



上海立凯电控科技有限公司

Shanghai LineKey Technology Co., Ltd.

RoHS

Specification For Approval

规格书

SFA NO.: LK-0592-13

DATE: 2022-11-07

客户名称: _____

部件名称: 功率变压器

客户料号: _____

公司料号: LT31-111

供方确认			客户确认
制 作	审 核	核 准	
吴 子 晗	薄 双 燕	陈 余 想	

SPEC/更改记录

版本	序号	更改描述	更改原因	备注
A 0				

ADD (地址): 上海市浦东新区商城路 800 号斯米克大厦1102室
Room 1102, CIMIC Tower, No.800, ShangCheng Road, Pudong, Shanghai, China

TEL (电话): 021-61993616

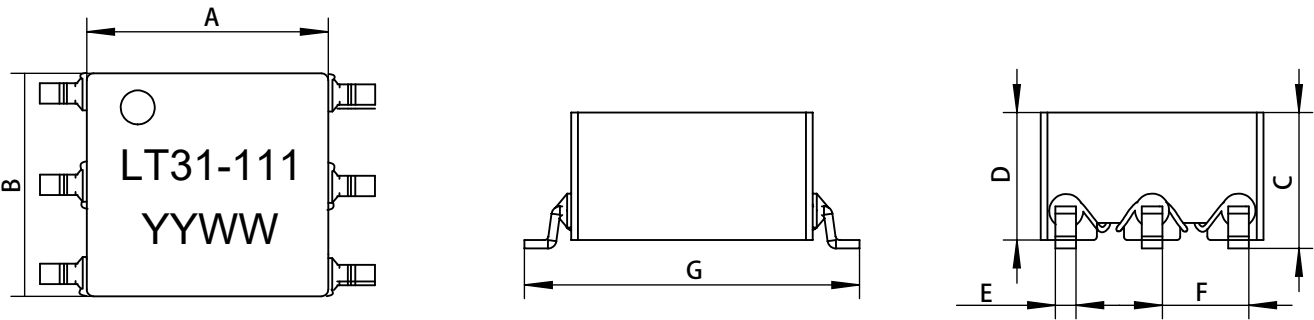
FAX (传真): 021-61993616

Web (网址): www.linekey.cn

E-mail (邮箱): sales@linekey.cn

Zip Code (邮编): 200120

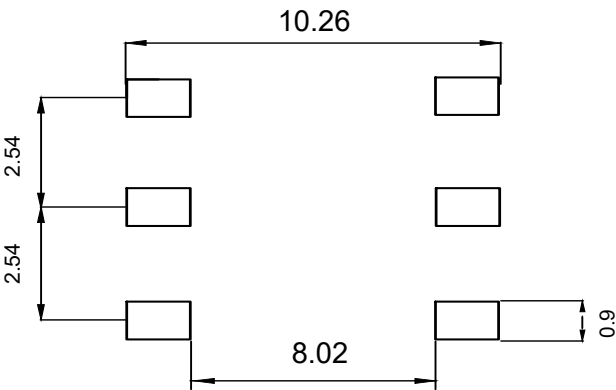
1.机械轮廓/ (Mechanical figure & Dimensions) UNIT:mm



顶视图/Top View

侧视图/Side View

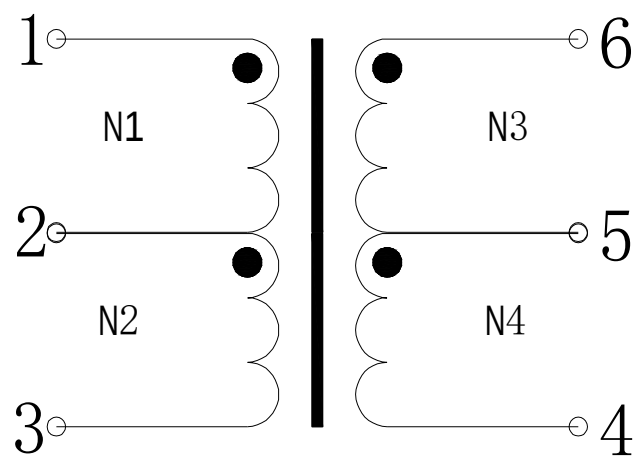
A	B	C	D	E	F	G	H	I	J	K
7.10±0.2	6.55±0.2	4.2Max.	3.75±0.2	0.60	2.54	10.2 Max				



推荐焊盘/ Pad

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2.电气原理图/ (WINDING CONNECTION)



3.工艺要求/ (TECHNICAL REQUIREMENT)

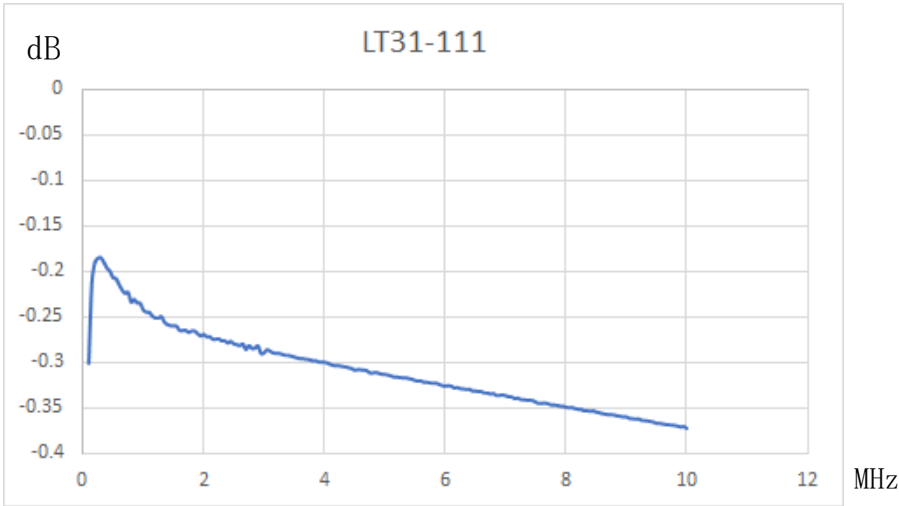
序号 NO.	端子/PIN		线材 Wire	圈数 Turns	胶带 (turns) Tape	挡墙宽度 (mm) Margin Tape	备注 Remark
	入 /In	出 /Out					
N1	1	2	FIW4 - Φ0.12(mm)	13(ref)			
N2	2	3	FIW4 - Φ0.12(mm)	13(ref)			
N1	6	5	FIW4 - Φ0.12(mm)	14(ref)			
N2	5	4	FIW4 - Φ0.12(mm)	14(ref)			

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4.电气参数/ (ELECTRICAL SPECIFICATION)

序号 NO.	项目 ITEMS	测量端 MEASURING POINT	规格参数 SPECIFICATION	测量条件(AT 25℃) TEST CONDITION	测试仪器 APPARATUS
1	电感量 Inductance	1-3	475uH Min.	10KHz/0.1V 串联测试	TH8300
2	漏感 Leakage Inductance	1-3(6-4 短接)	1.0uH Max.	10KHz/0.1V 串联测试	
3	耦合电容 Coupling Capacitance	1-6	15pF Typ.	100KHz/0.01V 串联测试	
4	伏秒积 Voltage-Time		11 Vus	N1/双极性波形	
5	直流电阻 DC Resistacne	1-3	0.31Ω Max.		TH2516A
		6-4	0.33Ω Max.		
6	匝比 Turns Ratio	(1-3):(6-4)	1:1.1	10KHz/0.1V	GKT3259
7	绝缘耐压 Insulation Voltage	(1-3) to (6-4)	2.5KV(AC)/60S/1mA		CS9912B

5.插入损耗曲线/ (INSERTION LOSS VS FREQ.)



6. 推荐回流焊曲线/ (CLASSIFICATION REFLOW PROFILES)

Profiles are based on the IPC/JEDEC J-STD-020D standard*Figure 1 shows a typical profile and Table 1 lists the "reflow requirements"associated with this profile. Small volume SMD packages are typically classified at higher peak temperatures(**typical value is highlighted in bold,see Table 2**). Exceeding these conditions may lower product reliability.

Figure 1 – Reflow Profile for Solderability Testing

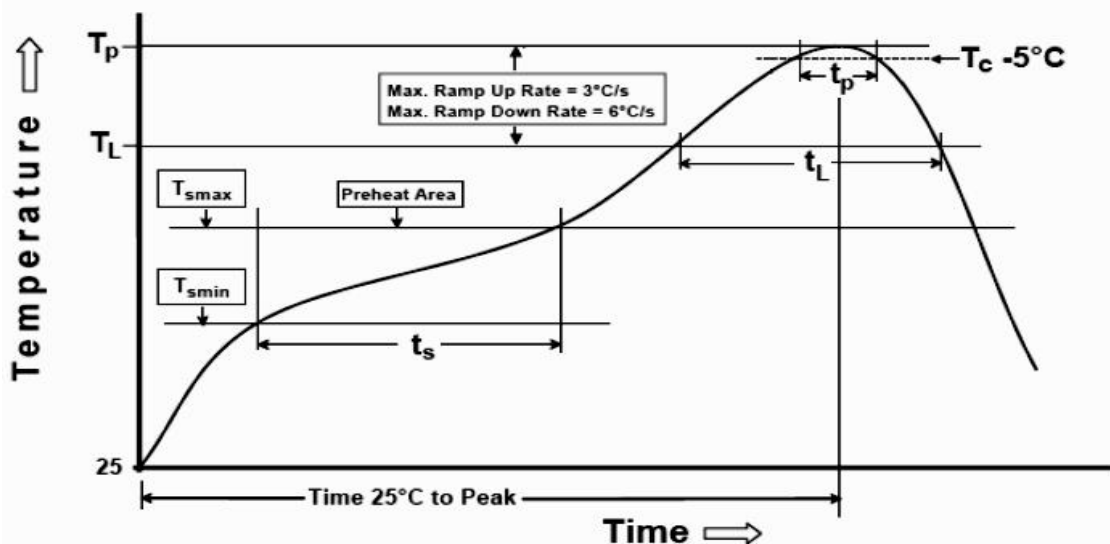


Table 1-Reflow Requirements for Solderability Testing

Reflow Parameter	Specification
Preheat temperature(T_{smin} - T_{smax})	150°C-200°C
Preheat Time(t_s)	60-180 seconds
Ramp-up Rate(T_L - T_p)	3°C/second maximum
Time Above 217°C(T_L)	60-150 seconds
Peak Temperature(T_p)	see Table 2
Time Within 5°C of Peak(T_p)	20-40 seconds
Ramp-down Rate(T_p - T_L)	6°C/second maximum
25°C to Peak Temperature(T to T_p)	8minutes maximum

*Table adapted from JEDEC Standard IPC/JEDEC J-STD-020D.

Table 2-Peak Temperatures for Lead Free Components

Package Thickness	Volume mm3	Volume mm3	Volume mm3
	<350	350-2000	>2000
<1.6mm	260+0-5°C	260+0-5°C	260+0-5°C
1.6-2.5mm	260+0-5°C	250+0-5°C	245+0-5°C
>2.5mm	250+0-5°C	245+0-5°C	245+0-5°C

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审核/CHECKED BY:

薄双燕

批准/RATIFYIED BY:

陈余想

电子样品检验报告

客户名称		部件名称	耦合变压器
客户料号		公司料号	LT31-111

一、电气性能

环境温度：25 湿度：75%

测试项目	测试标准&要求		测试数据									
			1	2	3	4	5	6	7	8	9	10
电感量	1-3 (475uH Min.)	10KHz/0.1V 串联测试	647	601	700	667	642	591	630	698	686	593
漏感	1-3(6-4短接) (1.0uH Max.)	10KHz/0.1V 串联测试	0.23	0.25	0.24	0.27	0.26	0.25	0.25	0.22	0.21	0.20
耦合电容	1-6 (15pF Typ.)	100KHz/0.01V 并联测试	15.1	21.0	16.5	15.6	24.6	19.3	22.7	22.9	14.9	13.7
匝比	(1-3):(6-4) = 1:1.1		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
直流电阻	1-3(0.31Ω Max.)		0.25	0.24	0.25	0.24	0.25	0.24	0.25	0.25	0.25	0.24
	6-4(0.33Ω Max.)		0.27	0.27	0.27	0.26	0.26	0.27	0.27	0.27	0.26	0.26
绝缘耐压	(1-3) to (6-4)	2.5KV(AC) / 60S / 1mA	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

测试仪器：

1.TH2827C 2.TH2516A 3.GKT3259 4.CS9912B

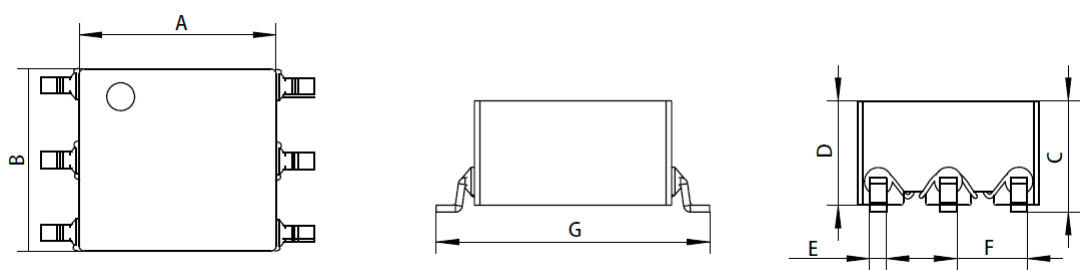
备注：

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电子样品检验报告

客户名称		部件名称	耦合变压器
客户料号		公司料号	LT31-111

产品图纸



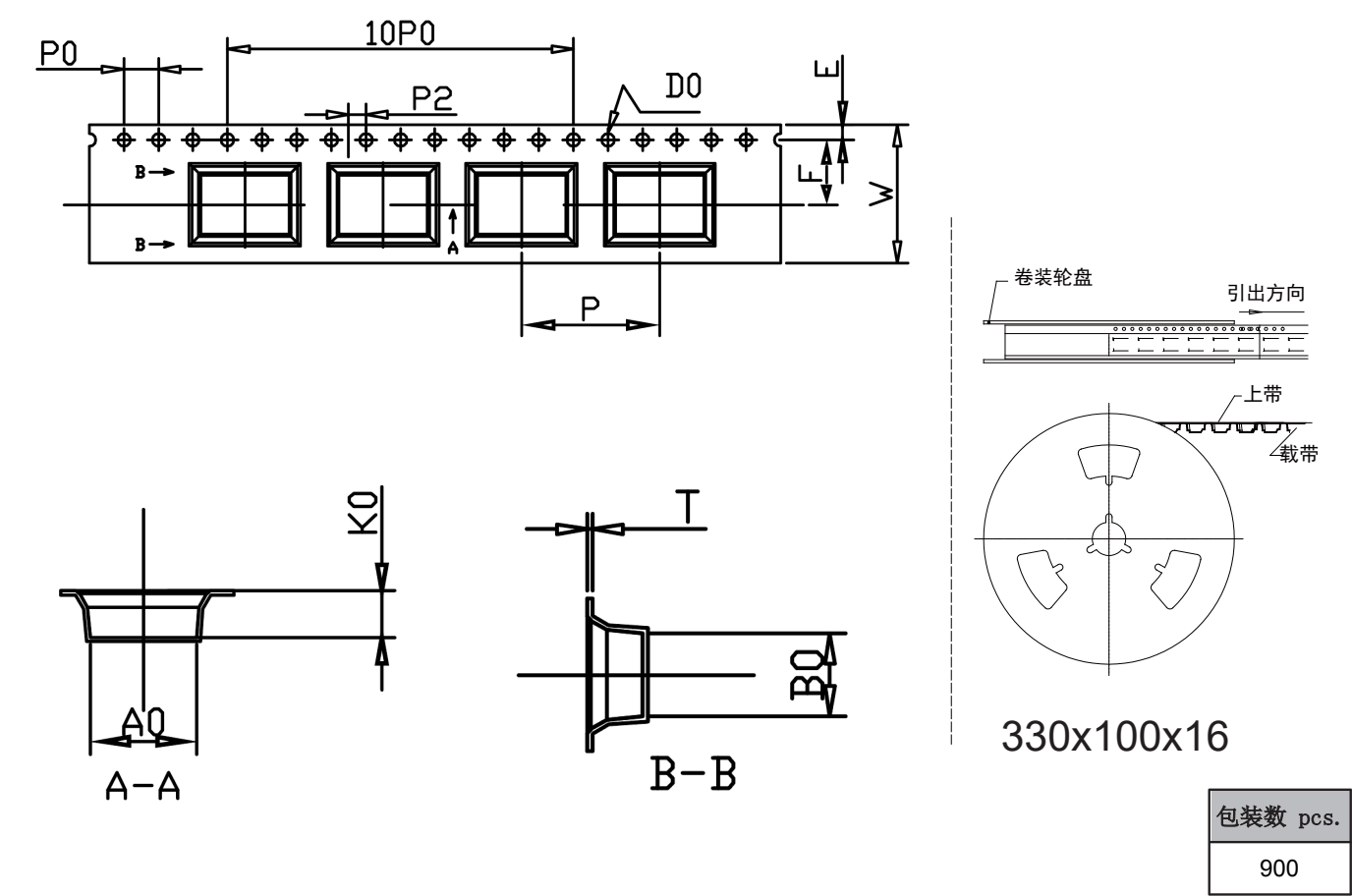
产品尺寸							
编号	A	B	C	D	E	F	G
	7.1±0.2	6.55±0.2	4.2 Max	3.75±0.2	0.6 Ref	2.54 Ref	10.2 Max
1	7.15	6.55	4.06	3.81	0.58	2.49	9.69
2	7.15	6.55	4.06	3.83	0.59	2.48	9.68
3	7.13	6.53	4.04	3.80	0.58	2.51	9.62
4	7.14	6.57	4.06	3.81	0.61	2.45	9.72
5	7.14	6.57	4.05	3.79	0.60	2.47	9.71
6	7.12	6.58	4.04	3.77	0.59	2.48	9.74
7	7.14	6.58	4.05	3.79	0.60	2.48	9.68
8	7.15	6.54	4.07	3.80	0.60	2.49	9.74
9	7.14	6.58	4.04	3.79	0.60	2.46	9.61
10	7.14	6.57	4.04	3.79	0.60	2.44	9.77
平均值	7.14	6.56	4.05	3.80	0.60	2.48	9.70
结果	OK	OK	OK	OK	OK	OK	OK

测试仪器:

1. 游标卡尺

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包装信息



	E(mm)	E2(mm)	F(mm)	P2(mm)	D0(mm)	P0(mm)	10P0(mm)	W(mm)	P(mm)	A0(mm)	B0(mm)	K0(mm)	T(mm)
公差	±0.1	Min.	±0.1	±0.15	+0.1-0.0	±0.1	±0.2	±0.3	±0.1	±0.1	±0.1	±0.1	±0.05
数量	1.75		7.5	2.0	1.5	4.0	40.0	16.0	16.0	10.2	6.85	4.50	0.4

外箱标签

上海立凯电控科技有限公司

Shanghai Linekey Technology Co., Ltd.

客户编码: xxxxxxxx Order Number: xxxxxxxx

Quantity: xx PCS Date Code: xxxx-xx-xx


xxxxxxx

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