

承 认 书

SPECIFICATION FOR APPROVAL

CUSTOMER			
CUSTOMER'S P/N			
DATE	04/Mar/2025	REVISION NO.	A
PART NO.	CKNR4020B		Series
DRAWN NO.			
DESCRIPTION.	SMD POWER INDUCTOR		
Customer's Signature			
Approved by	Checked by	Drawn by	
黄大燕	黄大燕	林树英	
04/Mar/2025	04/Mar/2025	04/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



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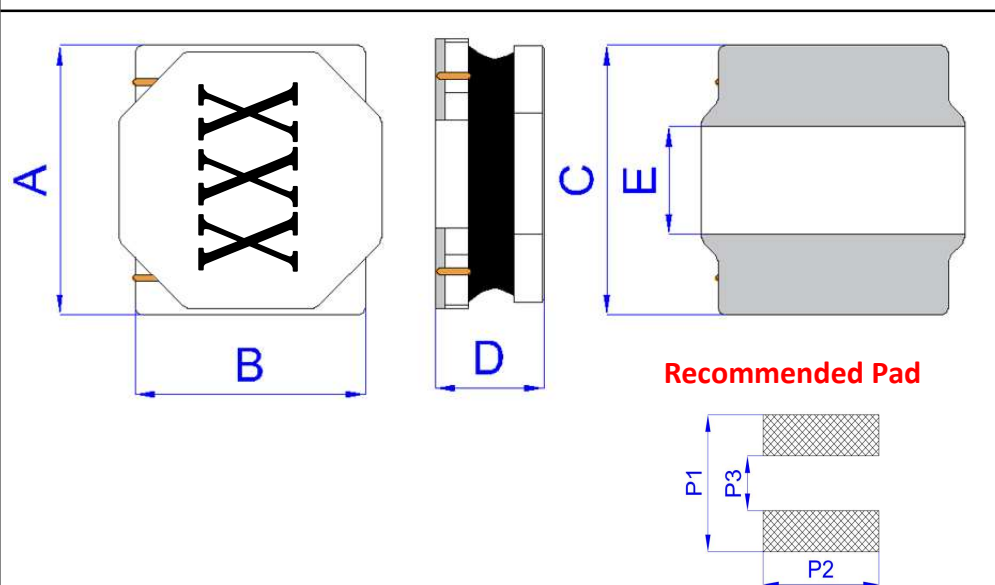
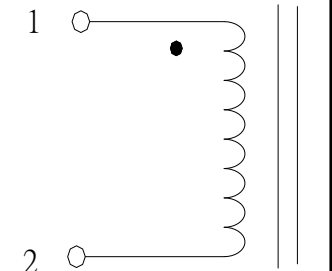


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DESCRIPTION.	SMD POWER INDUCTOR	DRAWN NO.	0
PART NO.	CKNR4020B	DATE	2025/3/4

1.SHAPE & DIMENSION

UNIT: mm						SCHEMATICS	
							
						MARKING COLOR	
						BLACK	

A	B	C	D	E	P1	P2	P3
4	4	4	2.0	1.6	4.0	3.7	1.6
±0.2	±0.2	±0.2	MAX	±0.3	Ref.	Ref.	Ref.

PART NUMBERING SYSTEM

	CK	NR	4020	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

APPROVED BY	CHECKED BY	DRAFT BY
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PART NO.	CKNR4020B	DATE	2025/3/4

2.SERIES SPECIFICATION

◆ CKNR4020B Series Specification:

Part Number	Inductance	Test Freq	DCR (mΩ)		Saturation Current (A)		Temp. Rise Current (A)	
	(μH)	(Hz)	Max	Typ	Max	Typ	Max	Typ
CKNR4020B-1R0YC	1.0	100KHz/1V	40	33	5.00	6.50	4.20	5.50
CKNR4020B-1R5YC	1.5		48	40	4.80	5.00	3.85	5.00
CKNR4020B-2R2MC	2.2		70	58	3.40	3.90	3.30	3.60
CKNR4020B-3R3MC	3.3		95	79	3.20	3.80	3.30	3.60
CKNR4020B-4R7MC	4.7		112	93	2.35	2.60	2.50	2.90
CKNR4020B-6R8MC	6.8		166	138	2.20	2.50	2.20	2.50
CKNR4020B-100MC	10		226	188	1.65	1.90	1.60	2.05
CKNR4020B-150MC	15		343	286	1.40	1.55	1.40	1.70
CKNR4020B-220MC	22		438	365	1.35	1.45	1.15	1.45
CKNR4020B-270MC	27		584	487	1.10	1.16	0.90	1.15
CKNR4020B-330MC	33		732	610	1.00	1.15	1.00	1.20
CKNR4020B-390MC	39		840	700	0.88	0.95	0.75	0.95
CKNR4020B-470MC	47		894	745	0.90	1.00	0.80	0.95
CKNR4020B-560MC	56		1080	900	0.80	0.85	0.63	0.83
CKNR4020B-680MC	68		1368	1140	0.80	0.85	0.63	0.83
CKNR4020B-101MC	100		1992	1660	0.52	0.60	0.52	0.65

◆ 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 CKNR4020B size inductors, absolute maximum voltage: I 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※

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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℃

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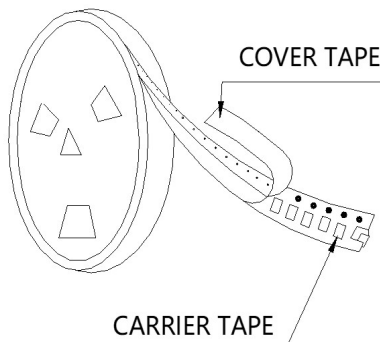
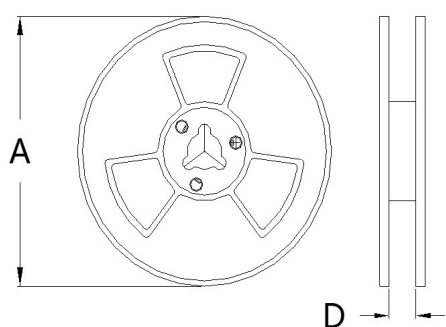
4.PACKAGING(unit: mm)

1.包装类型

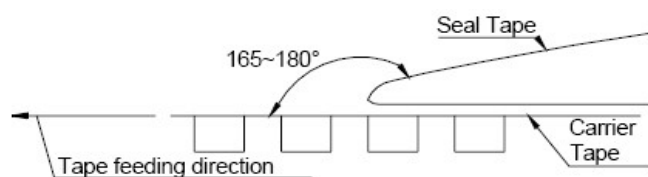
2.包装尺寸

13" 盘

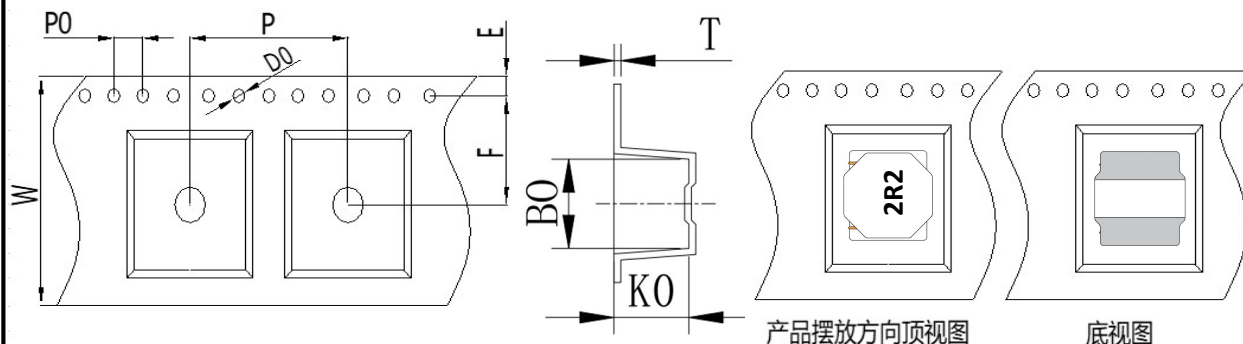
7" 盘



	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.



Item	W	B0	P	T	E	F	D0	P0	K0	
DIM(mm)	12.0±0.3	4.5±0.1	8.0±0.1	0.3±0.05	1.75±0.1	5.5±0.05	1.5±0.1	4.0±0.1	2.4±0.1	

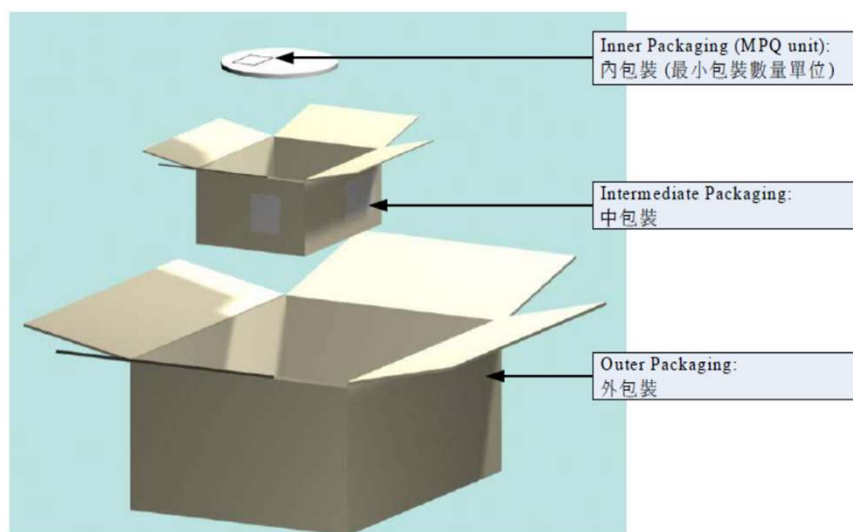
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5. CARTON



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

(如: 客户有特殊要求时, 则依客户要求实施.)

备注: 如果捆包数量小于内箱捆包数量时就用内箱包装

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 3000 PCS

内箱包装数量

每箱 5 卷,共 15000 PCS

外箱包装数量

每箱 10 卷,共 30000 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

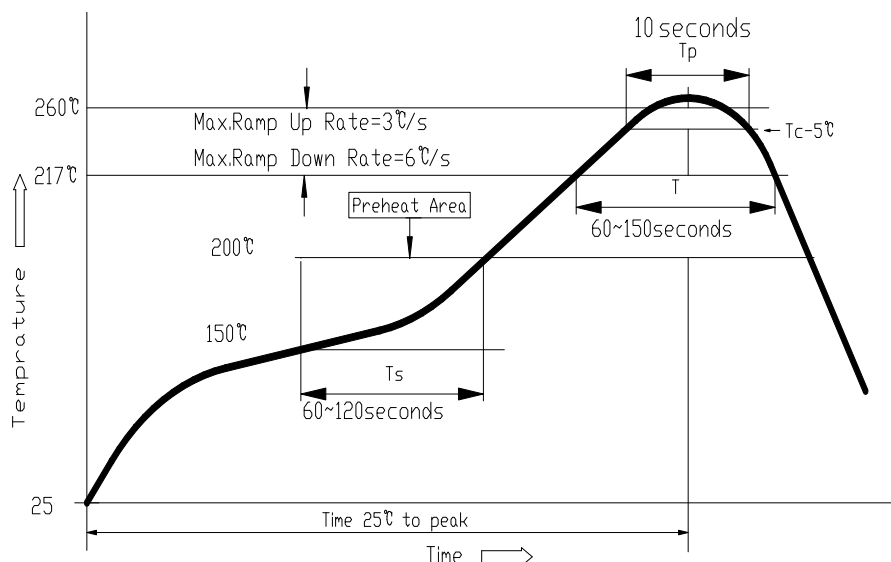
Applicable soldering process to the products is refl.

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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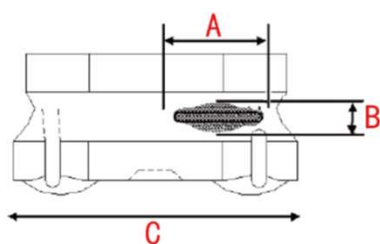


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8.Appearance of the standard

1.Void appearance tolerance limit



Size of voids occurring to coating resin is specified below.

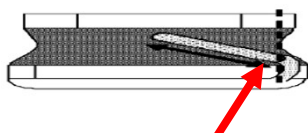
①Width direction(dimension A): Acceptable when $A \leq C/2$

Nonconforming when $B \geq C/2$

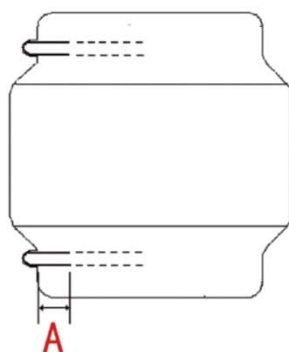
②Length direction(dimension B):Dimension b is not specified

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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CUSTOMER'S P/N

JINKAI P/N: CKNR4020-1R0YC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

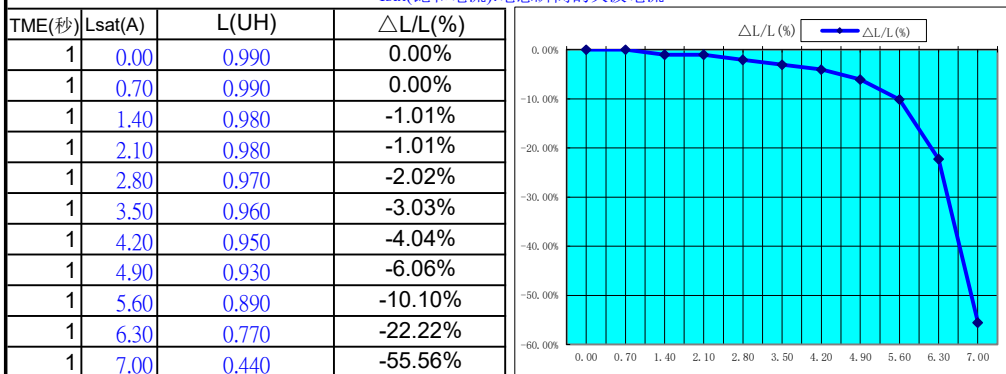
TEST TEMP. 20~25℃

DATE 2019/4/19

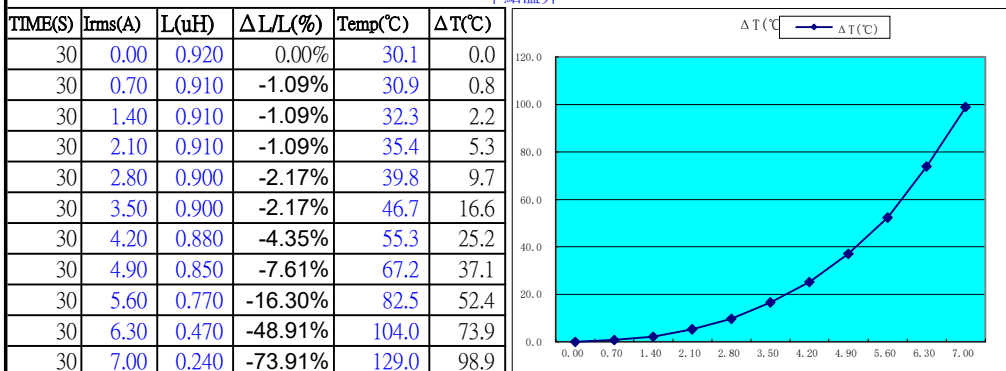
TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION								DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	△L/L	Irms A				長 mm	寬 mm	高 mm
SPEC.	1 ± 30%	38.4 Max.	4.85 Max.	△L/L≤-30%	2.15 △T≤40℃ ℃			上限 下限	4.2 3.8	4.2 3.8	2.00 MAX
TEST FREQ.	100KHz/1V		100KHz/1V								
1	0.92	32.9	0.81	-11.96%	OK				4.09	4.02	1.97
2	0.94	32.0	0.80	-14.89%	OK				4.08	4.00	1.94
3	0.93	33.8	0.78	-16.13%	OK				4.03	4.01	1.92
4	0.94	33.2	0.76	-19.15%	OK				4.08	4.07	1.92
5	0.95	33.2	0.75	-21.05%	OK				4.11	4.01	1.95
6	0.93	32.6	0.79	-15.05%	OK				4.05	4.02	1.95
7	0.95	35.2	0.80	-15.79%	OK				4.06	4.06	1.92
8	0.92	33.4	0.79	-14.13%	OK				4.08	4.05	1.95
9	0.95	35.2	0.80	-15.79%	OK				4.09	4.02	1.93
10	0.94	35.5	0.78	-17.02%	OK				4.06	4.03	1.96
AVG.	0.937	33.7	0.786	-16.10%					4.073	4.029	1.941
R	0.03	3.5	0.06	9.10%					0.08	0.07	0.05

Isat(飽和電流):電感瞬間的突波電流



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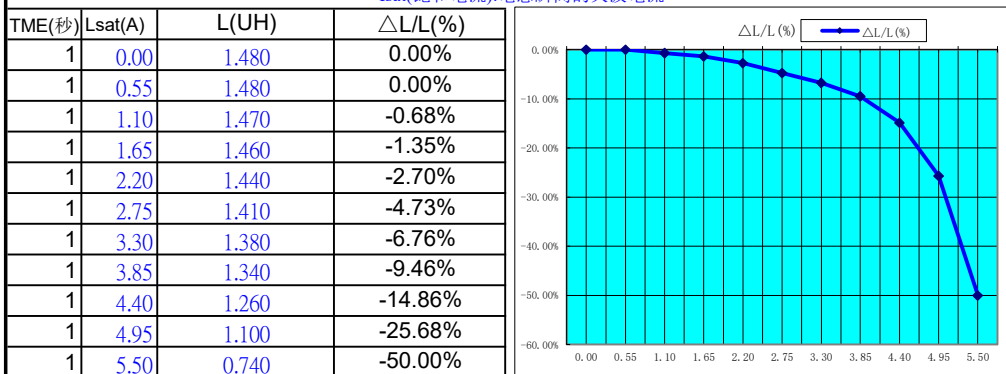
TEST TEMP. 20~25℃

DATE 2019/4/19

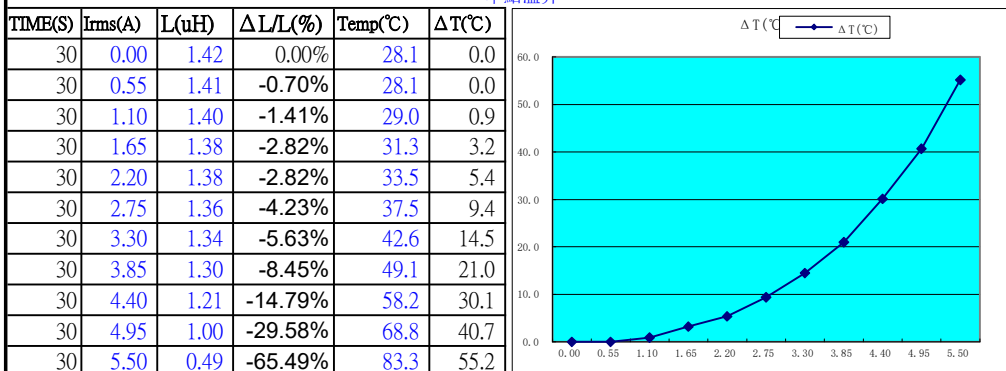
TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION								DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	△L/L	Irms A				長 mm	寬 mm	高 mm
SPEC.	1.5 ± 30%	45.5 Max.	4.45 Max.	△L/L≤-30%	1.98 △T≤40℃ ℃				上限 4.2 下限 3.8	4.2 3.8	2.00 MAX
TEST FREQ.	100KHz/1V		100KHz/1V								
1	1.53	39.6	1.18	-22.88%	OK				4.09	4.02	1.97
2	1.52	38.1	1.20	-21.10%	OK				4.08	4.00	1.94
3	1.52	39.5	1.18	-22.37%	OK				4.03	4.01	1.95
4	1.50	39.7	1.22	-18.67%	OK				4.08	4.07	1.92
5	1.51	38.5	1.20	-20.53%	OK				4.11	4.01	1.95
6	1.61	38.2	1.18	-26.71%	OK				4.05	4.02	1.95
7	1.50	39.7	1.15	-23.33%	OK				4.06	4.06	1.92
8	1.49	38.5	1.15	-22.82%	OK				4.08	4.05	1.95
9	1.50	39.8	1.14	-24.00%	OK				4.09	4.02	1.92
10	1.51	39.0	1.15	-23.84%	OK				4.06	4.03	1.96
AVG.	1.519	39.06	1.175	-22.62%					4.073	4.029	1.943
R	0.12	1.7	0.08	8.04%					0.08	0.07	0.05

Isat(飽和電流):電感瞬間的突波電流



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SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR4020-2R2MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

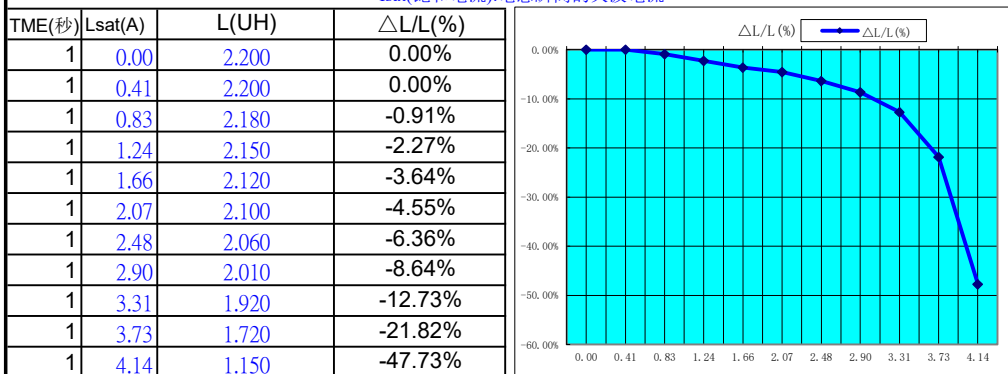
TEST TEMP. 20~25℃

DATE 2019/4/19

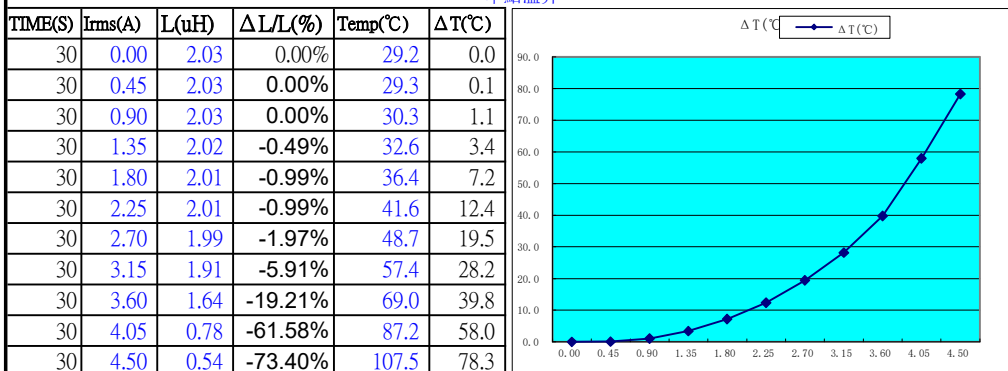
TEST DATA FOR PREPRODUCTION SAMPLE

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%	72 Max.	3.40 Max.	ΔL/L≤-30%	1.85 ΔT≤40℃ ℃				上限 下限	4.2 3.8	4.2 3.8	2.00 MAX
TEST FREQ.	100KHZ/1V		100KHZ/1V									
1	2.04	57.3	1.80	-11.76%	OK				4.09	4.02	1.97	
2	2.00	63.4	1.75	-12.50%	OK				4.08	4.00	1.94	
3	1.99	60.7	1.84	-7.54%	OK				4.03	4.01	1.94	
4	2.01	59.4	1.82	-9.45%	OK				4.08	4.07	1.92	
5	2.00	56.5	1.75	-12.50%	OK				4.11	4.01	1.95	
6	2.02	54.7	1.70	-15.84%	OK				4.05	4.02	1.95	
7	1.99	55.8	1.78	-10.55%	OK				4.06	4.06	1.92	
8	2.03	59.5	1.70	-16.26%	OK				4.08	4.05	1.95	
9	2.02	57.6	1.65	-18.32%	OK				4.09	4.02	1.93	
10	2.01	59.6	1.64	-18.41%	OK				4.06	4.03	1.96	
AVG.	2.011	58.45	1.743	-13.31%					4.073	4.029	1.943	
R	0.05	8.7	0.2	10.87%					0.08	0.07	0.05	

Isat(飽和電流):電感瞬間的突波電流



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CUSTOMER

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JINKAI P/N: CKNR4020BE-3R3MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25℃

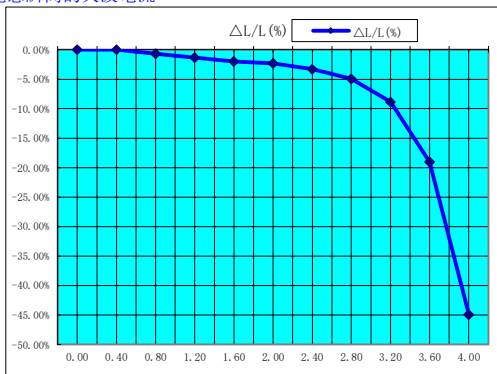
DATE 2019/4/19

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.	3.3 ± 20%	91 Max.	3.20 Max.	ΔL/L≤-30%	1.40 ΔT≤40℃ ℃			上限 下限	4.2 3.8	4.2 3.8	2.00 MAX
TEST FREQ.	100KHZ/1V		100KHZ/1V								
1	3.06	79.4	2.72	-11.11%	OK				4.09	4.02	1.97
2	3.12	79.8	2.66	-14.74%	OK				4.08	4.00	1.94
3	3.06	80.6	2.82	-7.84%	OK				4.03	4.01	1.91
4	3.10	78.5	2.71	-12.58%	OK				4.08	4.07	1.92
5	3.10	78.8	2.79	-10.00%	OK				4.11	4.01	1.95
6	3.06	78.6	2.75	-10.13%	OK				4.05	4.02	1.95
7	3.01	78.6	2.68	-10.96%	OK				4.06	4.06	1.92
8	2.98	81.1	2.65	-11.07%	OK				4.08	4.05	1.95
9	3.07	80.2	2.61	-14.98%	OK				4.09	4.02	1.92
10	3.11	79.5	2.65	-14.79%	OK				4.06	4.03	1.96
AVG.	3.067	79.51	2.704	-11.82%					4.073	4.029	1.939
R	0.14	2.6	0.21	7.14%					0.08	0.07	0.06

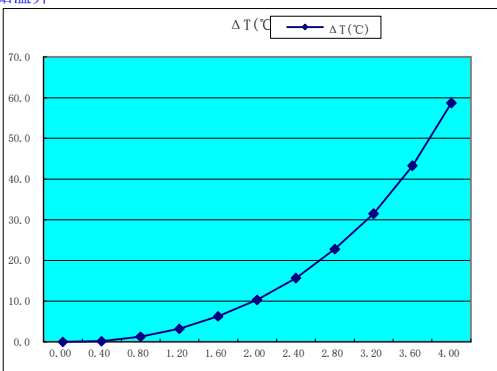
Isat(飽和電流):電感瞬間の突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	3.050	0.00%
1	0.40	3.050	0.00%
1	0.80	3.030	-0.66%
1	1.20	3.010	-1.31%
1	1.60	2.990	-1.97%
1	2.00	2.980	-2.30%
1	2.40	2.950	-3.28%
1	2.80	2.900	-4.92%
1	3.20	2.780	-8.85%
1	3.60	2.470	-19.02%
1	4.00	1.680	-44.92%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(℃)	ΔT(℃)
30	0.00	2.94	0.00%	29.8	0.0
30	0.40	2.92	-0.68%	30.0	0.2
30	0.80	2.91	-1.02%	31.1	1.3
30	1.20	2.89	-1.70%	33.0	3.2
30	1.60	2.89	-1.70%	36.1	6.3
30	2.00	2.87	-2.38%	40.1	10.3
30	2.40	2.85	-3.06%	45.5	15.7
30	2.80	2.79	-5.10%	52.6	22.8
30	3.20	2.60	-11.56%	61.3	31.5
30	3.60	1.95	-33.67%	73.1	43.3
30	4.00	0.80	-72.79%	88.5	58.7



承认书



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR4020BE-4R7MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

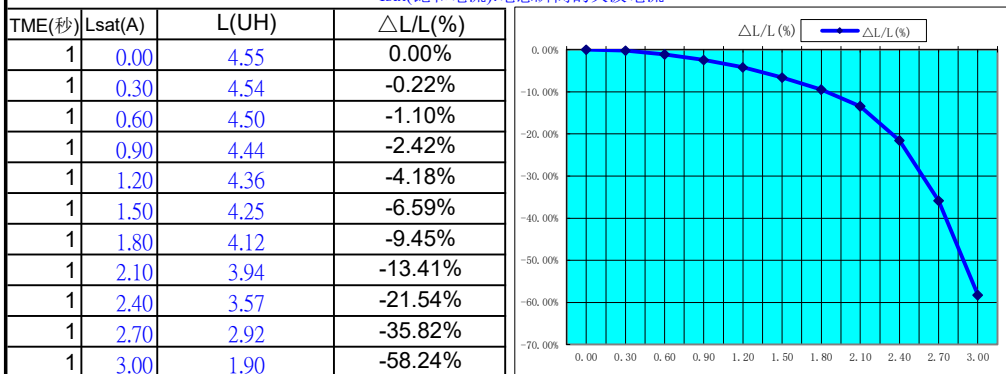
TEST TEMP. 20~25℃

DATE 2019/4/19

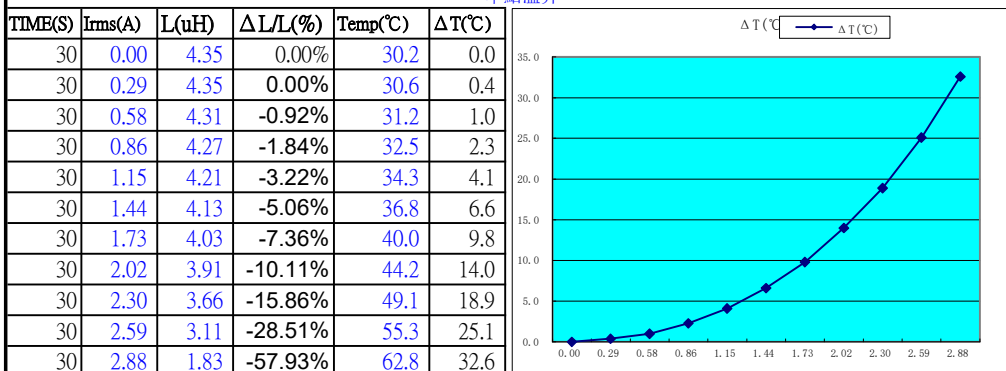
TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION								DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	ΔL/L	Irms A				長 mm	寬 mm	高 mm
SPEC.	4.7 ± 20%	114 Max.	2.35 Max.	ΔL/L≤-30%	1.34 ΔT≤40℃ ℃			上限 下限	4.2 3.8	4.2 3.8	2.00 MAX
TEST FREQ.	100KHZ/1V		100KHZ/1V								
1	4.58	93.2	3.82	-16.59%	OK				4.09	4.02	1.90
2	4.80	92.8	3.81	-20.63%	OK				4.08	4.00	1.92
3	4.76	92.4	3.82	-19.75%	OK				4.03	4.01	1.92
4	4.64	94.5	3.83	-17.42%	OK				4.08	4.07	1.92
5	4.56	92.4	3.85	-15.57%	OK				4.11	4.01	1.95
6	4.86	96.1	3.80	-21.81%	OK				4.05	4.02	1.95
7	4.97	95.8	3.81	-23.34%	OK				4.06	4.06	1.92
8	4.76	92.1	3.80	-20.17%	OK				4.08	4.05	1.95
9	4.62	93.5	3.80	-17.75%	OK				4.09	4.02	1.92
10	4.78	91.2	3.84	-19.67%	OK				4.06	4.03	1.96
AVG.	4.733	93.4	3.818	-19.27%					4.073	4.029	1.931
R	0.41	4.9	0.05	7.77%					0.08	0.07	0.06

Isat(飽和電流):電感瞬間的突波電流



單點溫昇



承 認 书



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR4020BE-6R8MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25℃

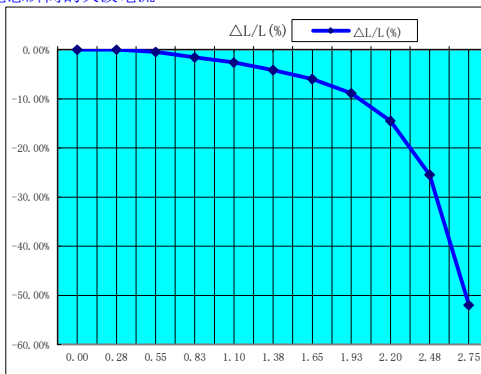
DATE 2019/4/19

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%	162.5 Max.	2.20 Max.	ΔL/L≤-30%	1.04 ΔT≤40℃ ℃			上限 下限	長 mm 寬 mm 高 mm
TEST FREQ.	100KHZ/1V		100KHZ/1V						
1	6.15	141	5.21	-15.28%	OK			4.09	4.02
2	6.29	143	5.18	-17.65%	OK			4.08	4.00
3	6.37	143	5.51	-13.50%	OK			4.03	4.01
4	6.41	133	5.51	-14.04%	OK			4.08	4.07
5	6.34	137	5.46	-13.88%	OK			4.11	4.01
6	6.29	139	5.45	-13.35%	OK			4.05	4.02
7	6.19	132	5.40	-12.76%	OK			4.06	4.06
8	6.24	134	5.44	-12.82%	OK			4.08	4.05
9	6.26	138	5.41	-13.58%	OK			4.09	4.02
10	6.28	135	5.36	-14.65%	OK			4.06	4.03
AVG.	6.282	137.5	5.393	-14.15%				4.073	4.029
R	0.26	11	0.33	4.88%				0.08	0.07

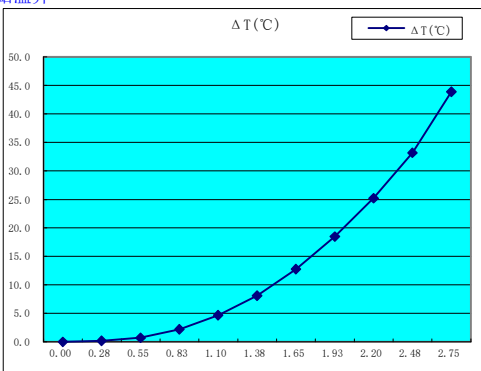
Isat(飽和電流):電感瞬間的突波電流

TME(秒)	Isat(A)	L(UH)	ΔL/L(%)
1	0.00	6.56	0.00%
1	0.28	6.56	0.00%
1	0.55	6.53	-0.46%
1	0.83	6.46	-1.52%
1	1.10	6.39	-2.59%
1	1.38	6.29	-4.12%
1	1.65	6.17	-5.95%
1	1.93	5.98	-8.84%
1	2.20	5.61	-14.48%
1	2.48	4.89	-25.46%
1	2.75	3.15	-51.98%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(℃)	ΔT(℃)
30	0.00	6.28	0.00%	30.6	0.0
30	0.28	6.26	-0.32%	30.8	0.2
30	0.55	6.21	-1.11%	31.3	0.7
30	0.83	6.14	-2.23%	32.8	2.2
30	1.10	6.06	-3.50%	35.3	4.7
30	1.38	5.98	-4.78%	38.7	8.1
30	1.65	5.86	-6.69%	43.4	12.8
30	1.93	5.67	-9.71%	49.1	18.5
30	2.20	5.29	-15.76%	55.8	25.2
30	2.48	4.46	-28.98%	63.8	33.2
30	2.75	2.52	-59.87%	74.5	43.9



承 認 书



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR4020BE-100MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25°C

DATE 2019/4/19

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%	214.5 Max.	1.6 Max.	△L/L≤-30%	0.90 ΔT≤40℃ ℃				上限 4.2 下限 3.8	4.2 3.8	2.00 MAX
TEST FREQ.	100KHZ/1V		100KHZ/1V								
1	9.55	187	7.90	-17.3%	OK				4.09	4.02	1.97
2	9.74	192	7.87	-19.2%	OK				4.08	4.00	1.94
3	9.70	187	8.04	-17.1%	OK				4.03	4.01	1.91
4	9.86	193	8.13	-17.5%	OK				4.08	4.07	1.92
5	9.83	190	7.65	-22.2%	OK				4.11	4.01	1.95
6	9.80	187	7.61	-22.3%	OK				4.05	4.02	1.95
7	9.97	188	7.52	-24.6%	OK				4.06	4.06	1.92
8	10.0	186	7.74	-22.6%	OK				4.08	4.05	1.95
9	10.0	191	7.68	-23.2%	OK				4.09	4.02	1.92
10	9.97	188	7.74	-22.4%	OK				4.06	4.03	1.96
AVG.	9.842	188.9	7.788	-20.84%					4.073	4.029	1.939
R	0.45	7	0.61	7.46%					0.08	0.07	0.06

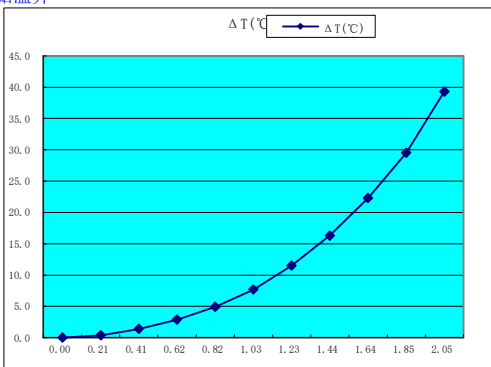
Isat(飽和電流):電感瞬間的突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	10.10	0.00%
1	0.21	10.00	-0.99%
1	0.41	9.90	-1.98%
1	0.62	9.66	-4.36%
1	0.82	9.45	-6.44%
1	1.03	9.23	-8.61%
1	1.23	8.99	-10.99%
1	1.44	8.70	-13.86%
1	1.64	8.26	-18.22%
1	1.85	7.44	-26.34%
1	2.05	5.85	-42.08%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(°C)	ΔT(°C)
30	0.00	9.62	0.00%	22.9	0.0
30	0.21	9.56	-0.62%	23.3	0.4
30	0.41	9.41	-2.18%	24.3	1.4
30	0.62	9.23	-4.05%	25.8	2.9
30	0.82	9.03	-6.13%	27.8	4.9
30	1.03	8.82	-8.32%	30.6	7.7
30	1.23	8.57	-10.91%	34.4	11.5
30	1.44	8.24	-14.35%	39.2	16.3
30	1.64	7.67	-20.27%	45.2	22.3
30	1.85	6.62	-31.19%	52.4	29.5
30	2.05	4.49	-53.33%	62.2	39.3



承 認 書



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR4020BE-150MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25°C

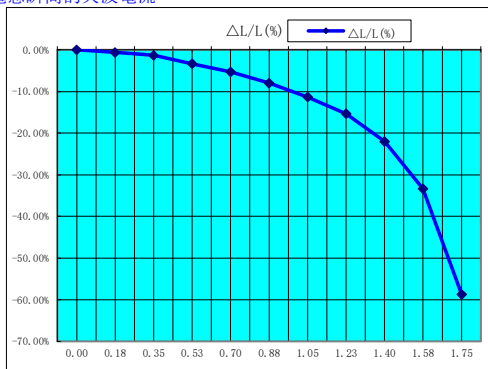
DATE 2019/4/19

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.	15.0 ± 20%	348 Max.	1.35 Max.	△L/L≤-30%	0.77 ΔT≤40℃ ℃				上限 下限	4.2 3.8	4.2 3.8	2.00 MAX
TEST FREQ.	100KHZ/1V		100KHZ/1V									
1	14.9	285	11.6	-22.15%	OK					4.09	4.02	1.97
2	14.4	287	12.0	-16.67%	OK					4.08	4.00	1.94
3	14.3	297	12.0	-16.08%	OK					4.03	4.01	1.91
4	15.2	274	12.1	-20.39%	OK					4.08	4.07	1.92
5	14.5	284	11.2	-22.76%	OK					4.11	4.01	1.95
6	14.6	287	12.4	-15.07%	OK					4.05	4.02	1.95
7	15.3	294	11.9	-22.22%	OK					4.06	4.06	1.92
8	14.6	281	12.5	-14.38%	OK					4.08	4.05	1.95
9	14.2	289	11.4	-19.72%	OK					4.09	4.02	1.94
10	15.8	284	12.0	-24.05%	OK					4.06	4.03	1.96
AVG.	14.780	286.2	11.91	-19.35%						4.073	4.029	1.941
R	1.6	23	1.3	9.67%						0.08	0.07	0.06

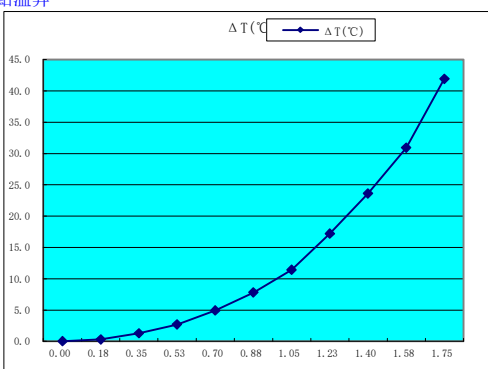
Isat(飽和電流):電感瞬間的突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	15.0	0.00%
1	0.18	14.9	-0.67%
1	0.35	14.8	-1.33%
1	0.53	14.5	-3.33%
1	0.70	14.2	-5.33%
1	0.88	13.8	-8.00%
1	1.05	13.3	-11.33%
1	1.23	12.7	-15.33%
1	1.40	11.7	-22.00%
1	1.58	10.0	-33.33%
1	1.75	6.20	-58.67%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(°C)	ΔT(°C)
30	0.00	15.3	0.00%	28.3	0.0
30	0.18	15.2	-0.65%	28.6	0.3
30	0.35	15.0	-1.96%	29.6	1.3
30	0.53	14.7	-3.92%	31.0	2.7
30	0.70	14.4	-5.88%	33.2	4.9
30	0.88	13.9	-9.15%	36.1	7.8
30	1.05	13.4	-12.42%	39.7	11.4
30	1.23	12.6	-17.65%	45.5	17.2
30	1.40	11.1	-27.45%	51.9	23.6
30	1.58	8.61	-43.73%	59.2	30.9
30	1.75	4.56	-70.20%	70.2	41.9



承 認 书



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR4020BE-220MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25°C

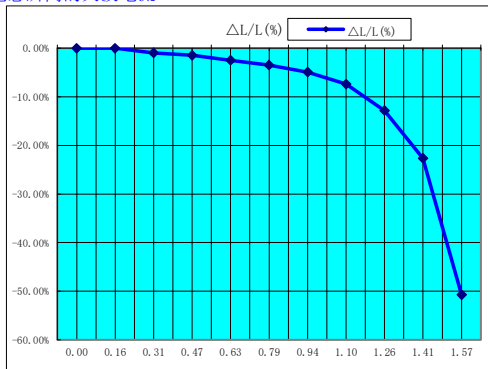
DATE 2019/4/19

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%	455 Max.	1.05 Max.	△L/L≤-30%	0.62 △T≤40℃ ℃			上限 下限	4.2 3.8	4.2 3.8	2.00 MAX
TEST FREQ.	100KHZ/1V		100KHZ/1V								
1	21.7	368	19.1	-11.98%	OK				4.09	4.02	1.97
2	21.8	358	19.0	-12.84%	OK				4.08	4.00	1.94
3	21.6	362	19.4	-10.19%	OK				4.03	4.01	1.92
4	21.6	370	19.0	-12.04%	OK				4.08	4.07	1.92
5	23.4	366	18.5	-20.94%	OK				4.11	4.01	1.95
6	22.2	372	18.6	-16.22%	OK				4.05	4.02	1.95
7	22.4	367	19.1	-14.73%	OK				4.06	4.06	1.92
8	22.6	352	18.9	-16.37%	OK				4.08	4.05	1.95
9	22.3	371	19.0	-14.80%	OK				4.09	4.02	1.94
10	22.1	369	19.0	-14.03%	OK				4.06	4.03	1.96
AVG.	22.170	365.5	18.96	-14.41%					4.073	4.029	1.942
R	1.8	20	0.9	10.75%					0.08	0.07	0.05

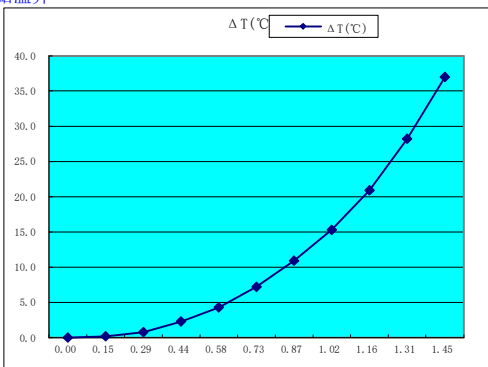
Isat(飽和電流):電感瞬間的突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	20.3	0.00%
1	0.16	20.3	0.00%
1	0.31	20.1	-0.99%
1	0.47	20.0	-1.48%
1	0.63	19.8	-2.46%
1	0.79	19.6	-3.45%
1	0.94	19.3	-4.93%
1	1.10	18.8	-7.39%
1	1.26	17.7	-12.81%
1	1.41	15.7	-22.66%
1	1.57	10.0	-50.74%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(°C)	ΔT(°C)
30	0.00	20.3	0.00%	24.8	0.0
30	0.15	20.3	0.00%	25.0	0.2
30	0.29	20.1	-0.99%	25.6	0.8
30	0.44	19.9	-1.97%	27.1	2.3
30	0.58	19.5	-3.94%	29.1	4.3
30	0.73	19.1	-5.91%	32.0	7.2
30	0.87	18.5	-8.87%	35.7	10.9
30	1.02	17.6	-13.30%	40.1	15.3
30	1.16	16.1	-20.69%	45.7	20.9
30	1.31	13.2	-34.98%	53.0	28.2
30	1.45	8.52	-58.03%	61.8	37.0



承认书



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR4020BE-270MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25°C

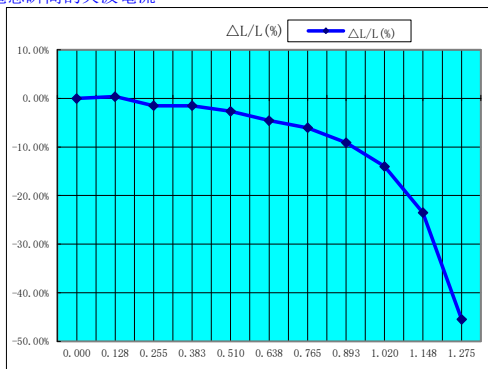
DATE 2019/4/19

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.	27.0 ± 20%	708.5 Max.	1.02 Max.	ΔL/L≤-30%	0.50 ΔT≤40℃ ℃				上限 下限	4.2 3.8	4.2 3.8	2.00 MAX
TEST FREQ.	100KHZ/1V		100KHZ/1V									
1	26.4	488	21.0	-20.45%	OK					4.09	4.02	1.97
2	26.0	477	21.5	-17.31%	OK					4.08	4.00	1.94
3	27.0	482	21.1	-21.85%	OK					4.03	4.01	1.92
4	26.8	488	21.3	-20.52%	OK					4.08	4.07	1.92
5	27.0	487	22.1	-18.15%	OK					4.11	4.01	1.95
6	27.2	478	22.5	-17.28%	OK					4.05	4.02	1.95
7	27.4	492	22.1	-19.34%	OK					4.06	4.06	1.92
8	26.9	495	21.4	-20.45%	OK					4.08	4.05	1.95
9	27.2	487	22.1	-18.75%	OK					4.09	4.02	1.96
10	28.0	498	22.0	-21.43%	OK					4.06	4.03	1.96
AVG.	26.990	487.2	21.71	-19.55%						4.073	4.029	1.944
R	2	21	1.5	4.57%						0.08	0.07	0.05

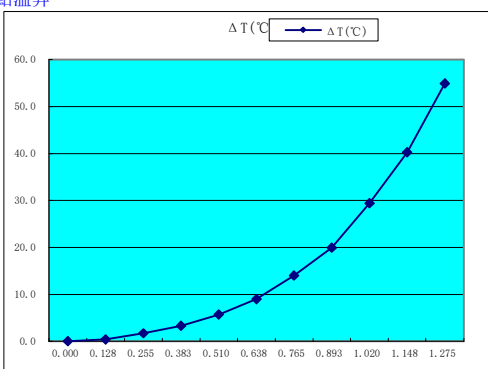
Isat(飽和電流):電感瞬間的突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.000	26.4	0.00%
1	0.128	26.5	0.38%
1	0.255	26.0	-1.52%
1	0.383	26.0	-1.52%
1	0.510	25.7	-2.65%
1	0.638	25.2	-4.55%
1	0.765	24.8	-6.06%
1	0.893	24.0	-9.09%
1	1.020	22.7	-14.02%
1	1.148	20.2	-23.48%
1	1.275	14.4	-45.45%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(°C)	ΔT(°C)
30	0.000	26.9	0.00%	28.3	0.0
30	0.128	26.9	0.00%	28.7	0.4
30	0.255	26.7	-0.74%	30.0	1.7
30	0.383	26.6	-1.12%	31.6	3.3
30	0.510	26.2	-2.60%	34.0	5.7
30	0.638	25.7	-4.46%	37.3	9.0
30	0.765	24.8	-7.81%	42.3	14.0
30	0.893	23.1	-14.13%	48.2	19.9
30	1.020	19.0	-29.37%	57.7	29.4
30	1.148	9.96	-62.97%	68.5	40.2
30	1.275	5.47	-79.67%	83.2	54.9



承 認 書



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR4020BE-330MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25°C

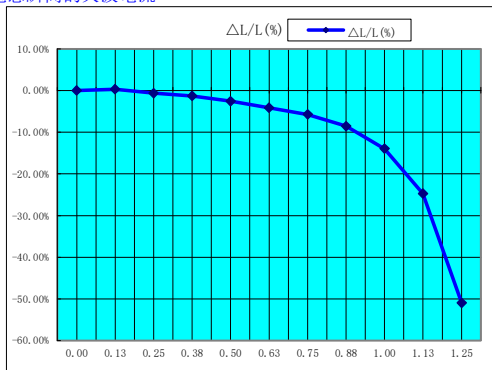
DATE 2019/4/19

TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION						DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	ΔL/L	Irms A				
SPEC.	33.0 ± 20%	745 Max.	0.85 Max.	ΔL/L ≤ -30%	0.49 ΔT ≤ 40°C °C				
TEST FREQ.	100KHZ/1V		100KHZ/1V						
1	31.3	616	28.2	-9.90%	OK			4.09	4.02
2	32.0	599	28.6	-10.63%	OK			4.08	4.00
3	31.8	617	28.2	-11.32%	OK			4.03	4.01
4	32.2	613	28.4	-11.80%	OK			4.08	4.07
5	30.7	618	28.1	-8.47%	OK			4.11	4.01
6	32.5	602	27.5	-15.38%	OK			4.05	4.02
7	31.6	616	26.9	-14.87%	OK			4.06	4.06
8	32.5	607	28.0	-13.85%	OK			4.08	4.05
9	32.1	609	27.5	-14.33%	OK			4.09	4.02
10	31.2	604	27.6	-11.54%	OK			4.06	4.03
AVG.	31.790	610.1	27.9	-12.21%				4.073	4.029
R	1.8	19	1.7	6.92%				0.08	0.07

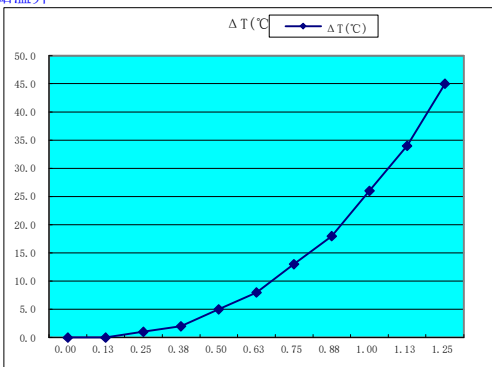
Isat(飽和電流):電感瞬間的突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	31.6	0.00%
1	0.13	31.7	0.32%
1	0.25	31.4	-0.63%
1	0.38	31.2	-1.27%
1	0.50	30.8	-2.53%
1	0.63	30.3	-4.11%
1	0.75	29.8	-5.70%
1	0.88	28.9	-8.54%
1	1.00	27.2	-13.92%
1	1.13	23.8	-24.68%
1	1.25	15.5	-50.95%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(°C)	ΔT(°C)
30	0.00	30.8	0.00%	30.0	0.0
30	0.13	30.7	-0.32%	30.0	0.0
30	0.25	30.5	-0.97%	31.0	1.0
30	0.38	30.1	-2.27%	32.0	2.0
30	0.50	29.7	-3.57%	35.0	5.0
30	0.63	29.2	-5.19%	38.0	8.0
30	0.75	28.6	-7.14%	43.0	13.0
30	0.88	27.6	-10.39%	48.0	18.0
30	1.00	25.6	-16.88%	56.0	26.0
30	1.13	21.0	-31.82%	64.0	34.0
30	1.25	10.4	-66.23%	75.0	45.0



承认书



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR4020BE-390MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25℃

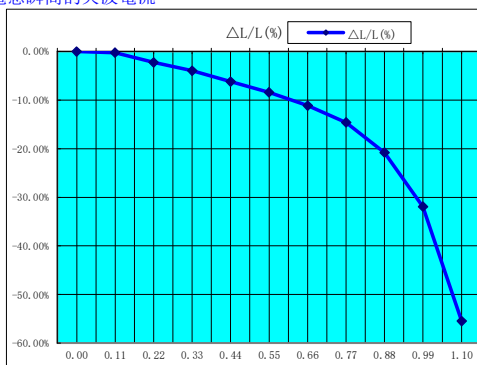
DATE 2019/4/19

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.	39.0 ± 20%	845 Max.	0.82 Max.	ΔL/L≤-30%	0.46 ΔT≤40℃ ℃			上限 下限	4.2 3.8	4.2 3.8	2.00 MAX
TEST FREQ.	1MHz/1V		100KHz/1V								
1	38.1	712	33.0	-13.39%	OK				4.09	4.02	1.97
2	38.4	675	33.2	-13.54%	OK				4.08	4.00	1.94
3	38.6	684	32.9	-14.77%	OK				4.03	4.01	1.94
4	40.6	671	32.1	-20.94%	OK				4.08	4.07	1.92
5	40.9	706	31.5	-22.98%	OK				4.11	4.01	1.95
6	40.2	712	33.9	-15.67%	OK				4.05	4.02	1.95
7	41.2	693	33.6	-18.45%	OK				4.06	4.06	1.92
8	40.2	683	32.5	-19.15%	OK				4.08	4.05	1.95
9	39.2	693	31.9	-18.62%	OK				4.09	4.02	1.95
10	40.2	742	32.5	-19.15%	OK				4.06	4.03	1.96
AVG.	39.760	697.1	32.71	-17.67%					4.073	4.029	1.945
R	3.1	71	2.4	9.60%					0.08	0.07	0.05

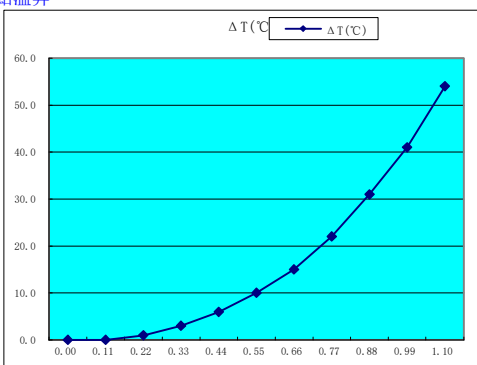
Isat(飽和電流):電感瞬間的突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	40.4	0.00%
1	0.11	40.3	-0.25%
1	0.22	39.5	-2.23%
1	0.33	38.8	-3.96%
1	0.44	37.9	-6.19%
1	0.55	37.0	-8.42%
1	0.66	35.9	-11.14%
1	0.77	34.5	-14.60%
1	0.88	32.0	-20.79%
1	0.99	27.5	-31.93%
1	1.10	18.0	-55.45%



單點溫昇

TME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(℃)	ΔT(℃)
30	0.00	40.2	0.00%	28.0	0.0
30	0.11	40.0	-0.50%	28.0	0.0
30	0.22	39.4	-1.99%	29.0	1.0
30	0.33	38.7	-3.73%	31.0	3.0
30	0.44	37.8	-5.97%	34.0	6.0
30	0.55	36.8	-8.46%	38.0	10.0
30	0.66	35.6	-11.44%	43.0	15.0
30	0.77	33.8	-15.92%	50.0	22.0
30	0.88	30.5	-24.13%	59.0	31.0
30	0.99	23.3	-42.04%	69.0	41.0
30	1.10	11.9	-70.40%	82.0	54.0



承 認 書



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR4020BE-470MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25°C

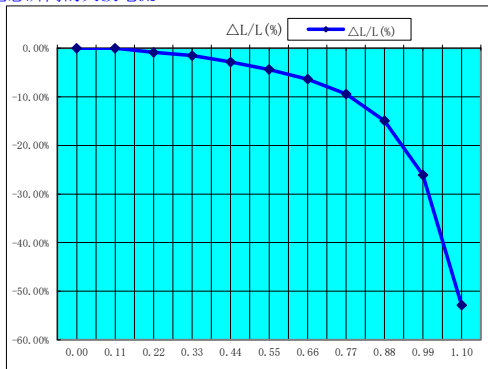
DATE 2019/4/19

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%	923 Max.	0.74 Max.	ΔL/L≤-30%	0.44 ΔT≤40℃ ℃			上限 下限	4.2 3.8	4.2 3.8	2.00 MAX
TEST FREQ.	1MHz/1V		100KHz/1V								
1	47.0	721	39.1	-16.81%	OK				4.09	4.02	1.97
2	47.1	749	39.0	-17.20%	OK				4.08	4.00	1.94
3	47.7	766	38.9	-18.45%	OK				4.03	4.01	1.89
4	47.8	743	38.9	-18.62%	OK				4.08	4.07	1.92
5	48.8	749	38.9	-20.29%	OK				4.11	4.01	1.95
6	46.0	758	37.6	-18.26%	OK				4.05	4.02	1.95
7	46.9	742	37.5	-20.04%	OK				4.06	4.06	1.92
8	45.1	723	38.5	-14.63%	OK				4.08	4.05	1.95
9	46.3	746	38.6	-16.63%	OK				4.09	4.02	1.93
10	45.2	752	38.0	-15.93%	OK				4.06	4.03	1.96
AVG.	46.790	744.9	38.5	-17.69%					4.073	4.029	1.938
R	3.7	45	1.6	5.65%					0.08	0.07	0.08

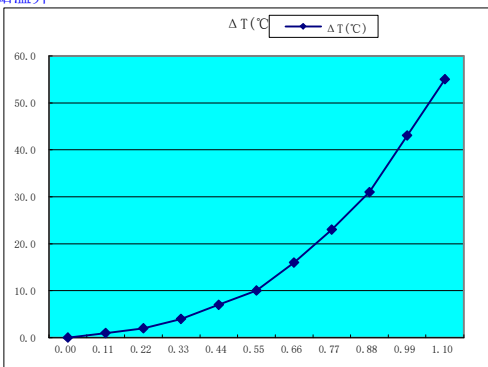
Isat(飽和電流):電感瞬間的突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	45.6	0.00%
1	0.11	45.6	0.00%
1	0.22	45.2	-0.88%
1	0.33	44.9	-1.54%
1	0.44	44.3	-2.85%
1	0.55	43.6	-4.39%
1	0.66	42.7	-6.36%
1	0.77	41.3	-9.43%
1	0.88	38.8	-14.91%
1	0.99	33.7	-26.10%
1	1.10	21.5	-52.85%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(°C)	ΔT(°C)
30	0.00	43.4	0.00%	28.0	0.0
30	0.11	43.4	0.00%	29.0	1.0
30	0.22	43.3	-0.23%	30.0	2.0
30	0.33	43.1	-0.69%	32.0	4.0
30	0.44	42.6	-1.84%	35.0	7.0
30	0.55	42.0	-3.23%	38.0	10.0
30	0.66	41.0	-5.53%	44.0	16.0
30	0.77	39.3	-9.45%	51.0	23.0
30	0.88	35.5	-18.20%	59.0	31.0
30	0.99	24.7	-43.09%	71.0	43.0
30	1.10	12.9	-70.28%	83.0	55.0



承 認 書



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR4020BE-560MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25°C

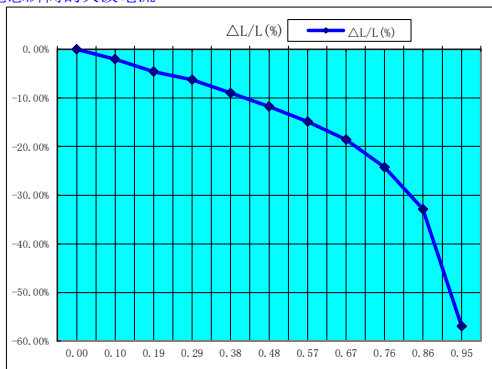
DATE 2019/4/19

TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION						DIMENSION (Unit : mm)			
MEAS. ITEM	L μh	DCR mΩ	Isat A	ΔL/L	Irms A				
SPEC.	56.0 ± 20%	1116 Max.	0.66 Max.	ΔL/L ≤ -30%	0.41 ΔT ≤ 40°C °C				
TEST FREQ.	1MHz/1V		100KHz/1V						
1	54.6	919	44.9	-17.77%	OK			4.09	4.02
2	53.4	928	43.8	-17.98%	OK			4.08	4.00
3	53.5	887	44.5	-16.82%	OK			4.03	4.01
4	51.9	887	43.6	-15.99%	OK			4.08	4.07
5	52.2	895	44.0	-15.71%	OK			4.11	4.01
6	54.1	887	44.6	-17.56%	OK			4.05	4.02
7	53.7	898	43.7	-18.62%	OK			4.06	4.06
8	53.7	927	44.8	-16.57%	OK			4.08	4.05
9	53.6	928	44.7	-16.60%	OK			4.09	4.02
10	54.5	925	45.0	-17.43%	OK			4.06	4.03
AVG.	53.520	908.1	44.36	-17.11%				4.073	4.029
R	2.7	41	1.4	2.91%				0.08	0.07

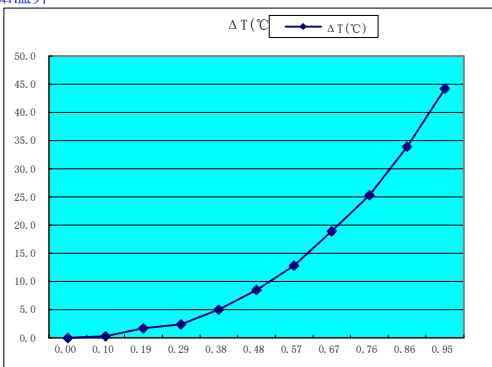
Isat(飽和電流):電感瞬間的突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	54.4	0.00%
1	0.10	53.3	-2.02%
1	0.19	51.9	-4.60%
1	0.29	51.0	-6.25%
1	0.38	49.5	-9.01%
1	0.48	48.0	-11.76%
1	0.57	46.3	-14.89%
1	0.67	44.3	-18.57%
1	0.76	41.2	-24.26%
1	0.86	36.5	-32.90%
1	0.95	23.4	-56.99%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(°C)	ΔT(°C)
30	0.00	54.3	0.00%	30.8	0.0
30	0.10	53.4	-1.66%	31.1	0.3
30	0.19	52.3	-3.68%	32.5	1.7
30	0.29	50.8	-6.45%	33.2	2.4
30	0.38	49.0	-9.76%	35.8	5.0
30	0.48	47.2	-13.08%	39.3	8.5
30	0.57	45.3	-16.57%	43.6	12.8
30	0.67	42.7	-21.36%	49.7	18.9
30	0.76	38.3	-29.47%	56.1	25.3
30	0.86	29.6	-45.49%	64.7	33.9
30	0.95	15.3	-71.82%	75.0	44.2



承 認 書



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR4020BE-680MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

TEST TEMP. 20~25°C

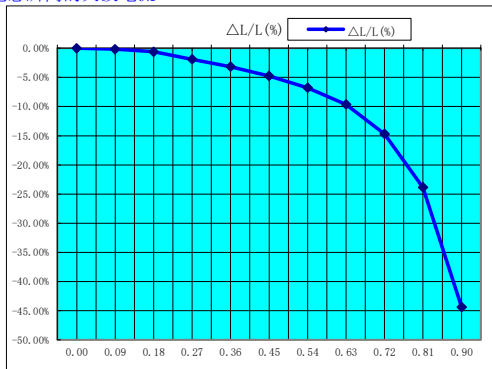
DATE 2019/4/19

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.	68.0 ± 20%	1378 Max.	0.61 Max.	△L/L≤-30%	0.36 △T≤40℃ ℃			上限 下限	4.2 3.8	4.2 3.8	2.00 MAX
TEST FREQ.	1MHz/1V		100KHz/1V								
1	72.0	1110	58.0	-19.44%	OK				4.09	4.02	1.97
2	67.4	1110	54.5	-19.14%	OK				4.08	4.00	1.94
3	72.0	1110	57.8	-19.72%	OK				4.03	4.01	1.95
4	70.8	1150	57.3	-19.07%	OK				4.08	4.07	1.92
5	71.4	1200	56.9	-20.31%	OK				4.05	4.01	1.95
6	72.1	1140	56.8	-21.22%	OK				4.05	4.02	1.95
7	71.1	1140	57.5	-19.13%	OK				4.06	4.06	1.92
8	69.8	1140	58.0	-16.91%	OK				4.08	4.05	1.95
9	67.7	1120	57.2	-15.51%	OK				4.09	4.02	1.89
10	68.8	1150	56.1	-18.46%	OK				4.06	4.03	1.96
AVG.	70.310	1137	57.01	-18.89%					4.067	4.029	1.94
R	4.7	90	3.5	5.71%					0.06	0.07	0.08

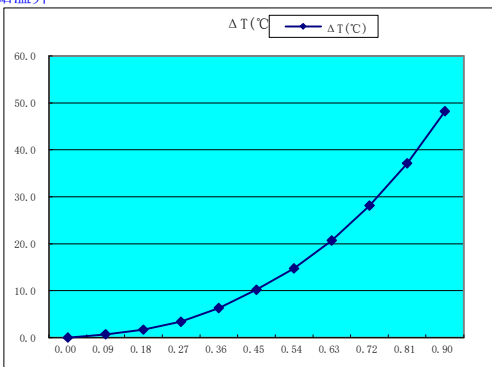
Isat(飽和電流):電感瞬間的突波電流

TME(秒)	Lsat(A)	L(UH)	ΔL/L(%)
1	0.00	63.3	0.00%
1	0.09	63.2	-0.16%
1	0.18	62.9	-0.63%
1	0.27	62.10	-1.90%
1	0.36	61.30	-3.16%
1	0.45	60.30	-4.74%
1	0.54	59.00	-6.79%
1	0.63	57.20	-9.64%
1	0.72	54.00	-14.69%
1	0.81	48.20	-23.85%
1	0.90	35.20	-44.39%



單點溫昇

TIME(S)	Irms(A)	L(uH)	ΔL/L(%)	Temp(°C)	ΔT(°C)
30	0.00	61.1	0.00%	27.3	0.0
30	0.09	61.1	0.00%	28.0	0.7
30	0.18	60.6	-0.82%	29.0	1.7
30	0.27	59.9	-1.96%	30.7	3.4
30	0.36	59.1	-3.27%	33.6	6.3
30	0.45	58.1	-4.91%	37.5	10.2
30	0.54	56.8	-7.04%	42.0	14.7
30	0.63	55.0	-9.98%	48.0	20.7
30	0.72	51.3	-16.04%	55.4	28.1
30	0.81	43.3	-29.13%	64.4	37.1
30	0.90	24.7	-59.57%	75.5	48.2



承 認 書



SPECIFICATION FOR APPROVAL

CUSTOMER

CUSTOMER'S P/N

JINKAI P/N: CKNR4020BE-101MC

PART NO. CKNR4020BE Series

DRAWN NO.

TEST R.H. 80~85%

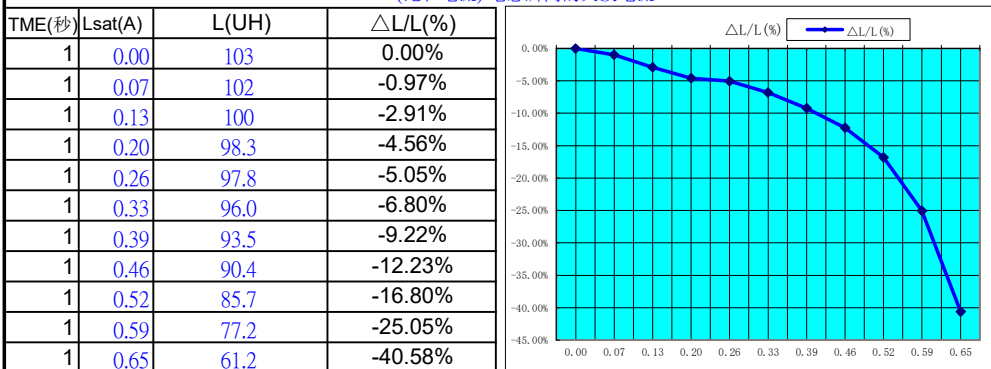
TEST TEMP. 20~25℃

DATE 2019/4/19

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%	1755 Max.	0.52 Max.	△L/L≤-30%	0.31 △T≤40℃ ℃			上限 下限	4.2 3.8	4.2 3.8	2.00 MAX
TEST FREQ.	1MHz/1V		100KHz/1V								
1	108	1640	83.2	-22.96%	OK				4.09	4.02	1.97
2	102	1680	81.8	-19.80%	OK				4.08	4.00	1.94
3	102	1700	81.7	-19.90%	OK				4.03	4.01	1.95
4	102	1660	81.7	-19.90%	OK				4.08	4.07	1.92
5	104	1690	84.5	-18.75%	OK				4.05	4.01	1.95
6	101	1650	81.3	-19.50%	OK				4.05	4.02	1.95
7	102	1630	82.0	-19.61%	OK				4.06	4.06	1.92
8	101	1650	81.2	-19.60%	OK				4.08	4.05	1.95
9	102	1620	81.0	-20.59%	OK				4.09	4.02	1.89
10	109	1670	82.1	-24.68%	OK				4.06	4.03	1.96
AVG.	103.300	1659	82.05	-20.53%					4.067	4.029	1.94
R	8	80	3.5	5.93%					0.06	0.07	0.08

Isat(飽和電流):電感瞬間的突波電流



單點溫昇

