

**测试报告** No. CANEC1110721402 日期: 2011年11月14日 第1页,共7页

南京指日高电子有限公司 中国南京市浦口区沿江都市经济园浦洲路**35**号

以下测试之样品是由申请者所提供及确认:二级管桥式整流器

SGS工作编号: CP11-007218 - GZ

测试样品信息: R-6

客户参考信息: MBS, DB-IMS, DB-1SD, B-1, RB-15, WOM, RC-2, RS-1, RS-2, RS-5, TBL,

BR-3, BR-25W, BR-6, KBL, KBU, KBJ, BR-25L, KBK, HBL, MBR-25, MBR25W, MP-6, MP-8/10, KBPC-8/10, MB-25W, MMB-25, MMB-25W, R-1, MA-405, DO-41, DO-15, DO-15B, R-3, R-5, DO-201AE, DO-201AD, R-6M, R-6, P-600,

HVM, SOD-123, SOT-323, SMA, SMB, SMC, SM-1, SOT-23, MELF,

MINI-MELF

样品接收日期: 2011年11月08日

测试周期: 2011年11月08日 - 2011年11月14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: 基于所送样品进行的测试,铅、镉、汞、六价铬、多溴联苯、多溴二苯醚的测试

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。

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Silva Zhou周北林

批准签署人

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测试结果:

### 样品部件外观描述:

样品编号	SGS样品ID	描述
1	CAN11-107214.001	银色金属引脚
2	CAN11-107214.002	带芯片的铜色金属
3	CAN11-107214.003	黑色塑料

### 备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 检测极限值
- (3) ND = 未检出 ( < MDL )
- (4) "-" = 未规定

### RoHS 指令 2011/65/EU

测试方法: 参考IEC 62321:2008:

- (1) 用ICP-OES测定镉的含量.
- (2) 用ICP-OES测定铅的含量.
- (3) 用ICP-OES测定汞的含量.
- (4) 用紫外-可见分光光度计比色法测定六价铬的含量
- (5) 用GC-MS测定PBBs(多溴联苯)和PBDEs(多溴二苯醚) 的含量

测试项目	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>002</u>	<u>003</u>
镉(Cd)	100	mg/kg	2	ND	ND
铅(Pb)	1,000	mg/kg	2	17920<1>	ND
汞(Hg)	1,000	mg/kg	2	ND	ND
六价铬(Cr(VI))	1,000	mg/kg	2	ND	ND
多溴联苯之和(PBBs)	1,000	mg/kg	-	ND	ND
一溴联苯	-	mg/kg	5	ND	ND
二溴联苯	-	mg/kg	5	ND	ND
三溴联苯	-	mg/kg	5	ND	ND
四溴联苯	-	mg/kg	5	ND	ND
五溴联苯	-	mg/kg	5	ND	ND
六溴联苯	-	mg/kg	5	ND	ND
七溴联苯	-	mg/kg	5	ND	ND
八溴联苯	-	mg/kg	5	ND	ND
九溴联苯	-	mg/kg	5	ND	ND
十溴联苯	-	mg/kg	5	ND	ND

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<u>测试项目</u>	<u>限值</u>	单位	<u>MDL</u>	<u>002</u>	<u>003</u>	
多溴二苯醚之和(PBDEs)	1,000	mg/kg	-	ND	ND	
一溴二苯醚	-	mg/kg	5	ND	ND	
二溴二苯醚	-	mg/kg	5	ND	ND	
三溴二苯醚	-	mg/kg	5	ND	ND	
四溴二苯醚	-	mg/kg	5	ND	ND	
五溴二苯醚	-	mg/kg	5	ND	ND	
六溴二苯醚	-	mg/kg	5	ND	ND	

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ND

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mg/kg

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备注:

七溴二苯醚

八溴二苯醚

九溴二苯醚

十溴二苯醚

(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: 参考IEC 62321:2008:

(1)用ICP-OES测定镉的含量. (2)用ICP-OES测定铅的含量. (3)用ICP-OES测定汞的含量.

(4)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.

<u>测试项目</u>	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>001</u>
镉(Cd)	100	mg/kg	2	ND
铅(Pb)	1,000	mg/kg	2	7
汞(Hg)	1,000	mg/kg	2	ND
六价铬(Cr(VI))	-	-	$\Diamond$	Negative

### 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:

Negative= 未检测到六价铬, Positive = 检测到六价铬;

(当点测试结果为Negative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:

Negative = 未检测到六价铬

Positive = 检测到六价铬; 表明50 cm2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

针对金属表面的防腐涂层: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代表测试时样品

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的状态

备注<1>: 根据客户提供的声明,样品2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):集成电路倒装芯片封装中半导体芯片及载体之间形成可靠联接所用焊料中的铅。

备注<2>: 本测试报告内容是参照报告编号为CANEC1110721401的中文译本,中英文版本如有歧异,概以英文版为准。

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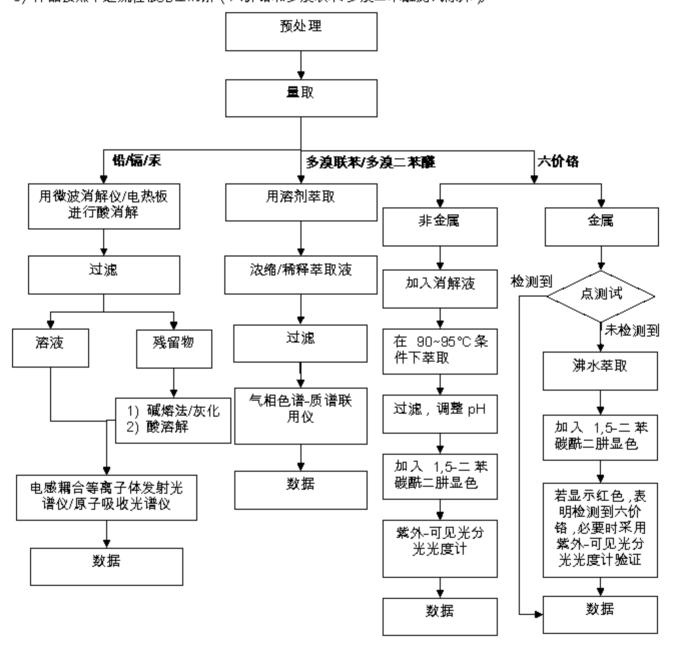
# 附件

## RoHS 测试流程图

1) 分析人员: 汪丹 / 余晓璐 / 詹达琦

2) 项目负责人: 余奕东 / 杨伟兴

3) 样品按照下述流程被完全消解(六价铬和多溴联苯/多溴二苯醛测试除外)。



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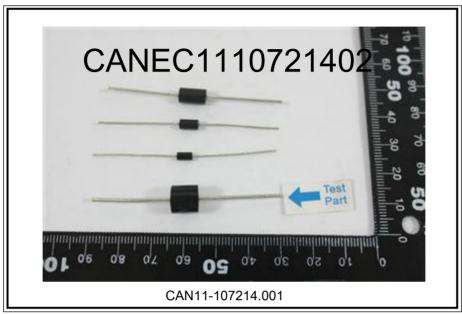


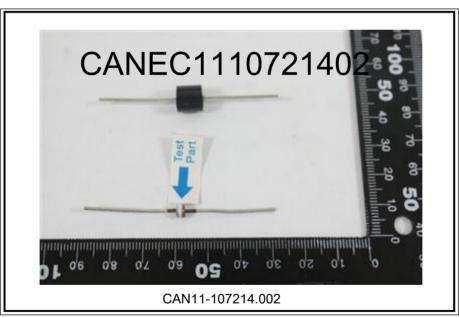
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样品照片:





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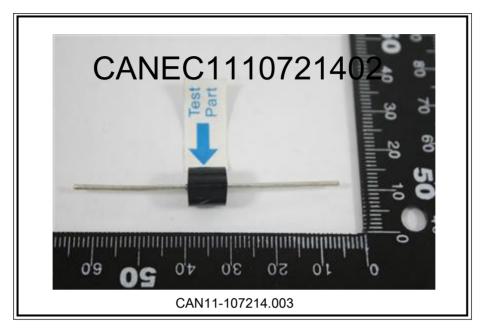
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