

承 认 书

SPECIFICATION FOR APPROVAL

客 户 名 称

Customer Name : 斯威易发展

产 品 名 称

Name of products: 功率电感

产 品 系 列

Product Series : CKNR4018E-1R5M

承 认 书 编 号

Specification No. : KSG150414002

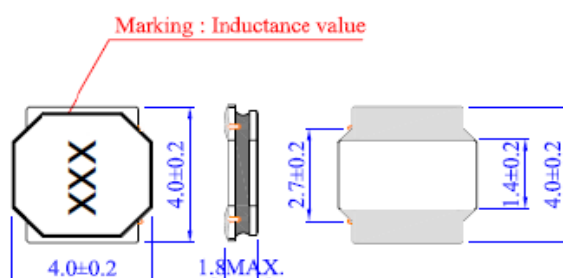
客户料号 Customer P/No.	尺 寸 Size	产品规格 Product Specification
	4018	CKNR4018E-1R5M 1.5 μ H \pm 20% (3.3A)
备注Note		
客户确认 Customer Sign & Chop		

深 圳 市 金 盛 浩 科 技 有 限 公 司
SHENZHEN KINGSINGO TECHNOLOGY CO., LTD.

SPECIFICATION FOR APPROVAL

CUSTOMER:	斯威易发展	PAGE:	1/5
CUSTOMER P/N:		REVISION:	A
KSG P/N:	CKNR4018E-1R5M	DATE:	2015-4-14
DRAWN NO.:	KSG150414002		

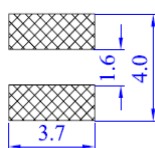
SHAPE & DIMENSION (UNIT:mm)



Marking Code: **1R5** Size: Color: typeface:

PAD LAYOUT(MM):

Recommended land pattern



ELECTRICAL SCHEMATIC:

ELECTRICAL SPECIFICATION

MEAS. ITEM	SPEC.	TEST FREQ.	CONDITIONS
L	1.5 μ H \pm 20%	100KHz/1V	Ta=25°C , Idc=0A
DCR	52 m Ω Max.		Ta=25°C
Isat	3.3 A Max.	100KHz/1V	$\Delta L/L \leq 30\%$

GENERAL SPECIFICATION

Electrical specifications : at 25°C

Operation Temperature : -40~+125°C

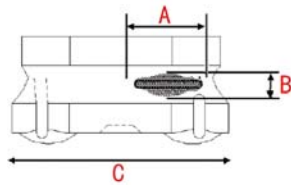
Storage Temperature : -40~+125°C

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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 $B \geq C/2$

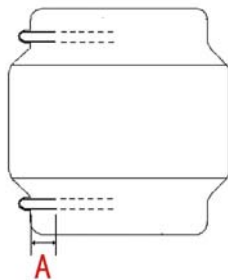
②Length direction(dimension B):Dimension b is not specified

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 2.0mm and below.



①Acceptable when $A \leq 0.6\text{mm}$

②Nonconforming when $A > 0.6\text{mm}$

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RELIABILITY TEST

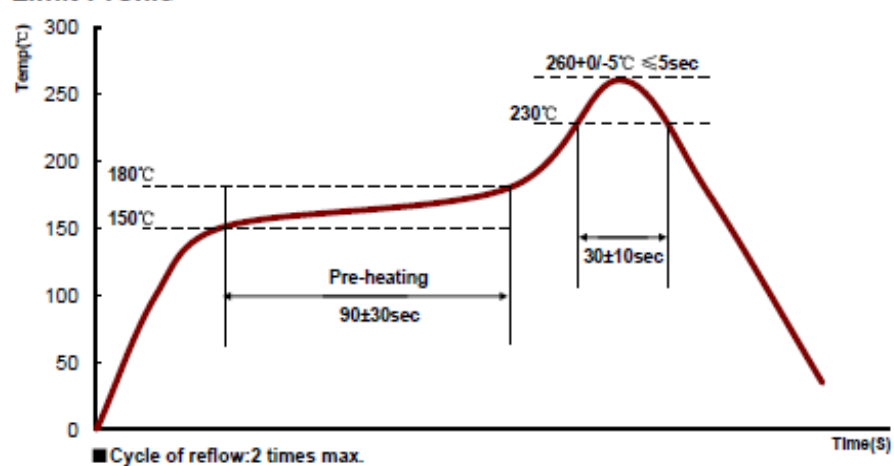
Test Items	Test Conditions	Criteria
1.Low temperature storage	Placed at -40℃ for 500 hours,then measured at room ambient temperature after placing 24 hours.	Inductance shall be within $\pm 10\%$ of the initial value.
2.High temperature storage	Placed at +125℃ for 500 hours,then measured at room ambient temperature after placing 24 hours.	Inductance shall be within $\pm 10\%$ of the initial value.
3.Thermal shock	-40℃, 30min.~+125℃,30min,500hours	Inductance shall be within $\pm 10\%$ of the initial value.
4.Humidity resistance	Placed at 90 to 95%RH,+50℃ 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 >100Mohm 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:10~500Hz Amplitude:1.5mm or 10G Sweep time:1oct/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 2sec.	No detachment of terminal pin and no breakage of wire.
8.Soldering heat resistance	Dip inductor's terminal in solder bath of follwing conditions: 1)260 \pm 5℃,10 \pm 1sec, 2)350 \pm 10℃,3.5 \pm 0.5sec	Inductance shall be within $\pm 10\%$ of the initial value. Appearance:No damage

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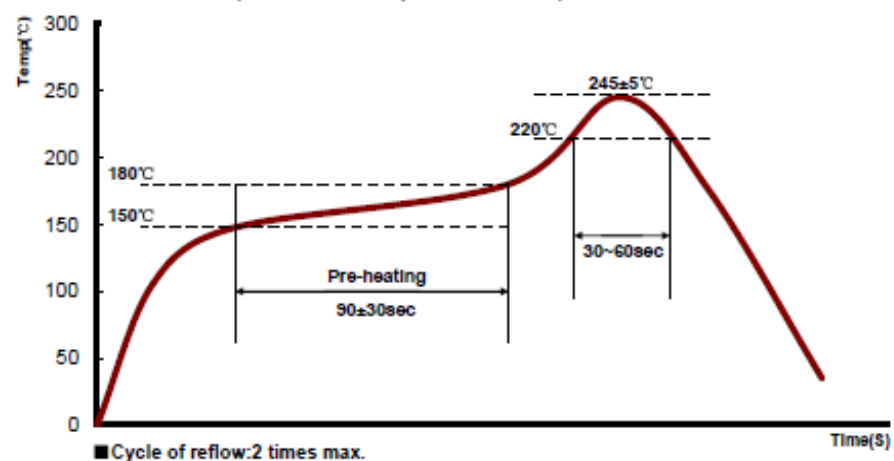
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REFLOW-PROFILE

Limit Profile



Standard Profile (for EOC Solder paste **S70G-HF**)



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CUSTOMER:	斯威易发展	PAGE:	5/5
CUSTOMER P/N:		TEST R.H:	≤85%
KSG P/N:	CKNR4018E-1R5M	TEST TEMP:	20~25℃
DRAWN NO.:	KSG150414002	DATE:	2015-4-14

TEST DATA FOR PREPRODUCTION SAMPLE												
TEST RESOLUTION									DIMENSION (Unit : mm)			
MEAS.												
ITEM	μH	mΩ							长	宽	高	
SPEC.	1.5	52							MAX	MAX	MAX	
	±	Max.							4.2	4.2	1.8	
	20%											
TEST	100KHz/1V								mm	mm	mm	
FREQ.												
1	1.46	37.9							4.00	4.01	1.76	
2	1.50	38.4							3.99	3.97	1.76	
3	1.43	38.3							4.01	4.01	1.72	
4	1.46	38.1							4.02	4.00	1.75	
5	1.45	38.2							4.05	4.00	1.69	
6	1.42	39.0										
7	1.45	39.0										
8	1.45	37.0										
9	1.42	38.6										
10	1.45	39.0										
AVG.	1.449	38.35										
R	0.08	2										

DRAWN BY	CHECKED BY	APPROVED BY
