

## 测试报告

No. CANEC1403157901

日期: 2014年03月28日 第1页,共8页

深圳市桦沣实业有限公司

中国深圳市南山区西丽镇平山大园工业区11栋3楼

以下测试之样品是由申请者所提供及确认: 晶体管

SGS工作编号: CP14-007639 - GZ

型号: HF13003-126

客户参考信息: 见备注

样品接收日期: 2014年03月14日

测试周期: 2014年03月14日 - 2014年03月28日

测试要求: 根据客户要求测试

测试方法: 请参见下一页

测试结果: 请参见下一页

结论: 基于所送样品指定部件进行的测试, 镉、铅、汞、六价铬、多溴联苯(PBB)、多溴二苯醚(PBDE)的测试结果符合欧盟RoHS指令2002/95/EC的重订指令2011/65/EU附录II的限值要求。

通标标准技术服务有限公司

授权签名

Echo Yeung 杨谷毅

批准签署人

备注: 根据客户申请, SGS出具了此中文报告, 英文版本可根据客户要求提供. (The Chinese test report is issued according to the applicant's request. The English version is available from SGS if further needed)



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测试结果:

测试样品描述:

样品编号	SGS样品ID	描述
SN1	CAN14-031579.001	带棕色印字的黑色塑胶
SN2	CAN14-031579.002	银色/铜色金属片
SN3	CAN14-031579.003	银色金属脚

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 方法检测限
- (3) ND = 未检出 (< MDL)
- (4) "-" = 未规定

**RoHS指令2011/65/EU**

- 测试方法:
- (1)参考IEC 62321-5:2013, 用ICP-OES测定镉的含量
  - (2)参考IEC 62321-5:2013, 用ICP-OES测定铅的含量
  - (3)参考IEC 62321-4:2013, 用ICP-OES测定汞的含量
  - (4)参考IEC 62321:2008, 用紫外-可见分光光度计比色法测定六价的含量
  - (5)参考IEC 62321:2008, 用GC-MS测定PBBs(多溴联苯)和PBDEs(多溴二苯醚) 的含量

测试项目	限值	单位	MDL	001
镉 (Cd)	100	mg/kg	2	ND
铅 (Pb)	1,000	mg/kg	2	ND
汞 (Hg)	1,000	mg/kg	2	ND
六价铬(Cr(VI))	1,000	mg/kg	2	ND
多溴联苯之和(PBBs)	1,000	mg/kg	-	ND
一溴联苯	-	mg/kg	5	ND
二溴联苯	-	mg/kg	5	ND
三溴联苯	-	mg/kg	5	ND
四溴联苯	-	mg/kg	5	ND
五溴联苯	-	mg/kg	5	ND
六溴联苯	-	mg/kg	5	ND
七溴联苯	-	mg/kg	5	ND
八溴联苯	-	mg/kg	5	ND
九溴联苯	-	mg/kg	5	ND
十溴联苯	-	mg/kg	5	ND
多溴二苯醚之和(PBDEs)	1,000	mg/kg	-	ND



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## 测试报告

No. CANEC1403157901

日期: 2014年03月28日 第3页,共8页

测试项目	限值	单位	MDL	001
一溴二苯醚	-	mg/kg	5	ND
二溴二苯醚	-	mg/kg	5	ND
三溴二苯醚	-	mg/kg	5	ND
四溴二苯醚	-	mg/kg	5	ND
五溴二苯醚	-	mg/kg	5	ND
六溴二苯醚	-	mg/kg	5	ND
七溴二苯醚	-	mg/kg	5	ND
八溴二苯醚	-	mg/kg	5	ND
九溴二苯醚	-	mg/kg	5	ND
十溴二苯醚	-	mg/kg	5	ND

备注:

(1) 最大允许极限值引用自指令2011/65/EU 附录II.

### RoHS指令2011/65/EU

- 测试方法:
- (1) 酸洗脱镀层, 参考IEC62321-5:2013, 用ICP-OES测定镉、铅的含量
  - (2) 酸洗脱镀层, 参考IEC62321-4:2013, 用ICP-OES测定汞的含量
  - (3) 参考IEC 62321-5:2013, 用ICP-OES测定镉的含量
  - (4) 参考IEC 62321-5:2013, 用ICP-OES测定铅的含量
  - (5) 参考IEC 62321-4:2013, 用ICP-OES测定汞的含量
  - (6) 参考IEC 62321:2008, 用点测试法/紫外-可见分光光度计比色法测定六价铬的含量

测试项目	限值	单位	MDL	002	003
镉 (Cd)	100	mg/kg	2	ND	ND
铅 (Pb)	1,000	mg/kg	2	7748 <sup>(1)</sup>	11
汞 (Hg)	1,000	mg/kg	2	ND	ND
六价铬(Cr(VI))	-	-	◇	阴性	阴性

备注:

(1) 最大允许极限值引用自指令2011/65/EU 附录II.

(2) ◇点测试法:

阴性= 未检测到六价铬, 阳性= 检测到六价铬;

(当点测试结果为阴性或无法确定时,将采用沸水萃取法作进一步的结果验证.)

◇沸水萃取法:

阴性= 未检测到六价铬

阳性= 检测到六价铬; 表明50 cm<sup>2</sup>表面积的被测试样品的沸水萃取液中六价铬的浓度等于或大于0.02 mg/kg

由于未获知样品的存储条件和生产日期, 样品的六价铬测试结果仅能代表测试时样品含六价铬的状态。



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备注<1>: 根据客户提供的声明, 编号002中的铅(Pb)被欧盟RoHS指令2011/65/EU豁免, 相应豁免条文(请以英文原文为准): 高熔点型焊料中的铅(即铅含量等于或大于85%的铅基合金焊料)。



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备注 : 13001-92, 6822-92, 6823D-92, 6823DA-92, 6833D-92, 6822L-92, 6823AL-92, 6822A-924212D-92, 4214D-92, 5083-92, 5118-92, 5134D-92, 13003A-92, 13003B-92, 13003C-9213003K-126, 13003B-126, 13003-126, 13003A-126, 123D-126, 123DA-126, 123DM-126, 133D-126, 123L-126, 123DML-126, 133DL-126, 133DA-126, 4209-126, 4212D-126, 4214D-126, 5160-126, 13003C-126, 13003-22013005-220, 13007-220, 13009-220, 13005ED-220, 13007MD-220, 13009A-220, 133DL-220, 133D-220, 13005DT-220, 128DA-220, 128D-220, M13005-220, 1N60-92, 2N60-251, 2N60-252, 2N60-220F, 2N65-251, 2N65-252, 2N65-220F, 4N60-252, 4N60-252, 4N60-220F, 4N65-251, 4N65-252, 4N65-220F, 5N60-220F, 7N60-220F, 8N60-220F, 10N60-220F, 50N06-220F, 100N03-220F, 730-220C, 740-220C, 830-220C, 840-220C, 1040-220F, 20150-220F, 20200-220F, 2060-220F, 1060-220F, 10150-220F, 30100-220F, 10200-220F, 3060-220F, 10100-220F, 1045-220F, 20100-220F, TIP41C-220



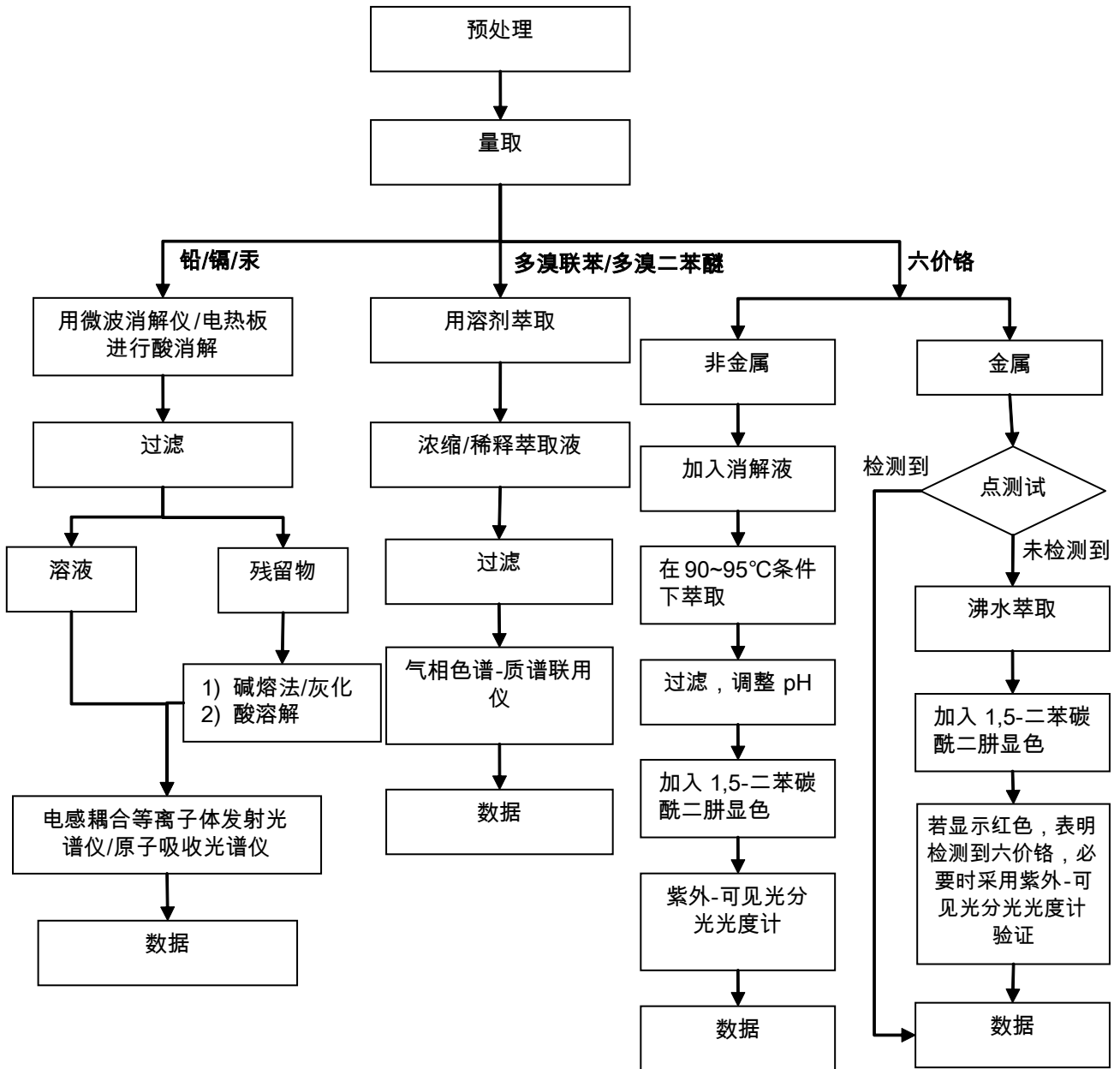
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附件

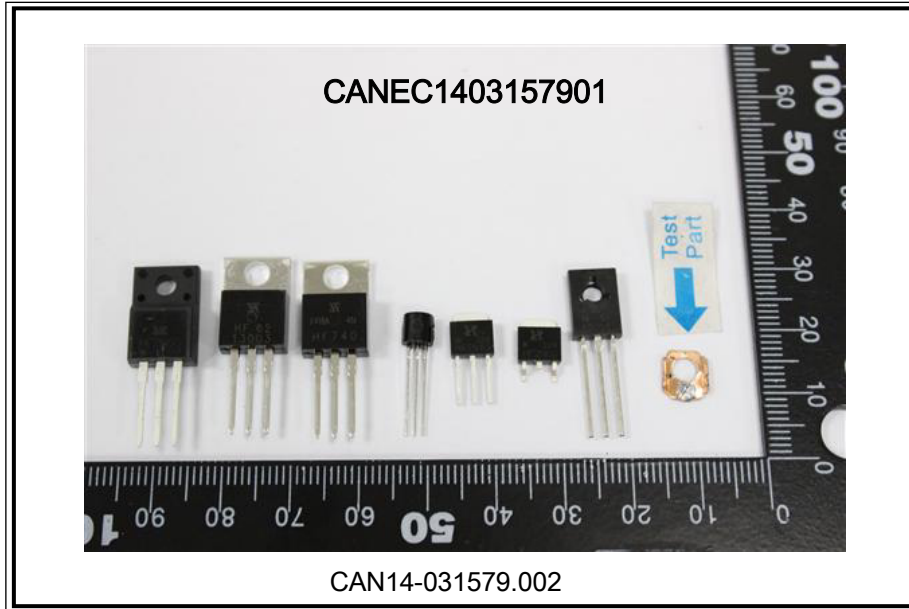
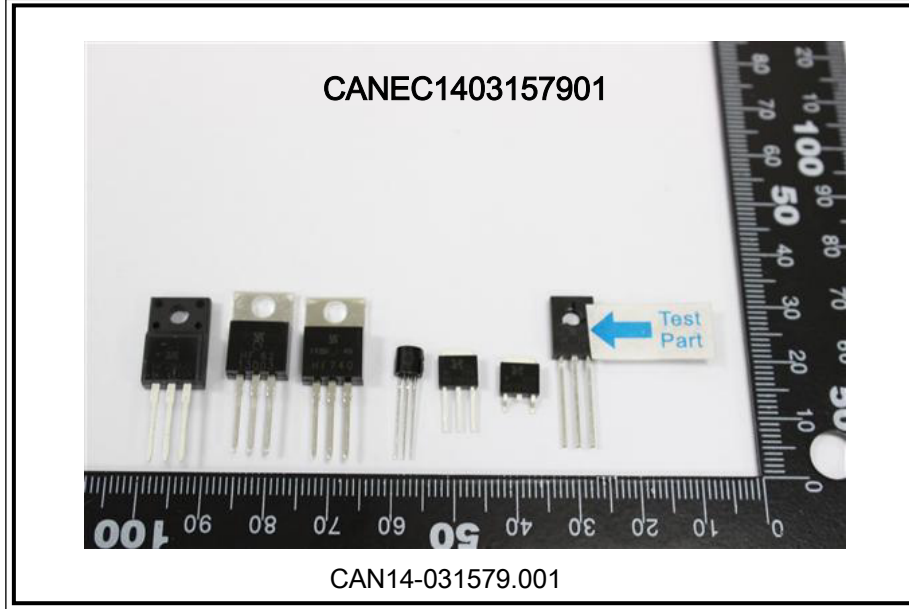
### RoHS 测试流程图

- 1) 分析人员：曹阳 / 余晓璐
- 2) 项目负责人：余奕东 / 魏红
- 3) 样品按照下述流程被完全消解（六价铬和多溴联苯 / 多溴二苯醚测试除外）。

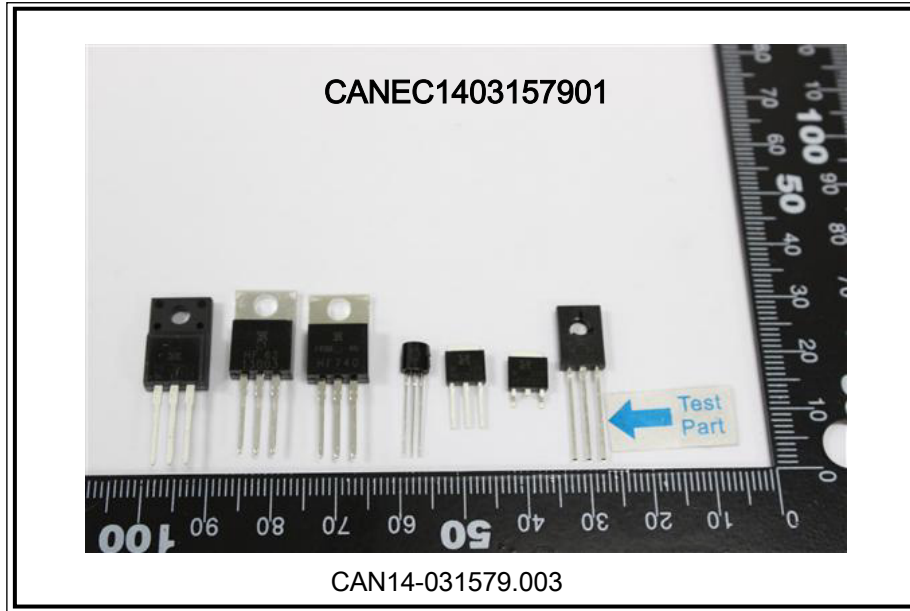


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