

## 检测报告

编号: SZXEC25001720902

日期: 2025 年 05 月 22 日

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客户名称: 广东仁懋电子有限公司

客户地址: 深圳市罗湖区桂园街道鹿丹村社区滨河路 1011 号鹿丹大厦 1901

样品名称: 肖特基二极管 MOS

型号: TOLL-8L

客户参考信息: 可控硅、稳压管、二极管、三极管、金属氧化物半导体型场效应管集成电路 TO-220AB、TO-220C、TO-247S、TO-247-3L、TO-247-4L、TO-247PLUS、SOD323、SOD123、PDFN3\*3、PDFN5\*6、TO-263、TO-264、TO-251、TO-252、TO-252-4L、TO-220FP、SOT-23、SOT-23-3L、SOT-23-5L、SOT-23-6L、TO-3PB、TO-3PL、TO-3PN、TO-3PF、SOP8、SMA、SMB、SMC、TOLT、STOLL、DFN、SOP8、SOT-323、SOT223-2、SOT-723、SOT-89、TSSOP8、SOP7PLUS

以上样品及信息由客户提供。

SGS 工作编号: SZP25-024507

样品接收时间: 2025 年 05 月 19 日

检测周期: 2025 年 05 月 19 日 ~ 2025 年 05 月 22 日

检测要求: 根据客户要求检测

检测方法: 见后续页。

检测结果: 见后续页。

检测要求	结论
欧盟 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863-铅、汞、镉、六价铬、多溴联苯 (PBB)、多溴二苯醚 (PBDE)、邻苯二甲酸二(2-乙基己基)酯 (DEHP)、邻苯二甲酸丁苄酯 (BBP)、邻苯二甲酸二丁酯 (DBP)和邻苯二甲酸二异丁酯 (DIBP)	符合
欧盟 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863-铅、汞、镉和六价铬	符合

通标标准技术服务有限公司深圳分公司

授权签名

袁依婷

Fay Yuan 袁依婷

批准签署人

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## 检测结果:

## 检测部件外观描述:

样品序号	样品编号	SGS 样品 ID	样品描述
SN1	A1	SZX25-0017209-0001.C001	黑色塑胶
SN2	A2	SZX25-0017209-0001.C002	银色金属引脚

## 备注:

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

欧盟 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863-铅、汞、镉、六价铬、多溴联苯 (PBB)、多溴二苯醚 (PBDE)、邻苯二甲酸二(2-乙基己基)酯 (DEHP)、邻苯二甲酸丁苄酯 (BBP)、邻苯二甲酸二丁酯 (DBP)和邻苯二甲酸二异丁酯 (DIBP)

检测方法: 参考 IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017 和 IEC 62321-12:2023, 采用 ICP-OES/AAS, UV-Vis 和 GC-MS 进行分析。

检测项目	限值	单位	MDL	A1
铅 (Pb)	1000	mg/kg	2	ND
汞 (Hg)	1000	mg/kg	2	ND
镉 (Cd)	100	mg/kg	2	ND
六价铬 (Cr(VI))	1000	mg/kg	8	ND
多溴联苯之和 (PBB)	1000	mg/kg	-	ND
一溴联苯 (MonoBB)	-	mg/kg	25	ND
二溴联苯 (DiBB)	-	mg/kg	25	ND
三溴联苯 (TriBB)	-	mg/kg	25	ND
四溴联苯 (TetraBB)	-	mg/kg	25	ND
五溴联苯 (PentaBB)	-	mg/kg	25	ND
六溴联苯 (HexaBB)	-	mg/kg	25	ND
七溴联苯 (HeptaBB)	-	mg/kg	25	ND
八溴联苯 (OctaBB)	-	mg/kg	25	ND
九溴联苯 (NonaBB)	-	mg/kg	25	ND
十溴联苯 (DecaBB)	-	mg/kg	25	ND
多溴二苯醚之和 (PBDE)	1000	mg/kg	-	ND
一溴二苯醚 (MonoBDE)	-	mg/kg	25	ND
二溴二苯醚 (DiBDE)	-	mg/kg	25	ND
三溴二苯醚 (TriBDE)	-	mg/kg	25	ND
四溴二苯醚 (TetraBDE)	-	mg/kg	25	ND
五溴二苯醚 (PentaBDE)	-	mg/kg	25	ND
六溴二苯醚 (HexaBDE)	-	mg/kg	25	ND



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检测项目	限值	单位	MDL	A1
七溴二苯醚 (HeptaBDE)	-	mg/kg	25	ND
八溴二苯醚 (OctaBDE)	-	mg/kg	25	ND
九溴二苯醚 (NonaBDE)	-	mg/kg	25	ND
十溴二苯醚 (DecaBDE)	-	mg/kg	25	ND
邻苯二甲酸二(2-乙基己基)酯 (DEHP)	1000	mg/kg	50	ND
邻苯二甲酸丁苄酯 (BBP)	1000	mg/kg	50	ND
邻苯二甲酸二丁酯 (DBP)	1000	mg/kg	50	ND
邻苯二甲酸二异丁酯 (DIBP)	1000	mg/kg	50	ND

## 备注:

- (1) 最大允许极限值引用自 RoHS 指令(EU) 2015/863。  
 (2) IEC 62321 系列等同于 EN 62321 系列。  
 (3) 2021 年 7 月 22 号开始, DEHP, BBP, DBP 和 DIBP 的限制适用于医疗器械, 包括体外医疗器械, 监控仪表, 包括工业监测和控制仪器。

## 欧盟 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863-铅、汞、镉和六价铬

检测方法: 参考 IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013 和 IEC 62321-7-1:2015, 采用 ICP-OES/AAS 和 UV-Vis 进行分析。

检测项目	限值	单位	MDL	A2
铅 (Pb)	1000	mg/kg	2	30
汞 (Hg)	1000	mg/kg	2	ND
镉 (Cd)	100	mg/kg	2	ND
六价铬 (Cr(VI)) <sup>▼</sup>	-	μg/cm <sup>2</sup>	0.10	ND

## 备注:

- (1) 最大允许极限值引用自RoHS指令(EU) 2015/863。  
 (2) IEC 62321系列等同于 EN 62321 系列。  
 (3) <sup>▼</sup> = a. 当六价铬的浓度高于0.13 μg/cm<sup>2</sup>时, 样品为阳性, 即含有六价铬;  
 b. 当六价铬的浓度为ND (低于0.10 μg/cm<sup>2</sup>) 时, 样品为阴性, 即未检测到六价铬;  
 c. 当六价铬的浓度介于0.10 μg/cm<sup>2</sup>与0.13 μg/cm<sup>2</sup>之间时, 无法直接判定是否检测到六价铬, 因不同个体的样品表面差异可能会影响测定结果。

由于未获知样品的存储条件和生产日期, 样品的六价铬检测结果仅能代表检测时样品含六价铬的状态。

除非另有说明, 参照 ILAC-G8:09/2019, 使用简单接受 (w=0) 的二元判定规则进行符合性判定。  
 除非另有说明, 此报告结果仅对检测的样品负责。本报告未经本公司书面许可, 不可部分复制。  
 检测报告仅用于客户科研、教学、内部质量控制、产品研发等目的, 仅供内部参考。



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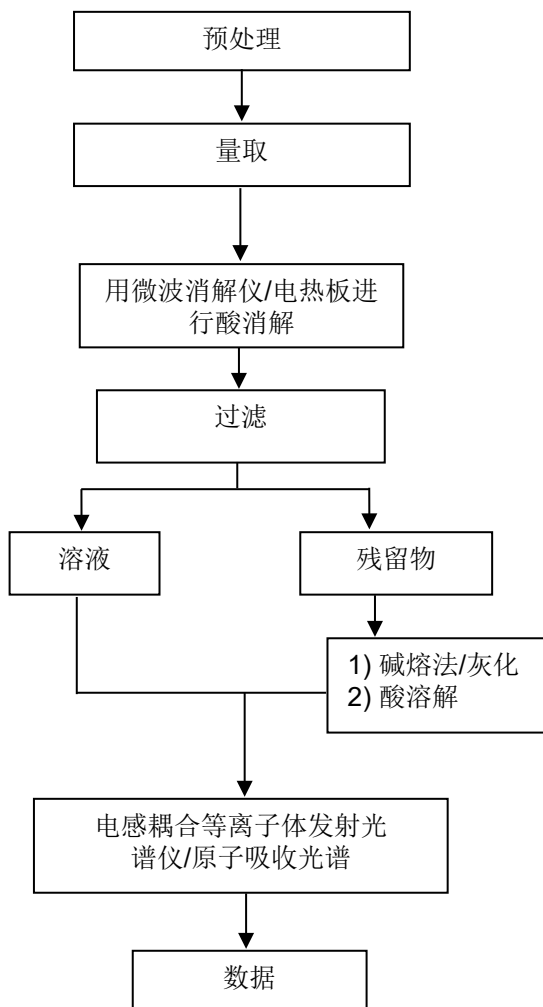
日期: 2025 年 05 月 22 日

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附件

## 元素检测流程图

样品按照下述流程被完全消解



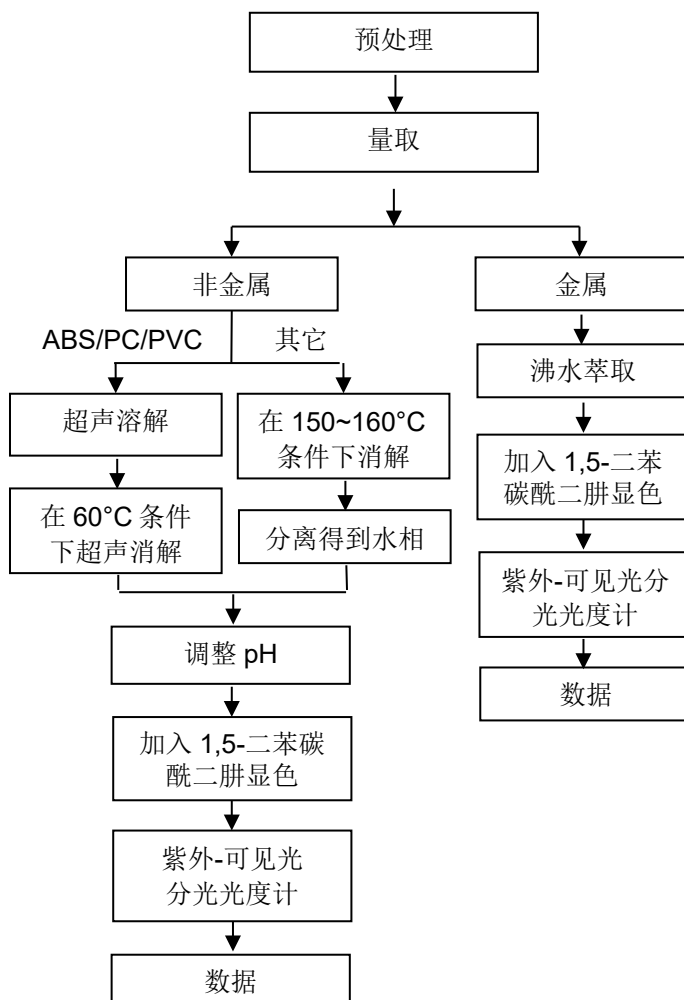
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## 六价铬检测流程图



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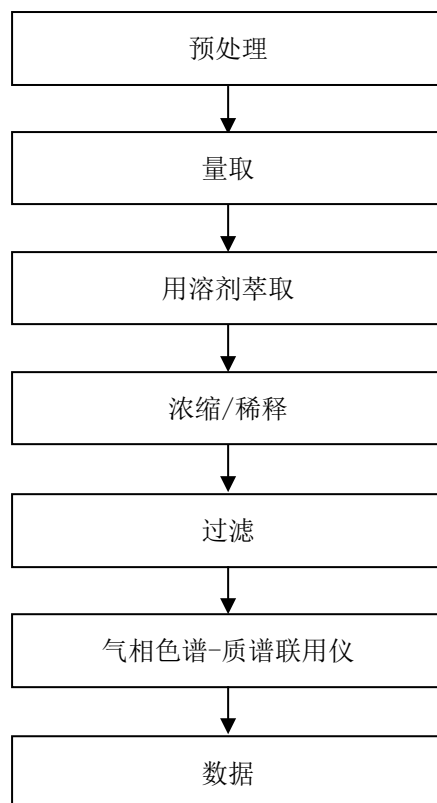
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## PBB/PBDE/Phthalates 检测流程图



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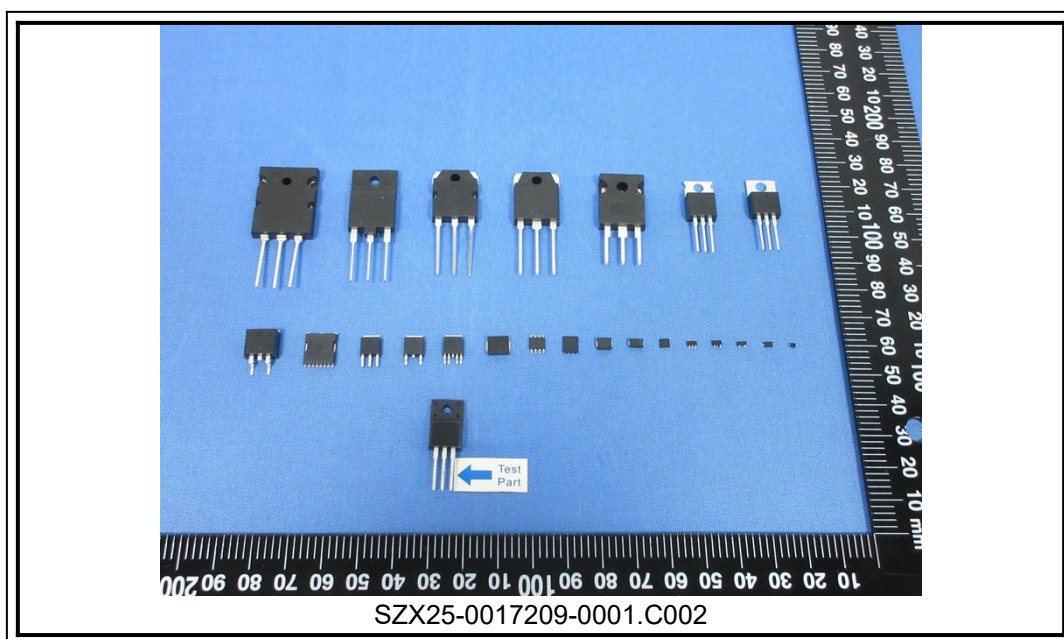
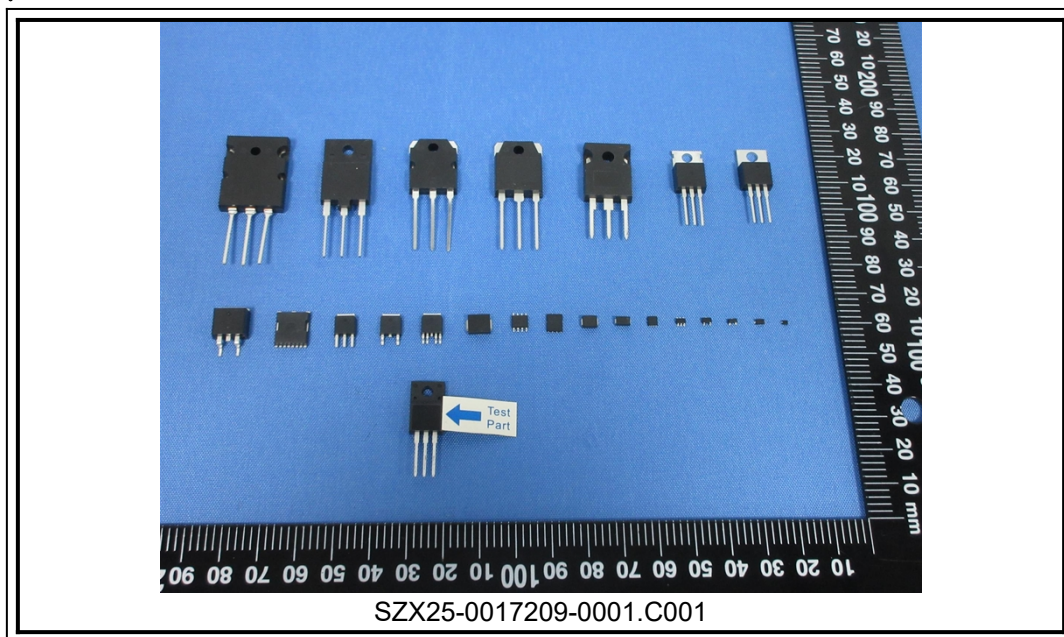
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