产品承认书
SPECIFICATION FOR APPROVAL

客户名称:
CUSTOMER

我司料号:
OUR PART NO. **XRPQ2014J-1R4M**

我司品名:
OUR PART NAME **PQ inductor**

送样日期:
DATE SAMPLES _____ 数 量:
QUANTITY _____

制造确认 MANUFACTURER APPROVE		
拟制 DRAWN	审核 CHECKED	确认 APPROVED
Hu Fangting	RaoPing	LiZhengxiong

客户确认 CUSTOMER APPROVE

客户名称 CUSTOMER NAME:

客户料号 CUSTOMER P/N:

规格型号 DESCRIPTION: XRPQ2014J 1.4uH ±20% 60A

检查結果: □ 合格 □不合格 签名及盖章:

INSPECT RESULT ACCEPT REJECT SIGNATURE AND STAMP

说明 REMARK:

如对本承认书内容有异议请提出或标记发送至我司，本承认书在未收到异议回复时于本承认书提供一周后生效。

If you have any objection to the contents of this acknowledgment, please raise it or send the mark to us. The acknowledgment will become effective one week after the acknowledgment is provided in the absence of any objection.

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产品承认书
SPECIFICATION FOR APPROVAL

客户名称 CUSTOMER		日期 DATE	2026/3/15
客户物料编号 CUSTOMER P/N		客户规格型号 DESCRIPTION	XRPQ2014J 1.4uH ±20% 60A
我司物料编号 OUR PART NO	XRPQ2014J-1R4M	我司品名 OUR PART NAME	PQ inductor

修订记录 Revision record

日期 Date	修改内容 Modify the content	审核 Checked	确认 Approved
2026/3/15	首次发行First issue	ZhongCuilan	HuangChuangen

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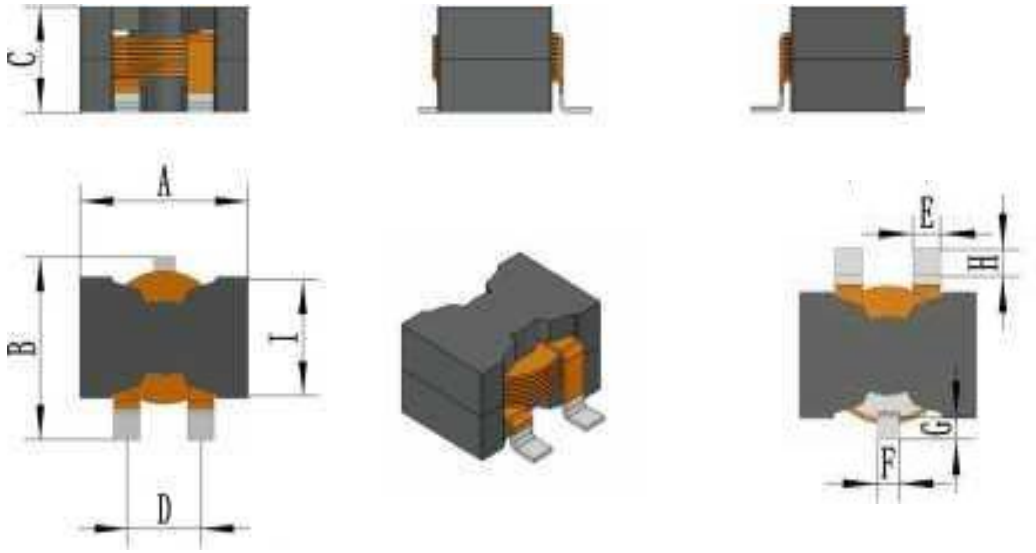
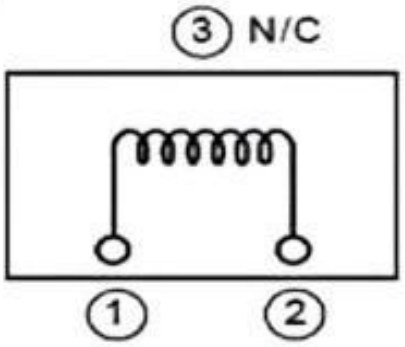
外观尺寸 Appearance of size：

单位 Unit：mm

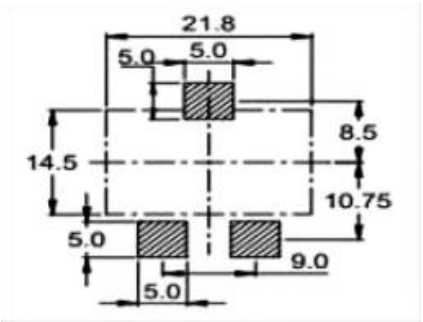


A	B	C	D	E	F	G	H	I
21.5MAX	22.5MAX	14.5MAX	9.0 ±0.5	3.2 ±0.5	2.5±0.5	2.5±0.5	3.0±0.5	14.0±0.5

2.Schematic 原理图：



3.焊接图RECOMMENDED PCB LAYOUT：



4.Electrical characteristics:

(1) . All test data is based on 25°C ambient.

(2) . DC current(A)that will cause an approximate △T40C.

(3) . DC current(A)that will cause L0 to drop approximately 30%Typ.

(4) . Operating temperature range: -40C~+ 125C.

(5) .The part temperature (ambient + temp rise)should not exceed 125C under worst case operating conditions. circuit design, component.PWB tracesize and thickness,airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the den application.

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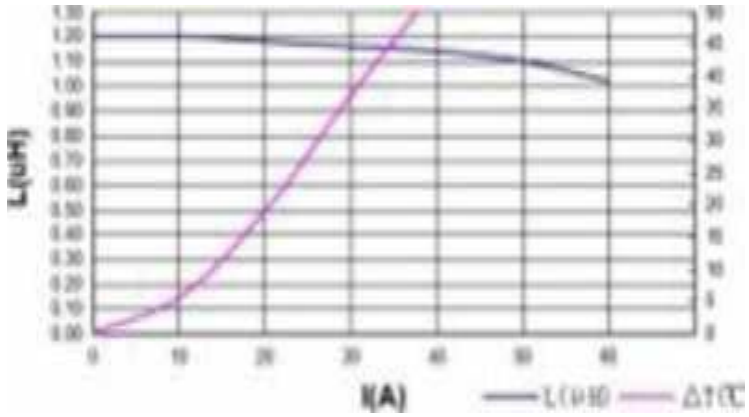
电性能参数.ELECTRICAL REQUIREMENTS：

Part Number 型号	Inductance (uH) 电感量 At 100KHz/0.25V	精度 precision （±）	直流电阻 DCR(mΩ)Max	Saturationcurrent(A)饱和电流	Temperature risecurrent (A)温升电流
XRPQ2014J-1R4M	1.4	20%	2.3	60	28

Saturation current VS temperature rise current curve：



▲Features:

• Assemblage design, sturdy structure.

装配设计，结构坚固。

• High inductance, high current, low magnetic loss, low ESR, small parasitic capacitance

高电感、大电流、低磁损耗、低 ESR、小寄生电容

• Temperature rise current and saturation current is less influenced by environment.

温升电流和饱和电流受环境影响较小 。

• Operating temperature : -40~+125 (Including coil's temperature rise-40~+125 C

可靠性测试
Reliability Testing

8.RELIABILITY TEST:		
TEST ITEM	**SPECIFICATION**	**TEST CONDITION**
Withstanding voltage test	After test, inductors shall have noevidence of electrical andmechanical damage.	AC voltage of 100v and AC current of 1mAapplied between inductor's terminal and core for 3secs
Resistance to soldering heat	1. Inductor shall have no evidence of electrical and mechanicaldamage. 2. Inductance shall not change more than ±5%. 3. Q shall not change more than ±20%.	a. Temp: 260±5°c b. Time: 10±1.0 secs
Solderability test	The terminal shall be at least 95% covered with solder.	After fluxing, the terminal shall be dipped in a melted solder bath at 245±5 C for 4±1.0 secs.
High temperature & high humidity test	The anti-erosion quality of the surface and the specimen's inductance shall not change from the initial value within ±10%	a. Test condition 1) Temp.:85°C, R.H.:85% 2)Time:144±2hours b. Measurement methods: The experimental component should be put at normal condition for 2 hours then to measureagain after test
Salt spray test		a. Test condition 1) Temp.:35±2 C 2)Time:48±2hours 3)Salt solution PH:6.5~7.2 b. Measurement methods: The experimental component should be put at normal condition for 2 hours then to measureagain after test
Vibration test	1. Inductance shall be within ±10% of the initial value. 2. Appearance:no damage	a. Frequency: 10 to 55HZ b. Amplitude: 1.5mm c. Direction and time: X, Y and Z directions for 2 hours each.
Free fall test	No mechanical damage shall be noticed.	Drop 5 times on a concrete floor from lm the height
Temperature Cycling test	1. Inductance shall be within ±10% of the initial value 2. Appearance:No damage	a. Test condition 1)Temp. :-55C,time:30±3min 2)Temp.:+125C,time: 30±3min 3)Cycles times:12 cycles b. Measurement methods: The experimental component should be put at normal condition for 2 hours then to measure again after test

可靠性测试
Reliability Testing

TEST ITEM	SPECIFICATION	TEST CONDITION
High Temperature resistance test	1. Inductance shall be within ±10% of the initial value 2. Appearance:No damage	a. Test condition 1)Applied ratedcurrent 2) Temp.:85C±2 C 3) Test time:1000+24/-0H b. Measurement methods: The experimental component should be put at normal condition for 24 hours then to measure again after test.
Low temperature resistance test		a. Test condition 1) Temp.:-55C±2 C 2) Test time:1000+24/- 0H b. Measurement methods: The experimental component should be put at normal condition for 24 hours then to measure again after test.

We have suggested the storage period of lead-free product should not over 6 months.

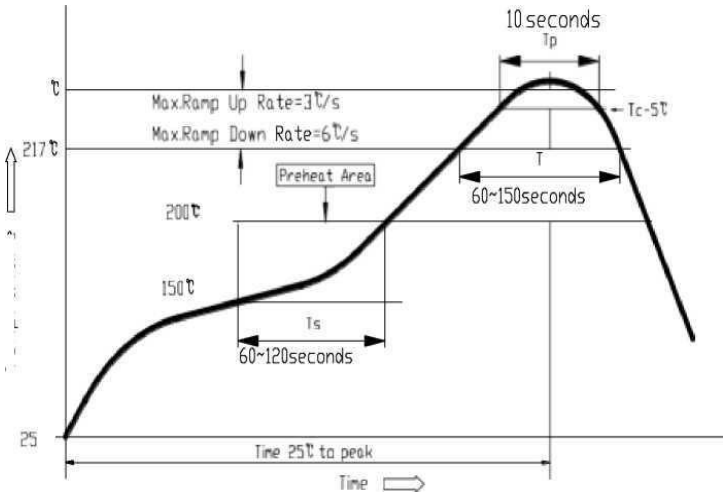
9.SOLDERING CONDITIONS:

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 solding 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: 350C ;

2 Soldering iron power outputW30W;

3 Diameter of soldering iron end: W 1.0mm;

4 Soldering time: <3 s