ΔT(°C)
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

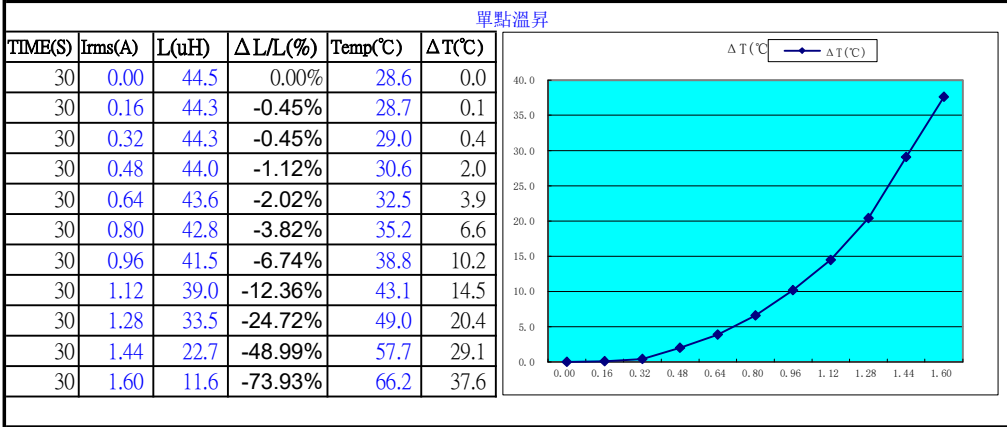
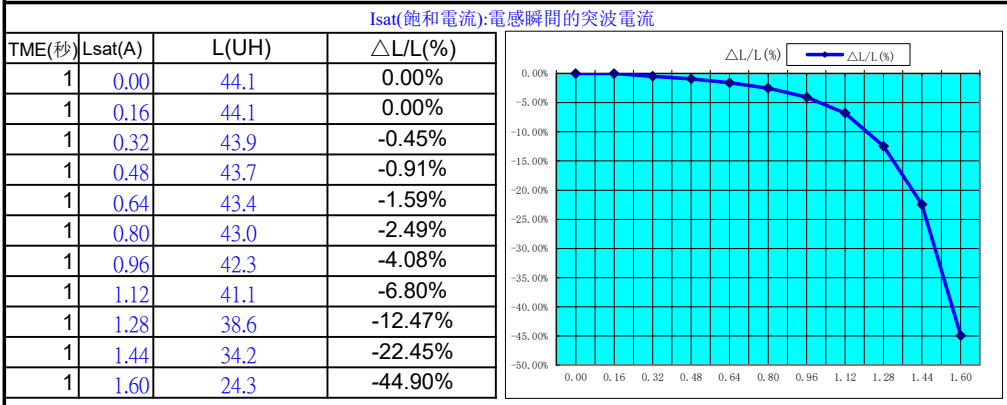
承認書



SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
JINKAI P/N:	CKNR5040B-470MC	TEST R.H.	80~85%
PART NO.	CKNR5040B Series	TEST TEMP.	20~25°C
DRAWN NO.		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.	47.0 ± 20%	353.6 Max.	1.10 Max.	ΔL/L≤-30%	1.00 ΔT≤40°C °C		上限 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



承认书



SPECIFICATION FOR APPROVAL

CUSTOMER				TEST R.H.	80~85%
CUSTOMER'S P/N				TEST TEMP.	20~25°C
JINKAI P/N:	CKNR5040B-680MC			DATE	2025/3/12
PART NO.	CKNR5040B Series				
DRAWN NO.					

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°C		上限 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):電感瞬間的突波電流

TME(秒)	Isat(A)	L(UH)	ΔL/L(%)
1	0.00	66.5	0.00%
1	0.13	66.3	-0.30%
1	0.27	66.2	-0.45%
1	0.40	66.0	-0.75%
1	0.53	65.6	-1.35%
1	0.67	64.7	-2.71%
1	0.80	63.0	-5.26%
1	0.93	60.0	-9.77%
1	1.06	54.5	-18.05%
1	1.20	45.8	-31.13%
1	1.33	32.7	-50.83%

單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(°C)	ΔT(°C)
30	0.00	63.7	0.00%	28.4	0.0
30	0.13	64.0	0.47%	28.6	0.2
30	0.27	63.9	0.31%	29.7	1.3
30	0.40	63.6	-0.16%	31.2	2.8
30	0.53	63.1	-0.94%	33.5	5.1
30	0.67	62.2	-2.35%	36.7	8.3
30	0.80	60.4	-5.18%	41.2	12.8
30	0.93	56.6	-11.15%	46.8	18.4
30	1.06	48.5	-23.86%	53.7	25.3
30	1.20	30.4	-52.28%	62.7	34.3
30	1.33	15.2	-76.14%	73.4	45.0

承認書



SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
JINKAI P/N:	CKNR5040B-101MC	TEST R.H.	80~85%
PART NO.	CKNR5040B Series	TEST TEMP.	20~25°C
DRAWN NO.		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.	100.0 ± 20%	728 Max.	0.75 Max.	ΔL/L ≤ -30%	0.70 ΔT ≤ 40°C		上限 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

