

检测报告

编号: SHAEC24007723604_1

日期: 2024 年 04 月 28 日

第 1 页, 共 9 页

客户名称: 中晶新源(上海)半导体有限公司

客户地址: 中国(上海)自由贸易试验区临港新片区海洋一路 333 号 1 号楼、2 号楼

样品名称: 功率器件

型号: PDFN5060-8L-D

客户参考信息: SOT-363、SOT-323、SOT-23-6L、SOT-23-5L、SOT-23-3L、SOT-23、SOT-223、SOP-8L、PDFN5060-8L-D、PDFN5060-8L-C、PDFN5060-8L、PDFN3333-8L-D、PDFN3333-8L、DFN2020-6L、PDFN5060-8L-W、PDFN5060-8L-HW、PDFN5060-8L-B、PDFN5060-8L-BW、sTOLL、TOLL、LFPK56、TO263-7L、TO247-4L、TO263-3L、TO247-3L、TO220-3L

以上样品及信息由客户提供。

此报告替代原来编号为 SHAEC24007723604, 日期为 2024 年 04 月 25 日的报告。

SGS 工作编号: SHP24-011885

样品接收时间: 2024 年 04 月 18 日

检测周期: 2024 年 04 月 18 日 ~ 2024 年 04 月 25 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
卤素	见检测结果

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授权签名

刘盈妹

Annie Liu 刘盈妹
批准签署人

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第 2 页, 共 9 页

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	A4	SHA24-0077236-0001.C004	黑色/银色固体

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

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, IEC 62321-6:2015 和 IEC 62321-8:2017, 采用 ICP-OES/AAS, UV-Vis 和 GC-MS 进行分析。

检测项目	限值	单位	MDL	A4
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	5	ND
二溴联苯 (DiBB)	-	mg/kg	5	ND
三溴联苯 (TriBB)	-	mg/kg	5	ND
四溴联苯 (TetraBB)	-	mg/kg	5	ND
五溴联苯 (PentaBB)	-	mg/kg	5	ND
六溴联苯 (HexaBB)	-	mg/kg	5	ND
七溴联苯 (HeptaBB)	-	mg/kg	5	ND
八溴联苯 (OctaBB)	-	mg/kg	5	ND
九溴联苯 (NonaBB)	-	mg/kg	5	ND
十溴联苯 (DecaBB)	-	mg/kg	5	ND
多溴二苯醚之和 (PBDE)	1000	mg/kg	-	ND
一溴二苯醚 (MonoBDE)	-	mg/kg	5	ND
二溴二苯醚 (DiBDE)	-	mg/kg	5	ND
三溴二苯醚 (TriBDE)	-	mg/kg	5	ND
四溴二苯醚 (TetraBDE)	-	mg/kg	5	ND
五溴二苯醚 (PentaBDE)	-	mg/kg	5	ND
六溴二苯醚 (HexaBDE)	-	mg/kg	5	ND
七溴二苯醚 (HeptaBDE)	-	mg/kg	5	ND
八溴二苯醚 (OctaBDE)	-	mg/kg	5	ND



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检测报告

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日期: 2024 年 04 月 28 日

第 3 页, 共 9 页

检测项目	限值	单位	MDL	A4
九溴二苯醚 (NonaBDE)	-	mg/kg	5	ND
十溴二苯醚 (DecaBDE)	-	mg/kg	5	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。

卤素

检测方法: 参考 EN 14582:2016, 采用 IC 进行分析。

检测项目	单位	MDL	A4
氟 (F)	mg/kg	20	ND
氯 (Cl)	mg/kg	50	ND
溴 (Br)	mg/kg	50	ND
碘 (I)	mg/kg	50	ND

本报告更新了客户参考信息。

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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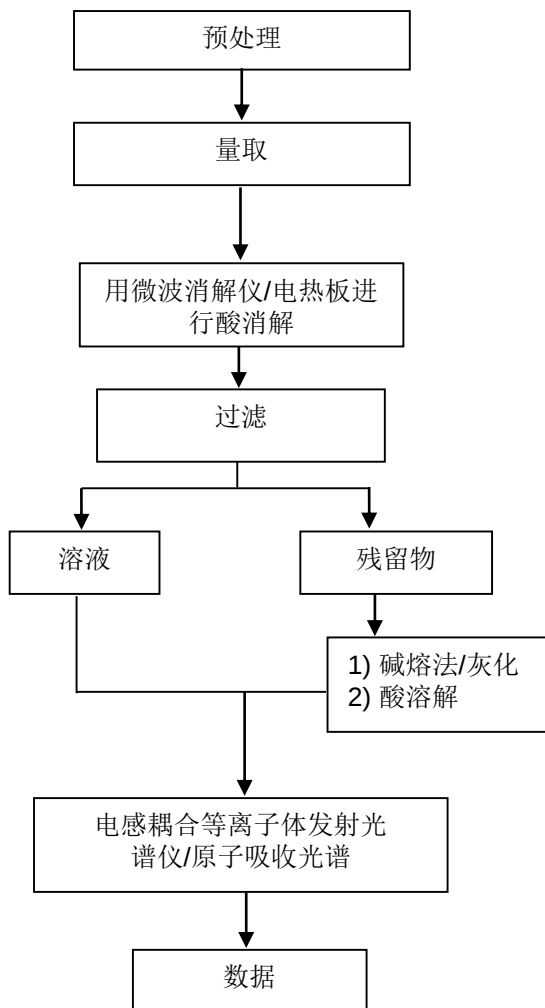
日期: 2024 年 04 月 28 日

第 4 页, 共 9 页

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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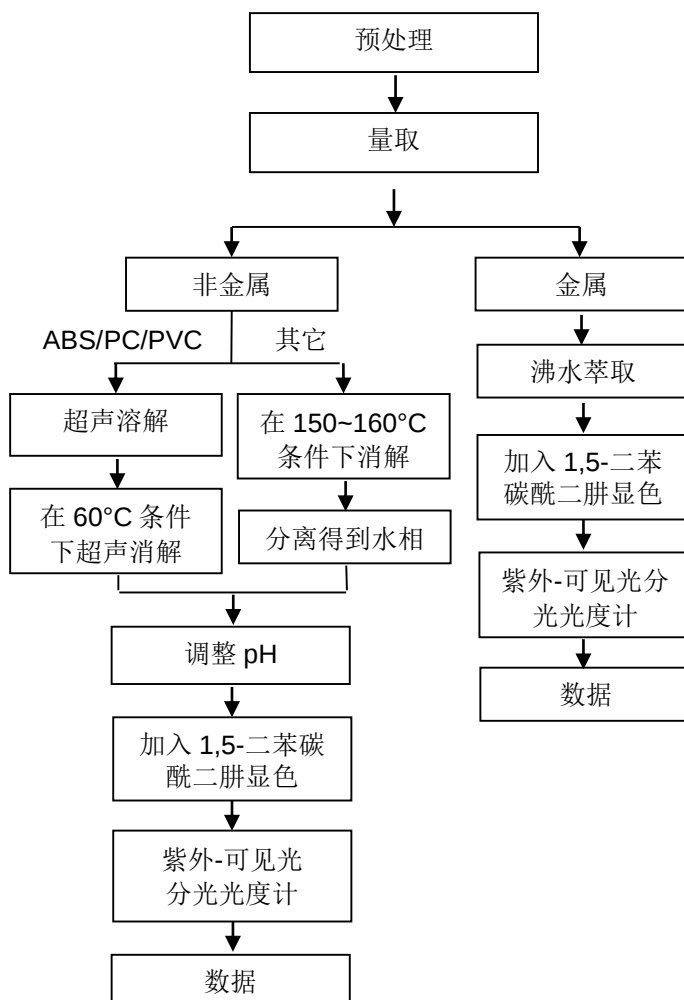
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六价铬检测流程图



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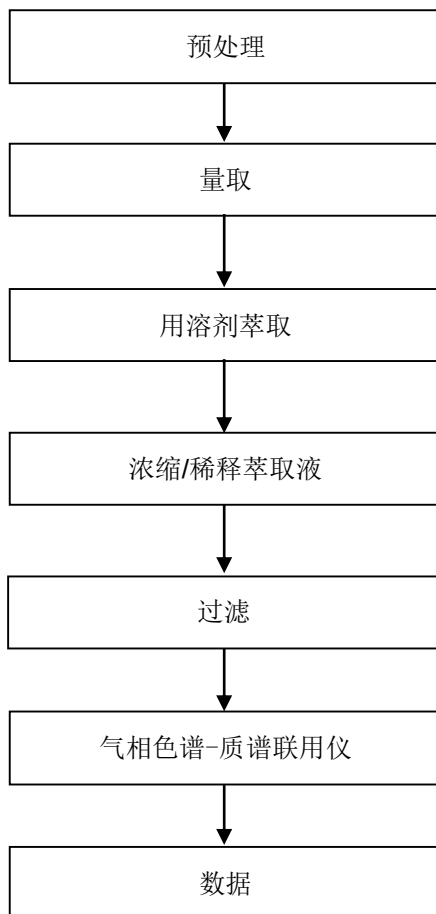
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编号: SHAEC24007723604_1

日期: 2024 年 04 月 28 日

第 6 页, 共 9 页

PBB/PBDE 检测流程图



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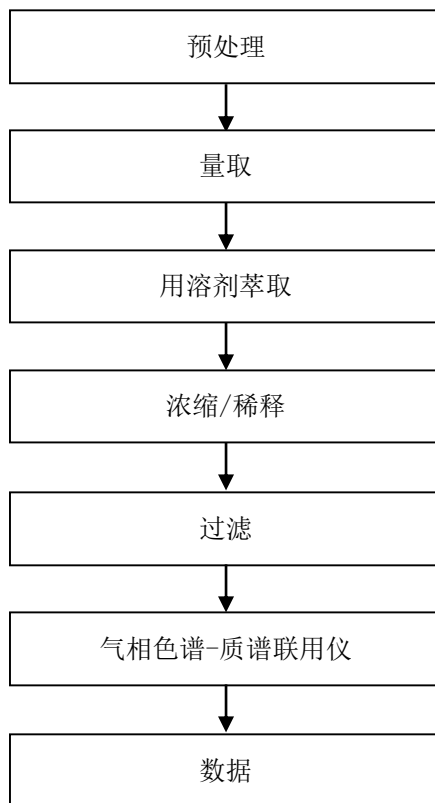
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Phthalates 检测流程图



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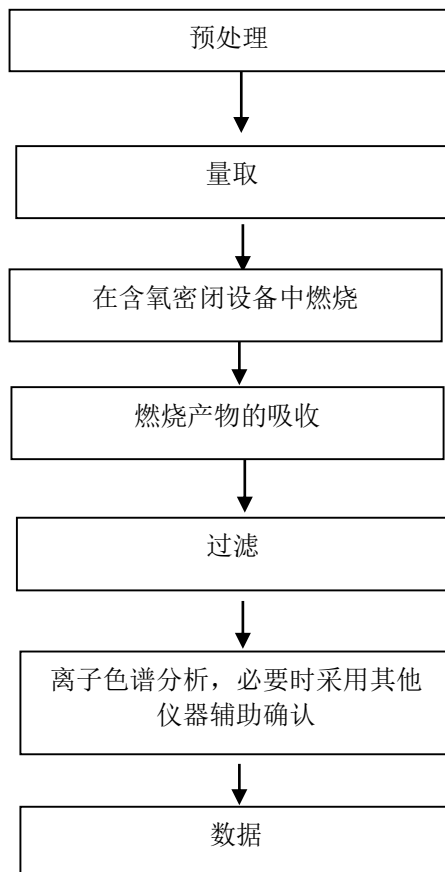
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卤素检测流程图



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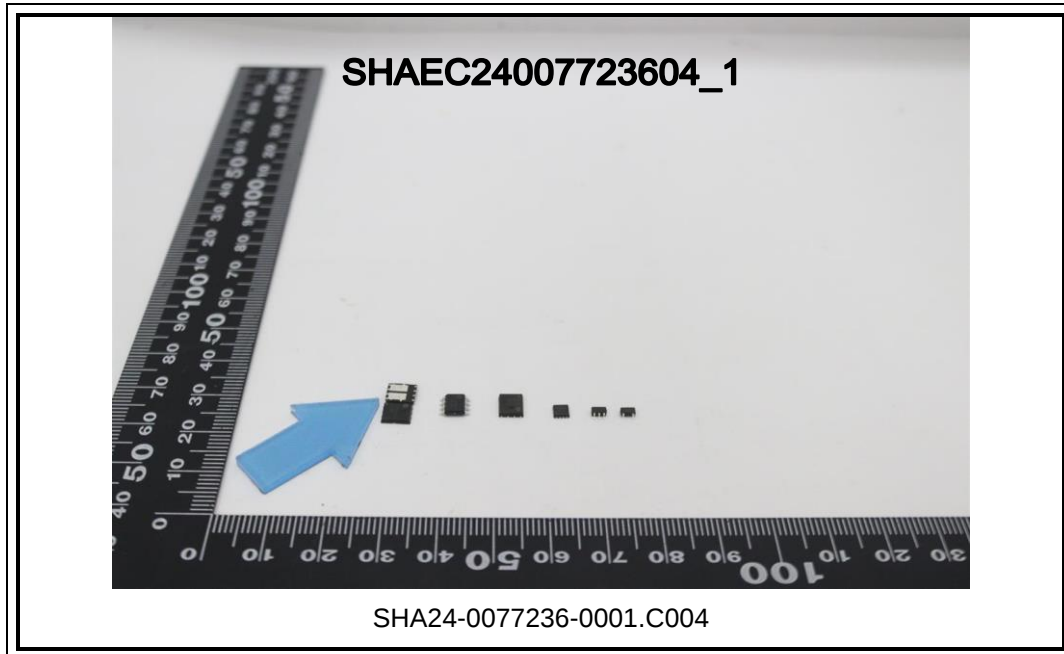
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编号: SHAEC24007723604_1

日期: 2024 年 04 月 28 日

第 9 页, 共 9 页

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