

## 检测报告

编号: SZXEC24000248910

日期: 2024年02月01日

第1页, 共10页

客户名称: 深圳市星通时频电子有限公司  
客户地址: 深圳市南山区龙珠四路方大城 T2 栋 10 楼

样品名称: 石英晶体谐振器  
型号: HC-49S  
客户参考信息: HC-49S, HC-49SMD, HC-M49S, HC-M49SMD,  
HC-49U, UM-1, UM-5  
制造商: SCTF  
供应商: SCTF  
以上样品及信息由客户提供。

SGS 工作编号: SZP24-003617  
样品接收时间: 2024年01月26日  
检测周期: 2024年01月26日 ~ 2024年02月01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
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)	见检测结果
铅、汞、镉和六价铬	见检测结果
卤素	见检测结果

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授权签名

叶晓键

Mescal Ye 叶晓键  
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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	A5	SZX24-0002489-0001.C005	银色本体 (混合) A5
SN2	A6	SZX24-0002489-0001.C006	银色金属引脚 A6

**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

**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	单位	MDL	A5
铅 (Pb)	mg/kg	2	ND
汞 (Hg)	mg/kg	2	ND
镉 (Cd)	mg/kg	2	ND
六价铬 (Cr(VI))	mg/kg	8	ND
多溴联苯之和 (PBB)	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)	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



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# 检测报告

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检测项目	单位	MDL	A5
八溴二苯醚 (OctaBDE)	mg/kg	5	ND
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)	mg/kg	50	ND
邻苯二甲酸丁苄酯 (BBP)	mg/kg	50	ND
邻苯二甲酸二丁酯 (DBP)	mg/kg	50	ND
邻苯二甲酸二异丁酯 (DIBP)	mg/kg	50	ND

## 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	单位	MDL	A6
铅 (Pb)	mg/kg	2	ND
汞 (Hg)	mg/kg	2	ND
镉 (Cd)	mg/kg	2	ND
六价铬 (Cr(VI)) <sup>▼</sup>	µg/cm <sup>2</sup>	0.10	ND

### 备注:

- (1) <sup>▼</sup> =
- 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;
  - 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;
  - 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。

## 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	A5
氟 (F)	mg/kg	20	ND
氯 (Cl)	mg/kg	50	ND
溴 (Br)	mg/kg	50	ND
碘 (I)	mg/kg	50	ND

备注: 样品的检测是基于申请人要求混合检测, 报告中的混合检测结果不代表其中个别单一材质的含量, 该检测数据仅供参考。

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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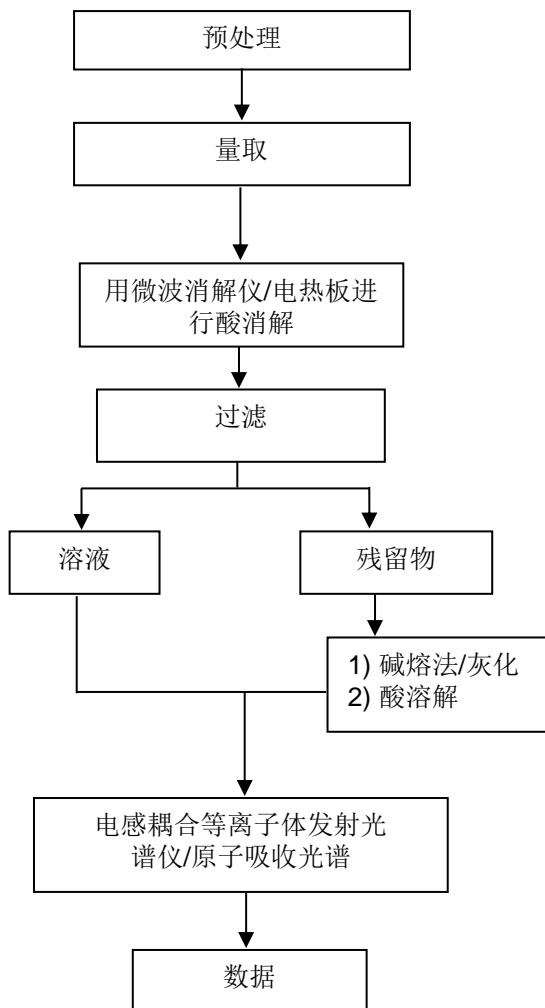
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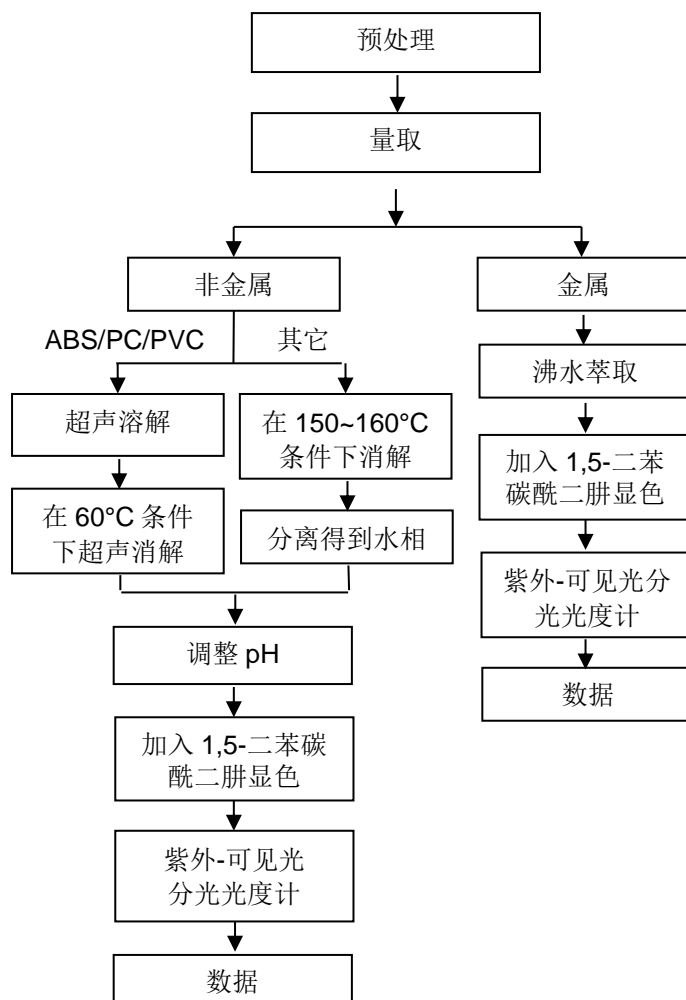
### 元素检测流程图

样品按照下述流程被完全消解

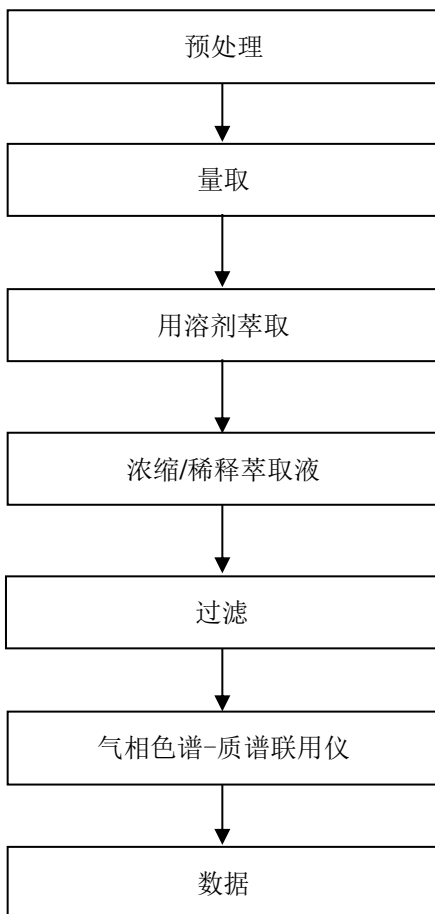




### 六价铬检测流程图



### PBB/PBDE 检测流程图



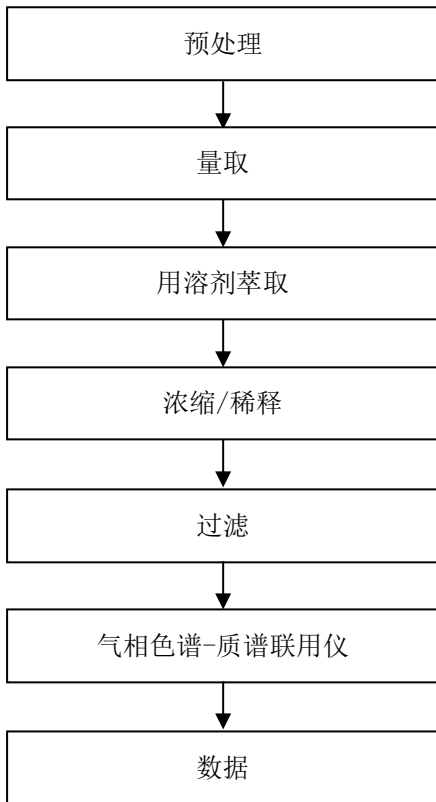
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### Phthalates 检测流程图



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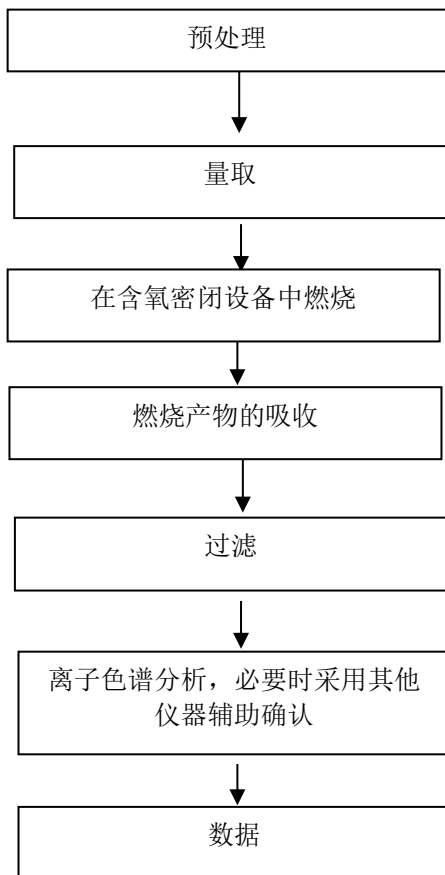
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### 卤素检测流程图



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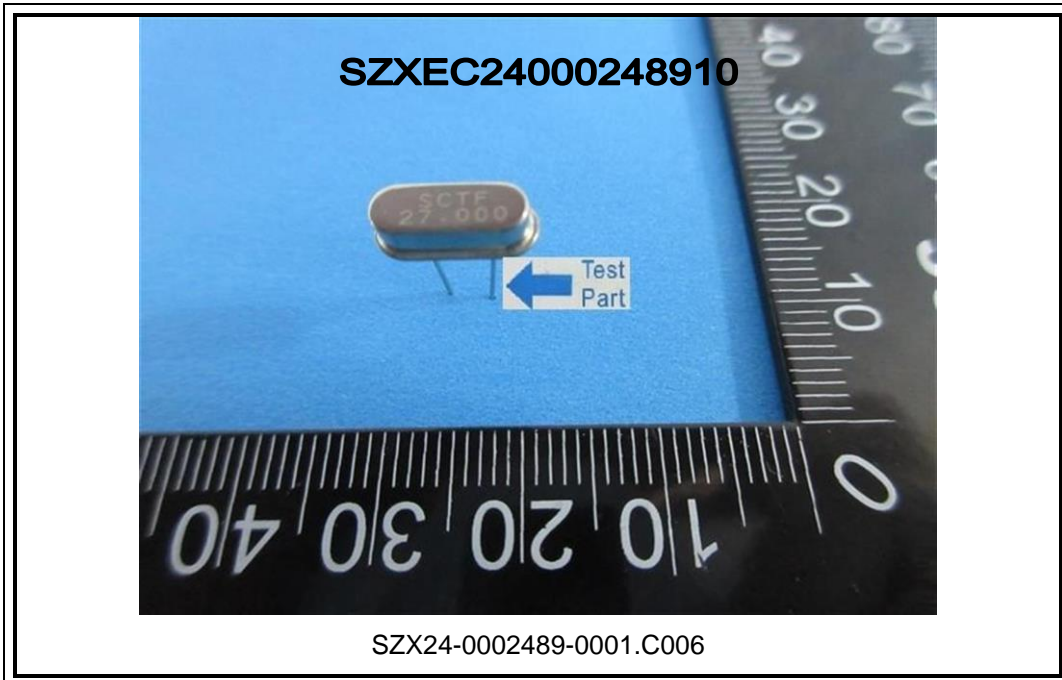
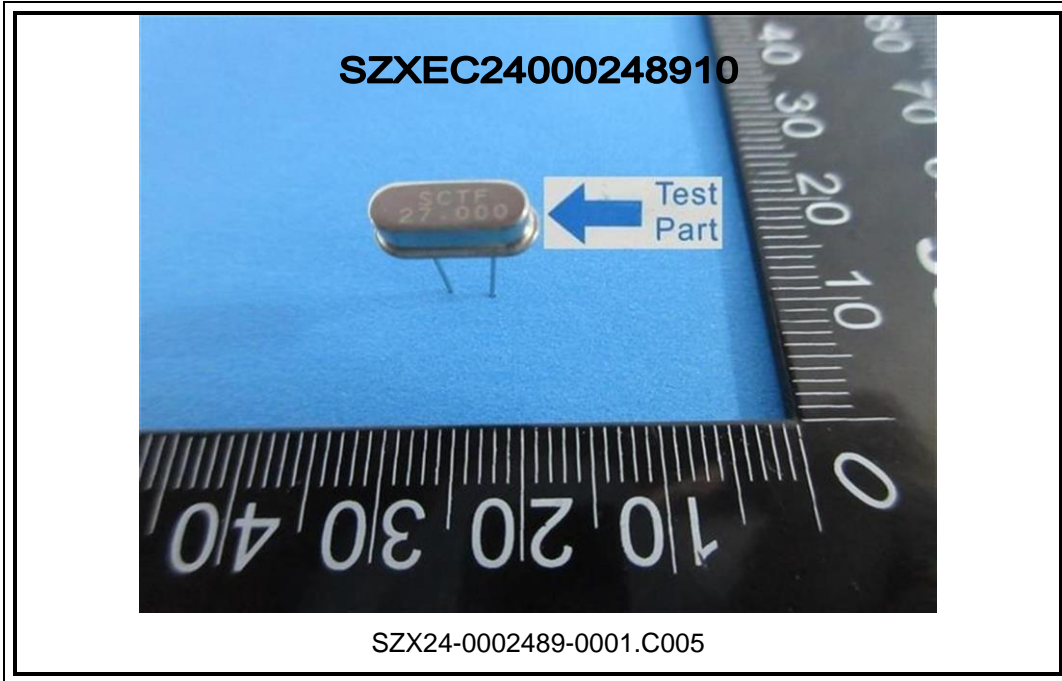
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