



川磊电子科技
ThreeLayer Technologies, Inc.
專業電感製造商

南充新川电子科技有限公司

ThreeLayer Scientific-Technics Co.,Ltd



产品承认书

SPECIFICATION FOR APPROVAL

客户名称 -----
CUSTOMER NAME.

产品类型 SMD Power Inductors
PRODUCT TYPE

客户料号 -----
CUSTOMER P/N

川磊料号 CLNR-5020 SERIES
OURS P/N

文件编号 SP-21072149
FILE NO.

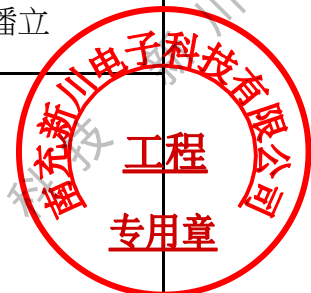
客户承认/CUSTOMER ACCEPTED

承认 APPROVED	确认 CHECKED	承办 DESIGN

批注/REMARK

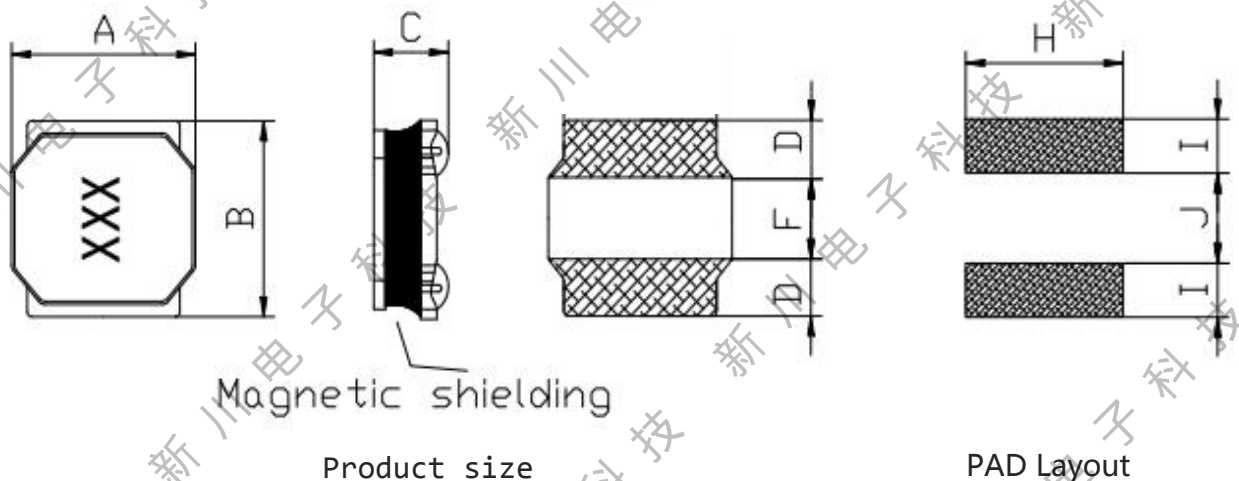
批准 APPROVED	确认 CHECKED	作成 DESIGN
程志华	陈尧	潘立

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客户名称 CUSTOMER	-----	客户品名 CUSTOMER P/N	-----	版别 REV.	1.0
产品类型 PRODUCT TYPE	SMD Power Inductors	新川品名 OURS P/N	CLNR-5020 SERIES	文件编号 FILE NO.	SP-21072149

一.尺寸图/DIMENSION (单位/UNIT : mm)



ITEM	A	B	C	D	F	H	I	J	
DIM	5.0	5.0	2.0	1.5	2.0	5.2	1.7	1.8	
TOLE	±0.2	±0.2	Max	Typ	Typ	Typ	Typ	Typ	

二.电路图/CIRCUIT DIAGRAM



三.注意事项/NOTE :

1.印字：黑色

四.电气特性/ELECTRICAL CHARACTERISTIC

Part Number	Inductance (uH)	Tolerance	Test Frequency(Hz)	DCR (mΩ) Max.	IDC1 (A) Max.	IDC2 (A) Max.	MARK
CLNR-5020-R47□	0.47	N	100KHZ/1V	12	6.10	5.00	R47
CLNR-5020-1R0□	1.0	N	100KHZ/1V	21	4.10	3.80	1R0
CLNR-5020-1R5□	1.5	N	100KHZ/1V	26	4.10	3.20	1R5
CLNR-5020-2R2□	2.2	N	100KHZ/1V	35	3.20	2.70	2R2
CLNR-5020-3R3□	3.3	N	100KHZ/1V	48	2.55	2.30	3R3
CLNR-5020-4R7□	4.7	M N	100KHZ/1V	60	2.50	2.20	4R7
CLNR-5020-6R8□	6.8	M N	100KHZ/1V	90	2.05	1.80	6R8

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四.电气特性/ELECTRICAL CHARACTERISTIC

Part Number	Inductance (uH)	Tolerance	Test Frequency(Hz)	DCR (mΩ) Max.	IDC1 (A) Max.	IDC2 (A) Max.	MARK
CLNR-5020-8R2□	8.2	M, N	100KHZ/1V	98	1.85	16.50	8R2
MNR-5020-100□	10	M, N	100KHZ/1V	120	1.70	1.55	100
MNR-5020-150□	15	M, N	100KHZ/1V	165	1.35	1.25	150
MNR-5020-220□	22	M, N	100KHZ/1V	260	1.15	1.10	220
MNR-5020-330□	33	M	100KHZ/1V	400	0.92	0.90	330
MNR-5020-470□	47	M	100KHZ/1V	580	0.77	0.75	470
MNR-5020-680□	68	M	100KHZ/1V	740	0.65	0.64	680
MNR-5020-101□	100	M	100KHZ/1V	1100	0.53	0.40	101

- (1) Specify the inductance tolerance, K(±10%),M(±20%),N(±30%)
- (2).IDC1:Base on temp.rise & ΔL/L0A 30% Typ
- (3).IDC2:Temp.rise 40°C Typ
- (4).Operating temp.: -40°C to +125°C
- (5).Storage temp.: -20°C up to +40°C, 75% RH max.

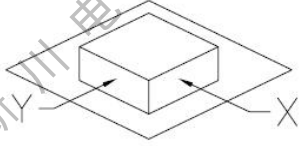
五.材料清单/MATERIAL LIST

NO.	ITEM	DESCRIPTION
1	CORE	FERRITE
2	WIRE	P180 G1
3	ADHESIVE	NR-3614
4	TIN	107H
5	INK	BLACK

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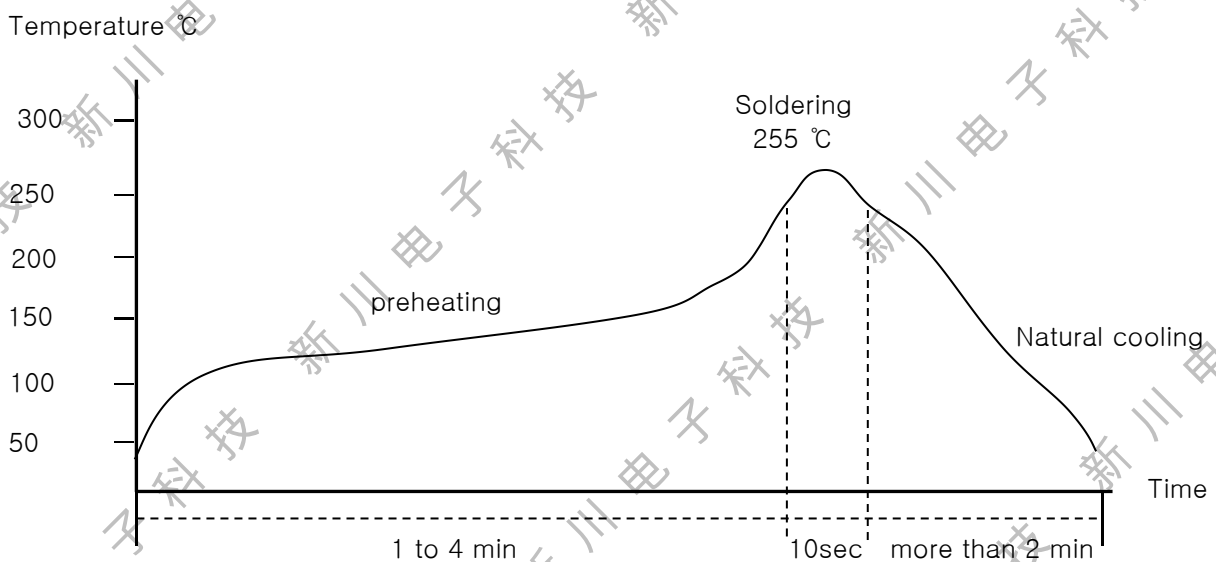
六.可靠性测试/RELIABILITY TESTING

Operating Temperature	- 40 to +125 °C (Contain Heating coil)
Appearance Inspection	No external defects by visual inspection
Terminal Strength	After soldering , between copper plaet and terminals of coils , push in two directions of X , Y with standing 10N(1.02kg) for10+/-2 sec. Terminal should not peel off. (Refer to figure at right)
Heat endurance of reflow soldering	Refer to figure
Insulating resistance	Over 100 MΩ at 100V D.C . between wire and core
Dielectric Strength	Apply at 0.5KV 3mA for 1 minute between wire and core
Temperature characteristics	Inductance coefficient (0~2,000) × 10 / °C (- 40~ + 125 °C)
Humidity characteristics	Inductance deviation within ± 10% , after 96 hours in 90~95% relative humidity at 40 ± 2 °C and 1 hours drying under normal condition



A test is made under the above mentioned condition , and it is kept for 2 hours in the normal

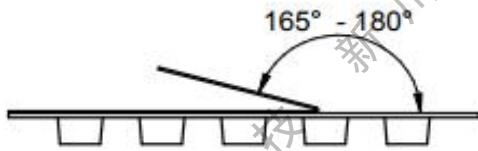
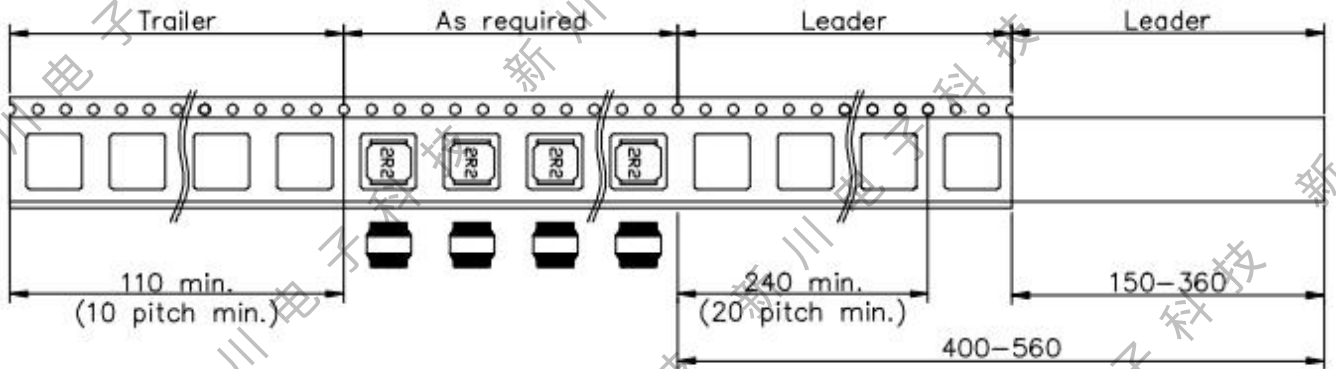
IR Reflow profile



Temperature and humidity . After that , no mechanical and electrical defect should be found .

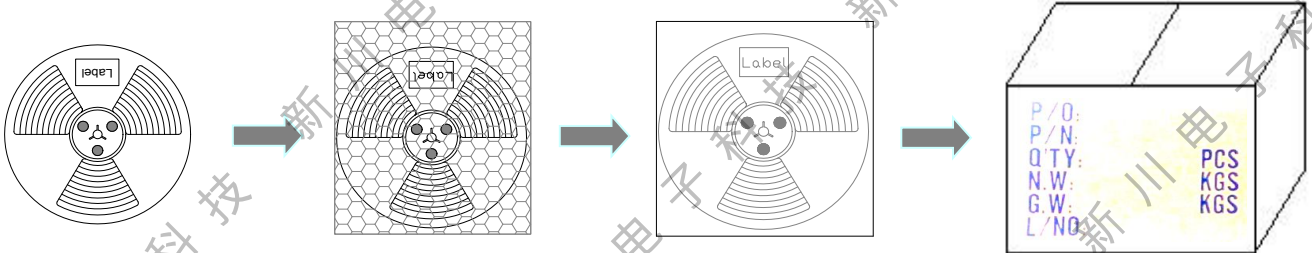
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七.编带规格/TAPING SPECIFICATIONS



Tape width	Distance	Pull-of force
12 mm	8 mm	10~120g

八.包装方式/PACKING LIST



轮盘：13'(直径330mm)
数量：3000PCS/盘

PE袋
数量：3000PCS/袋

内盒
数量：12000PCS/盒

外箱，数量：60000PCS/箱
不足整箱用内盒或填充物
装满