



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

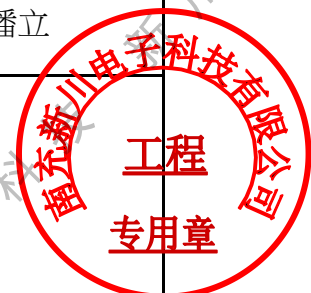
SPECIFICATION FOR APPROVAL

客户名称 <i>CUSTOMER NAME.</i>	-----
产品类型 <i>PRODUCT TYPE</i>	Shielded Power Inductors
客户料号 <i>CUSTOMER P/N</i>	-----
川磊料号 <i>OURS P/N</i>	CLPS-4020 SERIES
文件编号 <i>FILE NO.</i>	SP-18102203

客户承认/ <i>CUSTOMER ACCEPTED</i>		
承认 <i>APPROVED</i>	确认 <i>CHECKED</i>	承办 <i>DESIGN</i>
批注/ <i>REMARK</i>		

批准 <i>APPROVED</i>	确认 <i>CHECKED</i>	作成 <i>DESIGN</i>
程志华	陈尧	潘立

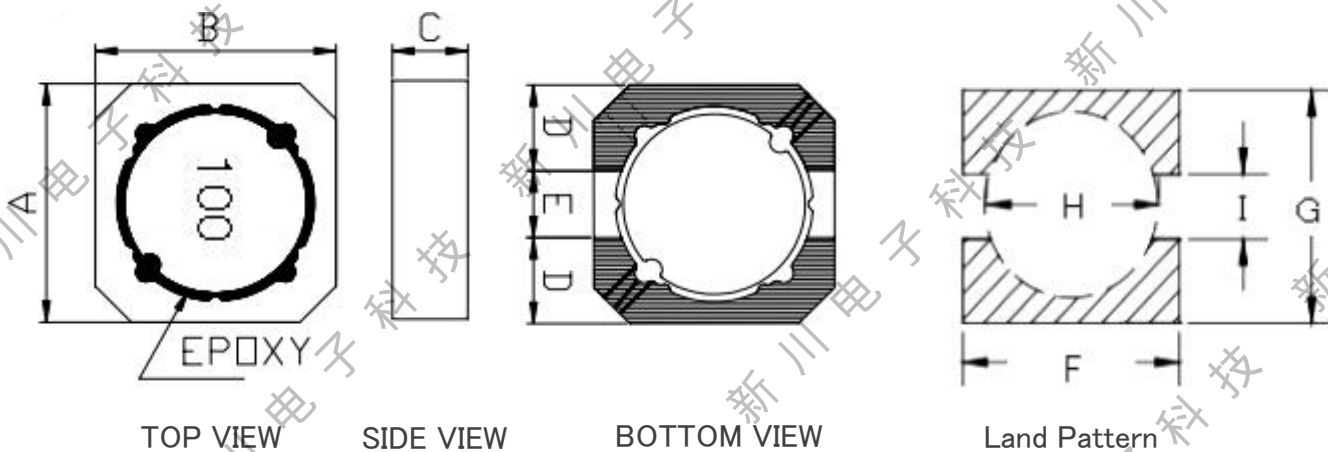
生产工厂：南充川磊电子科技有限公司  
 销售公司：南充新川电子科技有限公司  
 业务专线：0817-2111163/18681773184  
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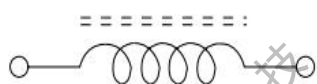
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一.尺寸图/DIMENSION (单位/UNIT : mm)



ITEM	A	B	C	D	E	F	G	H	I
DIM	4.0	4.0	2.0	1.1	1.8	4.4	4.4	2.9	1.8
TOLE	±0.2	±0.2	Max	Typ	Typ	Typ	Typ	Typ	Typ

二.电路图/CIRCUIT DIAGRAM



三.注意事项/NOTE :

1.印字：白色Gulim字体

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
CLPS-4020-1R8□	1.8	N	100K/0.1V	51	1.97	2.37	1R8
CLPS-4020-2R2□	2.2	N	100K/0.1V	59	1.72	2.19	2R2
CLPS-4020-3R3□	3.3	N	100K/0.1V	78	1.52	1.94	3R3
CLPS-4020-4R7□	4.7	N	100K/0.1V	98	1.24	1.71	4R7
CLPS-4020-6R8□	6.8	N	100K/0.1V	131	1.05	1.47	6R8
CLPS-4020-100□	10	M N	100K/0.1V	185	0.85	1.00	100
CLPS-4020-150□	15	M N	100K/0.1V	280	0.72	0.90	150
CLPS-4020-220□	22	M N	100K/0.1V	431	0.56	0.80	220
CLPS-4020-330□	33	M N	100K/0.1V	628	0.47	0.69	330
CLPS-4020-470□	47	M N	100K/0.1V	934	0.39	0.56	470
CLPS-4020-680□	68	M N	100K/0.1V	1200	0.32	0.50	680

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Part Number	Inductance (uH)	Tolerance	Test Frequency (Hz)	DCR (mΩ) Max	IDC1 (A) Max.	IDC2 (A) Max.	MARK
CLPS-4020-101□	100	M	100K/0.1V	1400	0.26	0.40	101
CLPS-4020-221□	220	M	100K/0.1V	3200	0.18	0.30	221
CLPS-4020-561□	560	M	100K/0.1V	6600	0.12	0.20	561

(1).Specify the inductance tolerance, K(±10%), L(±15%), M(±20%),N(±30%)

(2).IDC1:Base on temp.rise &  $\Delta L/L0A \leq 30\%$  MAX

(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.

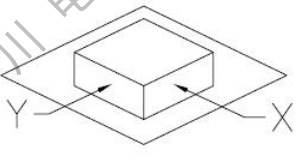
五.材料清单/MATERIAL LIST

NO.	ITEM	DESCRIPTION
1	CORE	FERRITE
2	WIRE	P180 Grd1
3	ADHESIVE	XNR3614
4	INK	WHITE

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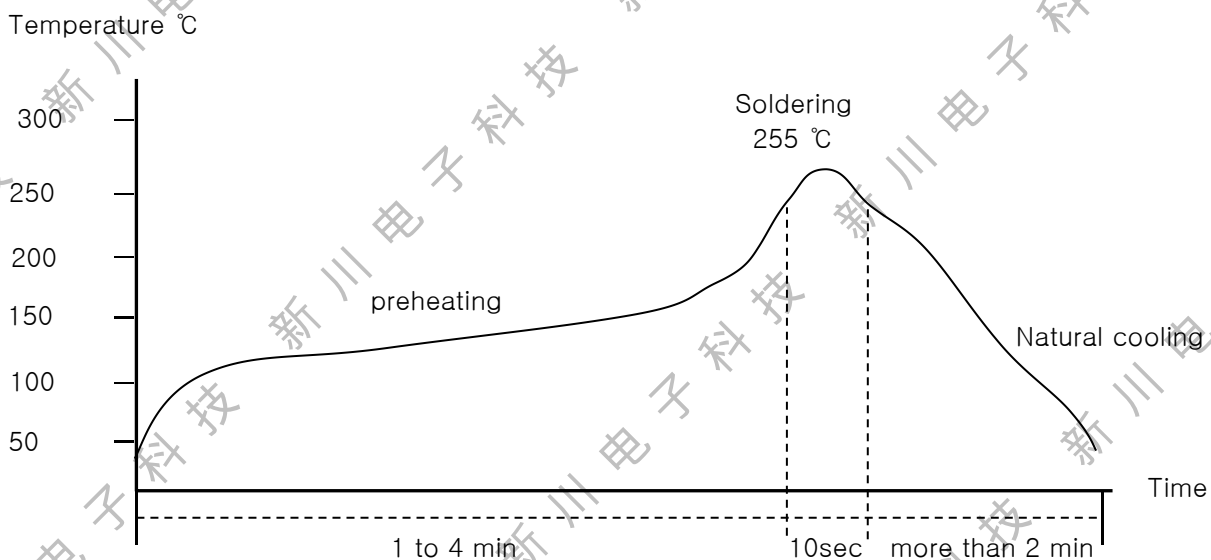
六.可靠性测试/RELIABILITY TESTING

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 <sup>-4</sup> / °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

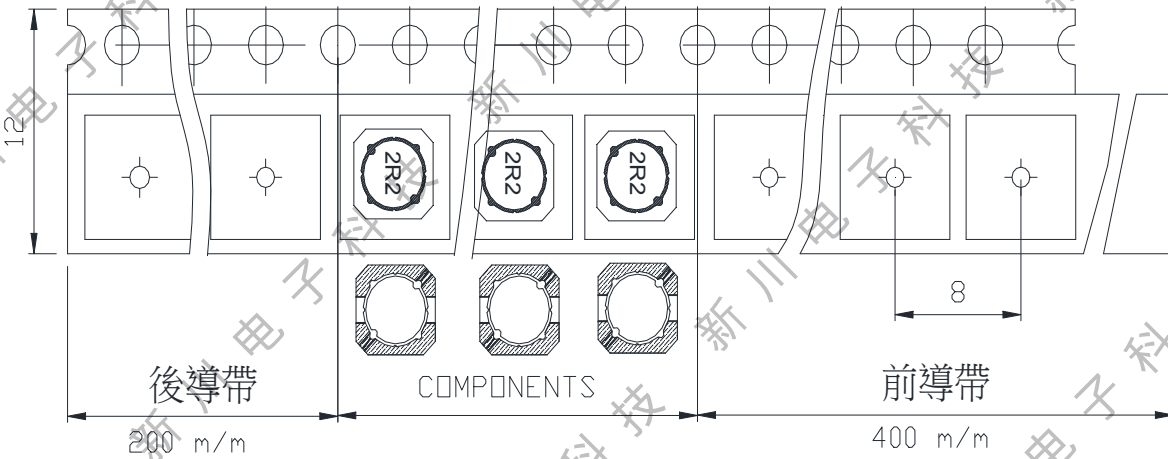


Temperature and humidity . After that , no mechanical and electrical defect should be found .

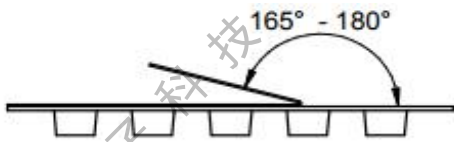
承认书/SPECIFICATION FOR APPROVAL

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七. 编带规格/TAPING SPECIFICATIONS

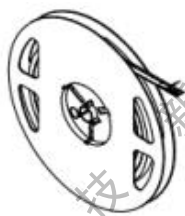


Transparent carrier and cover tape/透明载带和自粘上带

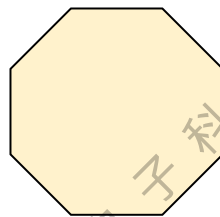


Tape width	Distance	Pull-of force
12 mm	8 mm	10~120g

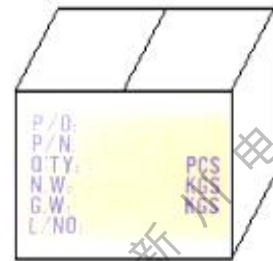
八. 包装方式/PACKING LIST



轮盘：7'(直径178mm)  
数量：1000PCS/盘



内盒/PE袋  
数量：4000PCS/盒



外箱，数量：40000PCS/箱  
不足整箱用内盒或填充物装满