承认书

SPECIFICATION FOR APPROVAL

客户 Customer	
客户料号 Customer P/N	
安规型号 Safety Model	
品名 Description	**Differential Mode Inductor**
产品型号 Product Model	**T031-125-80uH±10%(CR2985-S)**
图纸编号 Drawing No.	**2024041201**
版本 REV	**A0**

出图 DRAWING		
制作 Prepared	**审核 Checked**	**批准 Approved**
夏欢	郭亦雄	陈林
DATE : 2024-04-12		

客户承认 CUSTOMER APPROVE

惠州市长瑞工贸有限公司

（Huizhou Changrui Industry and Trade Co., Ltd.）

惠州市长瑞智造电子有限公司

（Huizhou Changruizhizao Electronics Co., Ltd.）

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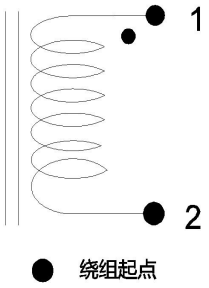
CHANGE LIST 变更履历

DATE 日期	VERSION 版本	CHANGE CONTENT 修订内容	PREPARED 制定	CHECKED 审核
2024/4/12	A0	Initial release	夏欢	郭亦雄

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1. SCHEMATICS (接线图）：



2. WINDING CONSTRUCTION（绕组结构）：

ORDER	S - F 开始 - 结束	WIRE SIZE 线径	TURNS 圈数	NOTES 说明
N1	1 - 2	UEW-F Φ0.3mm 本色	38.5Ts REF	均密绕

Not

3. ELECTRICAL SPECIFICATION (at 25°C) 电性规格

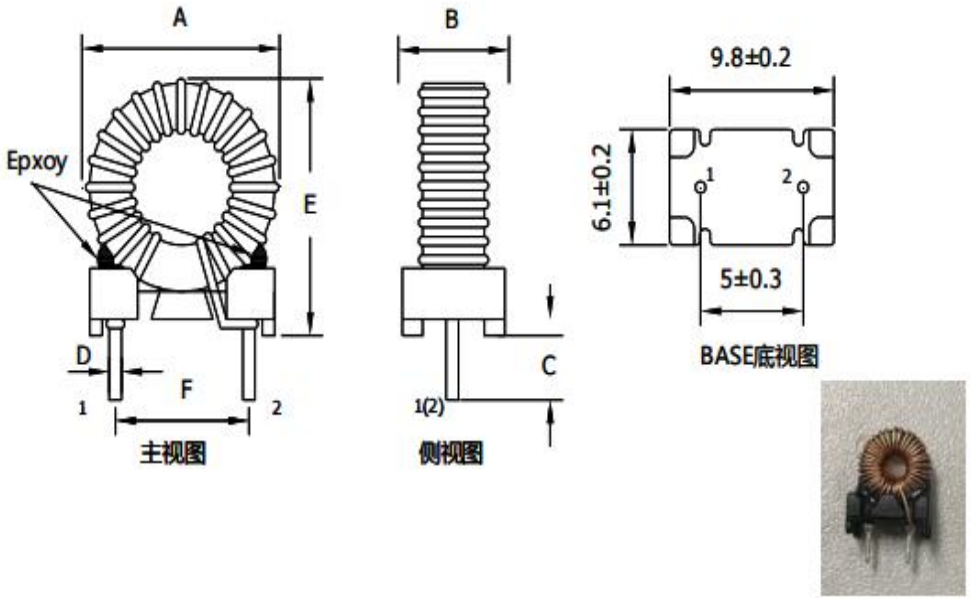
Test Item 测试项目	SPEC 规格	Test Condition 测试条件	Test Instruments 测试仪器
Inductance L 电感	80uH ±10%	10kHz, 0.25V,R100Ω	ZX1373X-12A
DCR 直流阻抗	160mΩ max	at25℃	TH2512B
HI-POT 耐压	160mΩ max	at25℃	ZX9320S-4
LAYER SHORT 层间短路	600VAC	3mA/3S/50Hz ACR:7 COILS~CORE	2882A-5
Isat 饱和电流	0.7A	L≥50uH	ZX1373X-12A
Irms温升电流	1.5A	△T≤40℃	ZX1373X-12A
Impendance Z 阻抗（谐振点）	3000Ω min	7±3MHz	4395A
Impendance Z1 阻抗	400Ω min	2MHz	
Impendance Z2 阻抗	400Ω min	20MHz	

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4. DIMENSIONS 尺寸: (Unit:mm)



SPEC. (mm)	
A	10.3max
B	6.5max
C	2.7±0.3
D	0.6±0.1
E	12.8max
F	5.0±0.3

Note: 产品密绕，点胶固定底座与线包，成品需含浸。

5. DEFINITION OF PRODUCT NAME 产品名称定义:

T	031-125	80uH	±10%			
A	B	C	D	E	F	G

A.产品类型：环形
B.磁芯尺寸规格
C.感量
D.公差
E.
F.
G.

6. GENERAL SPECIFICATON :

a. Storage temperature : -25°C ~ 85°C, R.H. : 30% ~ 70%
b. Operating temperature : -40°C ~ +125°C
c. Moisture sensitivity level (MSL) 2 (1 year floor life at <30°C/85% relative humidity)
d. Failures in time(FIT)/Mean time between failures(MTBF) 38 per billiion hours/26,315,789 hours, calculated per Telcordia SR-332

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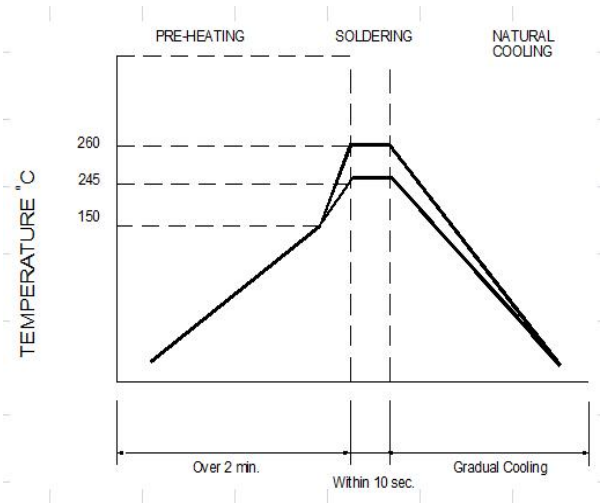
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7. MATERIAL LIST 材料清单:

No.	Item	Material Description 材料描述	Manufacturer 制造商	TEMP 温度	UL File UL档案号	Remark
1	CORE	T031-125	Boluo Chenxing Electronic Technology Co., LTD			V
2	WIRE	UEW-F Φ0.3mm 本色	DONGGUAN YIDA NDUSTRY Co,LTD.	155℃	E344055	
		UEW-F Φ0.3mm 本色	HONGQI GROUP JIANGXI COPPER CO.,LTD.	155℃	E355168	
3	VARNISH	JX-1150(*)	Yueyang GREEN Technology Co., Ltd.	130℃	E303754	
4	EPOXY	HCJ800A/B	DONG GUAN HONG CHUANG ELECTRONIC MATERIAL CO, LTD			
		3300A/B-1	DONGGUAN EATTO ELECTRONIC MATERIAL CO.,LTD.	130℃	E218090	
5	Sn	SC07	Guangdong Zhongshi Metal Co., Ltd			
6	BASE	T375HF	Chang Chun Plastics Co., Ltd	150℃	E59481	

Note : Core source marded "V" means design & verify ok. 磁芯打“V” 表示设计验证Ok.

8. SOLDERING CONDITIONS 焊锡条件:

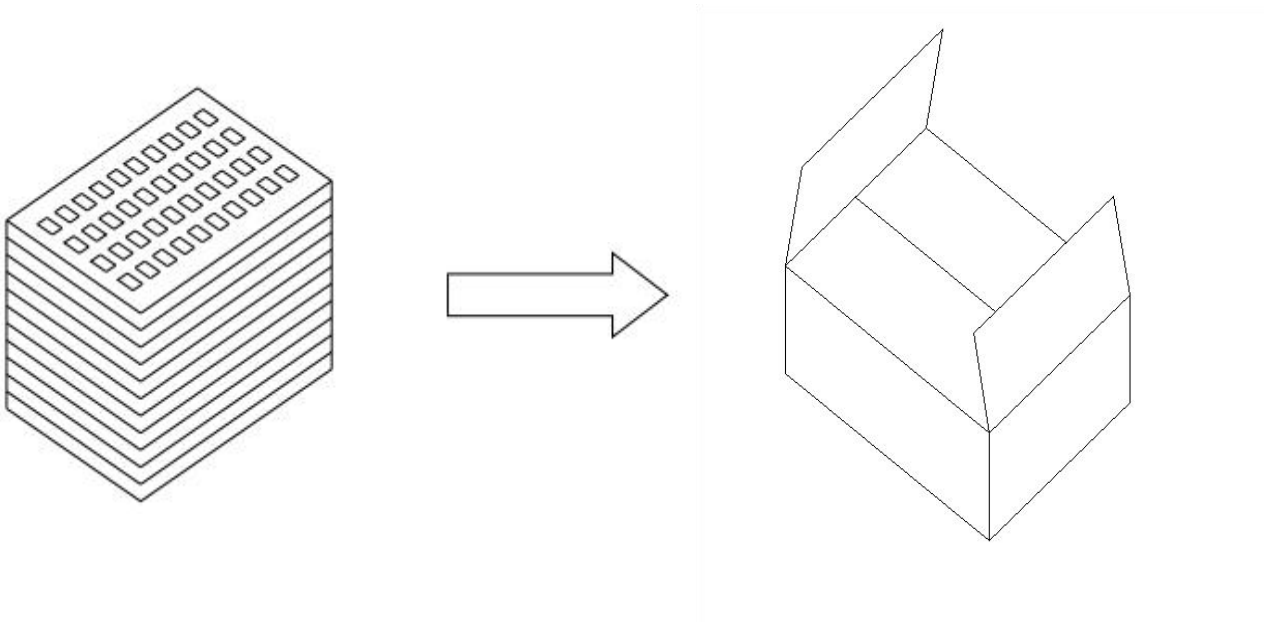


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9. PACKAGE SPECIFICATION 包装规格:



序号(N0)	包装材料 Packing material	尺寸 Size	材质 Material	数量 Quantity
1	吸塑Plastic uptake	378*275*13mm	PET	240/BOX
2	外箱Master Carton	385*280*145mm	K747K	4800/Carton

Remark : Weight (REF): 1.7g

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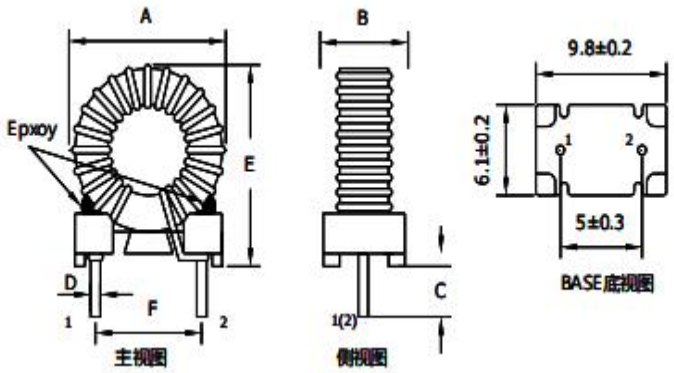
10. TEST DATA FOR PREPRODUCTION SAMPLE 样品测试数据:

Electrical Characteristic 电气特性				Dimensions 尺寸 (mm)								
Item	L	DCR	Iast @0.7A	A	B	C	D	E	F	G	G	I
STD.	80uH±10%	160mΩmax	L≥50uH	10.3 max	6.5max	2.7±0.3	0.6±0.1	12.8max	5.0±0.3			
1	77.8	115	59.6	9.9	6.2	2.7	0.6	12.0	4.9			
2	78.5	113	59.8	9.9	6.1	2.8	0.59	11.9	4.9			
3	80.5	115	60.5	9.8	6.1	2.8	0.58	11.9	4.9			
4	80.2	114	62.3	9.8	6.2	2.7	0.59	11.9	4.9			
5	79.5	114	60.4	10.0	6.2	2.8	0.59	11.8	5.0			
6	78.9	115	60.3	9.8	6.2	2.8	0.6	11.9	5.0			
7	78.9	115	60.2	9.8	6.1	2.7	0.6	12.1	5.0			
8	79.5	115	59.8	9.9	6.2	2.7	0.59	12.1	4.9			
9	79.3	115	58.6	9.9	6.2	2.7	0.59	12.0	4.9			
10	79.9	114	63.1	9.9	6.2	2.8	0.59	12.0	4.9			
$\overline{X}$	79.3	115	60.46	9.87	6.17	2.75	0.592	11.96	4.93			

综合判定

√ OK NG

外观尺寸图

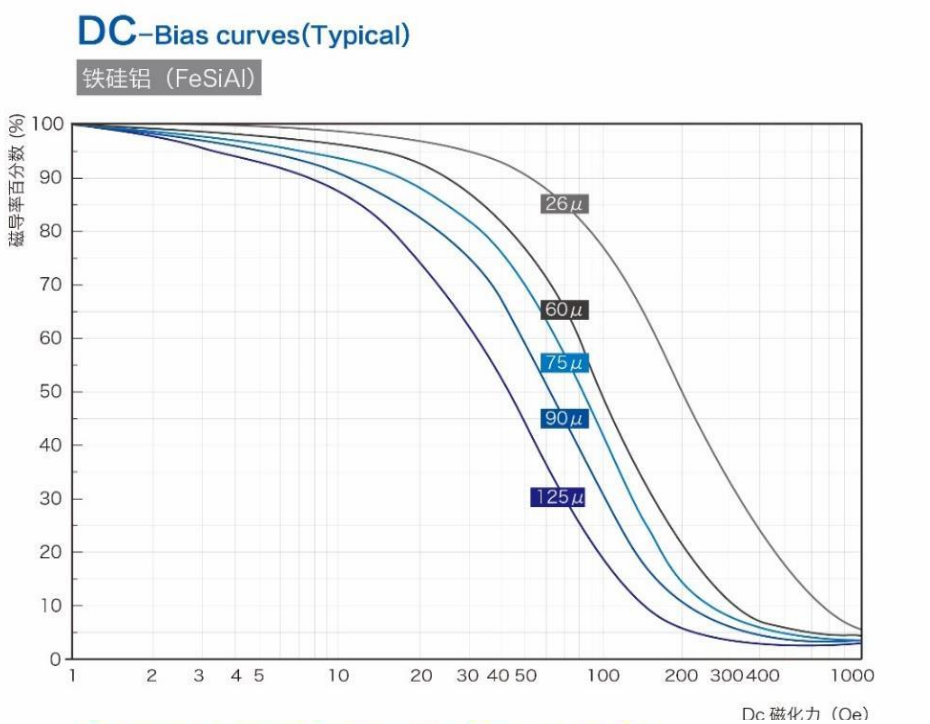


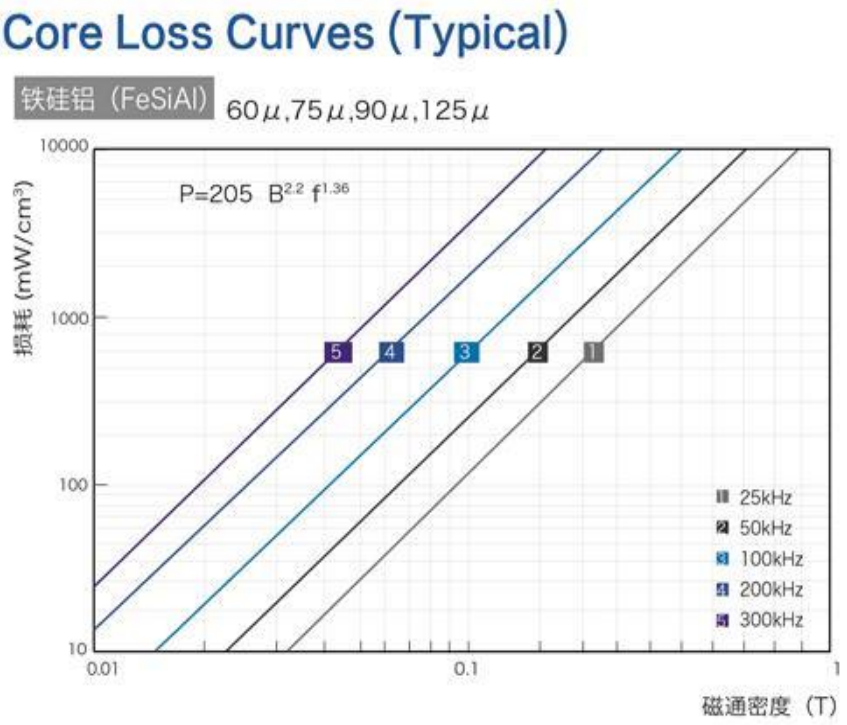
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11. CORE MATERIAL CHARACTERISTIC 磁芯材质特性



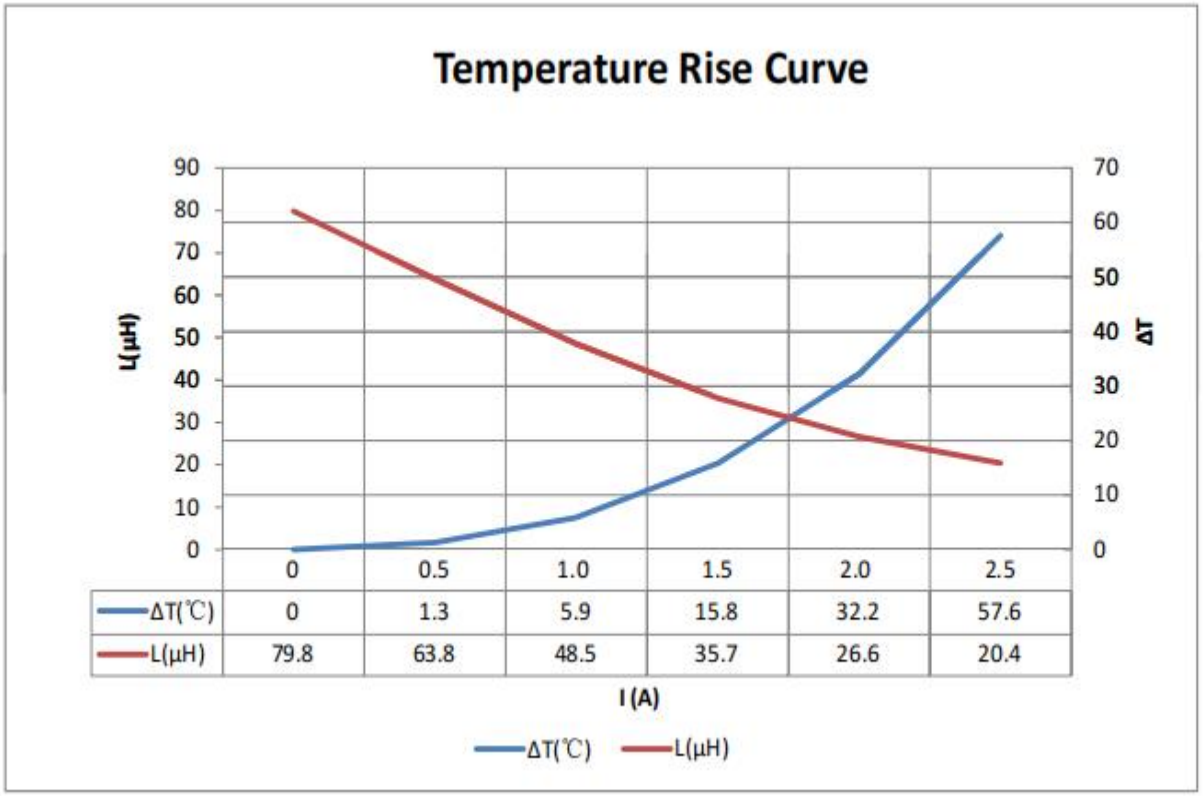


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12. Temperature Rise Curve 温升曲线:



	0	0.5	1.0	1.5	2.0	2.5
ΔT(℃)	0	1.3	5.9	15.8	32.2	57.6
L(μH)	79.8	63.8	48.5	35.7	26.6	20.4

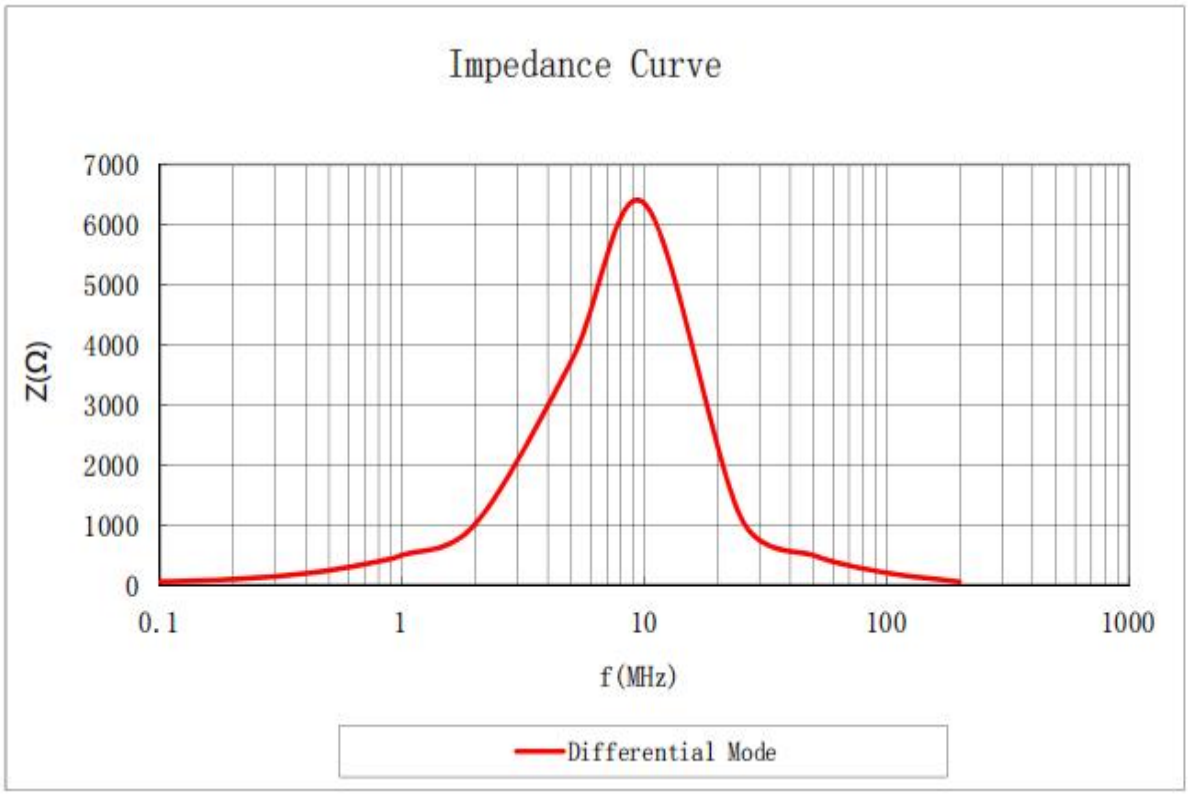
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13. IMPEDANCE CURVE 阻抗曲线:

Fequency (MHz)	0.1	0.3	0.5	0.8	1	2	5	10	25	50	100	200
Impendance (Ω)	48.8	140	241	392	496	1010	3730	6350	1120	489	200	50



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