

## Test Report

No. 10098066/07 (1)

Date: 23 August 2007

Page 1 of 6

CTS Corporation (Singapore) Electronic Components  
14 Ang Mo Kio Industrial Park  
Singapore 569503

The following sample(s) was/were submitted and identified by/on behalf of the client as:

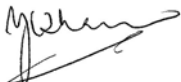
Sample Description : Oscillator (XO), Ceramic SMT Programmable CP5, CP7 and variants  
Sample Receiving Date : 15 August 2007  
Testing Period : 16 August 2007 to 23 August 2007  
Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.

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Test Result(s) : Please refer to next page(s).

Conclusion : Based on the performed tests on submitted samples, the results are **compliant with** the limits of RoHS Directive 2002/95/EC and its subsequent amendments.

Signed for and on behalf of  
SGS Testing & Control Services Singapore Pte Ltd



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Y.C. Tham  
Laboratory Manager

Test Location: 26 Ayer Rajah Crescent, #07-07, Singapore 139944

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## Test Report

No. 10098066/07 (1)

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### Test Result(s):

Sample Description : Oscillator (XO), Ceramic SMT Programmable CP5, CP7 and variants

| Test Item(s):                             | Unit  | Method  | Results     | MDL | RoHS Limit |
|---|-------|---|-------------|-----|------------|
| Cadmium(Cd)                               | mg/kg | With reference to US EPA Method 3052. Analysis was performed by ICP/AES.                      | n.d.        | 2   | 100        |
| Lead (Pb)                                 | mg/kg |   | n.d.        | 2   | 1000       |
| Mercury (Hg)                              | mg/kg |   | n.d.        | 2   | 1000       |
| Hexavalent Chromium (CrVI)                | mg/kg | With reference to US EPA Method 3060A & 7196A. Analysis was performed by UV/Vis Spectrometry. | n.d.        | 2   | 1000       |
| <b>Sum of PBBs</b>                        | mg/kg | With reference to EPA Method 3550C. Analysis was performed by GC/MS.                          | <b>n.d.</b> | -   | 1000       |
| Monobromobiphenyl                         | mg/kg |   | n.d.        | 5   | -          |
| Dibromobiphenyl                           | mg/kg |   | n.d.        | 5   | -          |
| Tribromobiphenyl                          | mg/kg |   | n.d.        | 5   | -          |
| Tetrabromobiphenyl                        | mg/kg |   | n.d.        | 5   | -          |
| Hexabromobiphenyl                         | mg/kg |   | n.d.        | 5   | -          |
| Pentabromobiphenyl                        | mg/kg |   | n.d.        | 5   | -          |
| Heptabromobiphenyl                        | mg/kg |   | n.d.        | 5   | -          |
| Octabromobiphenyl                         | mg/kg |   | n.d.        | 5   | -          |
| Nonabromobiphenyl                         | mg/kg |   | n.d.        | 5   | -          |
| Decabromobiphenyl                         | mg/kg |   | n.d.        | 5   | -          |
| <b>Sum of PBDE (Mono to Nona)(Note 4)</b> | mg/kg |   | <b>n.d.</b> | -   | 1000       |
| Monobromodiphenyl ether                   | mg/kg |   | n.d.        | 5   | -          |
| Dibromodiphenyl ether                     | mg/kg | n.d.  | 5           | -   |            |
| Tribromodiphenyl ether                    | mg/kg | n.d.  | 5           | -   |            |
| Tetrabromodiphenyl ether                  | mg/kg | n.d.  | 5           | -   |            |
| Pentabromodiphenyl ether                  | mg/kg | n.d.  | 5           | -   |            |
| Hexabromodiphenyl ether                   | mg/kg | n.d.  | 5           | -   |            |
| Heptabromodiphenyl ether                  | mg/kg | n.d.  | 5           | -   |            |
| Octabromodiphenyl ether                   | mg/kg | n.d.  | 5           | -   |            |
| Nonabromodiphenyl ether                   | mg/kg | n.d.  | 5           | -   |            |
| Decabromodiphenyl ether                   | mg/kg | n.d.  | 5           | -   |            |
| <b>Sum of PBDEs (Mono to Deca)</b>        | mg/kg | <b>n.d.</b>   | -           | -   |            |

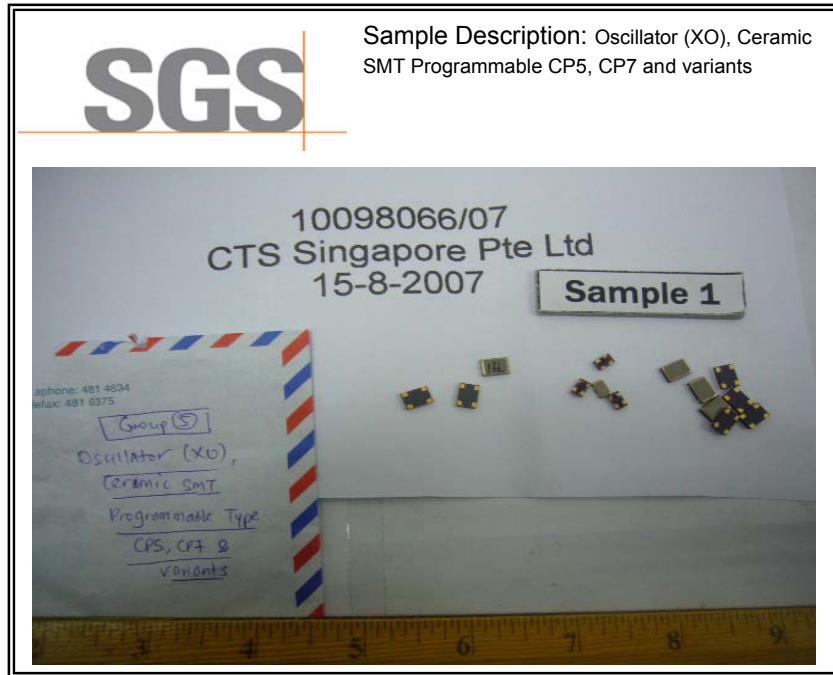
- Note:
- (1) mg/kg = ppm
  - (2) n.d.= Not Detected = Denoted less than MDL
  - (3) MDL = Method Detection Limit
  - (4) Sum of Mono to NonaBDE & according to 2005/717/EC DecaBDE is exempt.
  - (5) “-“ = Not regulated
  - (6) “ --- “ = Not Conducted

Remarks: Sample received was totally dissolved by preconditioning & destroyed after the analysis.  
Lab Analyst: Christine Choy, Irene Li & Jessica Chong.

Test Location: 26 Ayer Rajah Crescent, #07-07, Singapore 139944

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**Sample photo:**

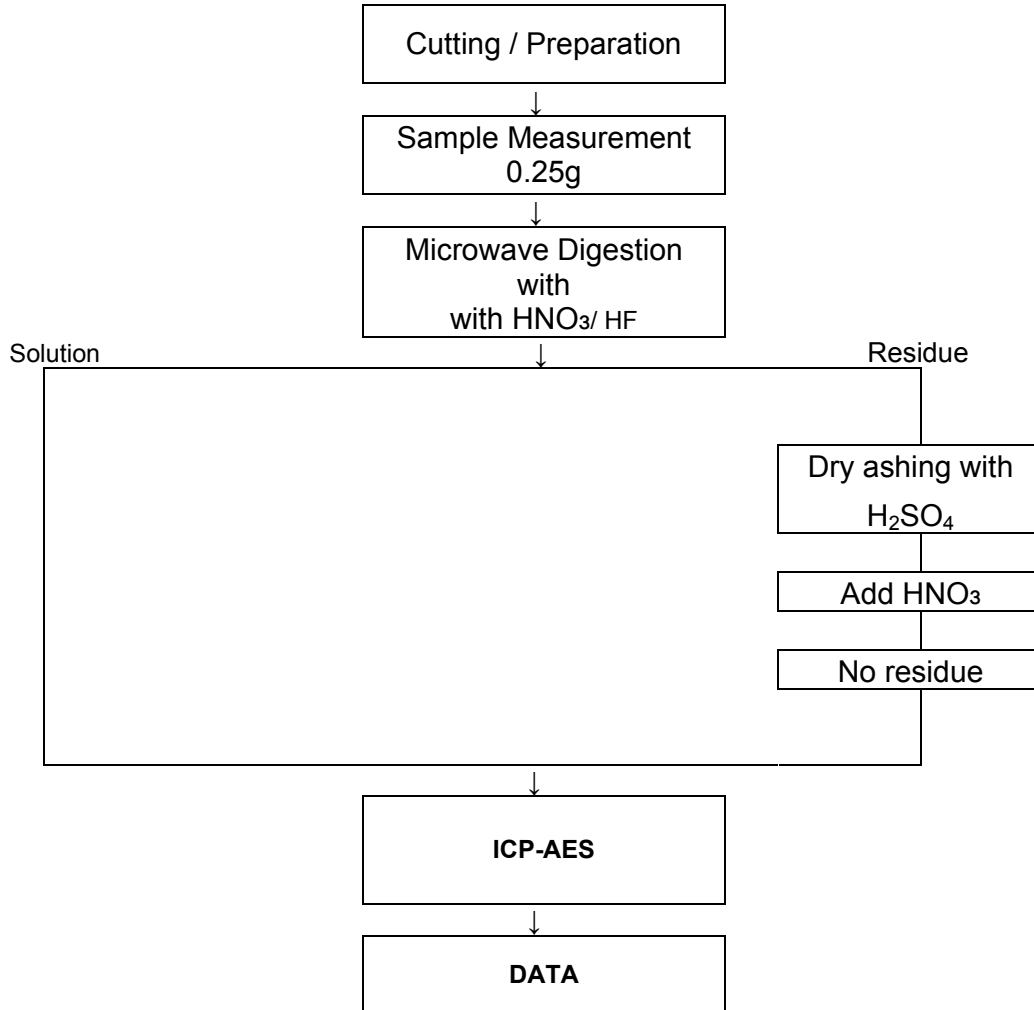


SGS authenticate the photo on original report only

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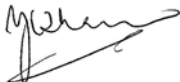
**Process Flow of US EPA 3051A/3052 (Hg, Cd, Pb)**



Lab Analyst : Jessica Chong

Sample received has been totally digested and dissolved by preconditioning method.

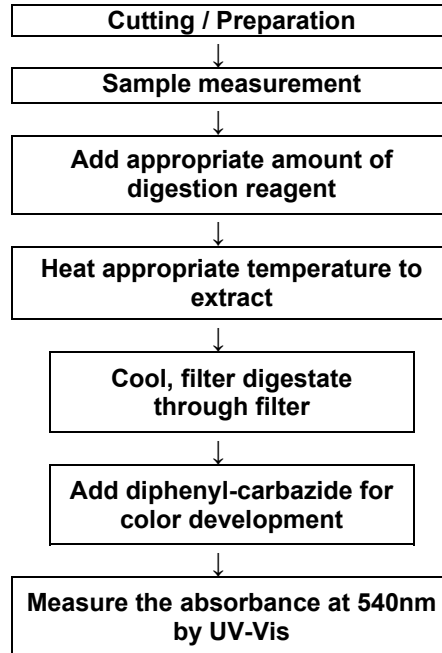
Signed for and on behalf of  
SGS Testing & Control Services Singapore Pte Ltd



Y.C. Tham  
Laboratory Manager

Test Location: 26 Ayer Rajah Crescent, #07-07, Singapore 139944

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**Process Flow of EPA 3060A, 7196A for analysis of Cr (VI)**

Lab Analyst : Christine Choy

Sample received has been totally digested and dissolved by preconditioning method.

Signed for and on behalf of  
SGS Testing & Control Services Singapore Pte Ltd

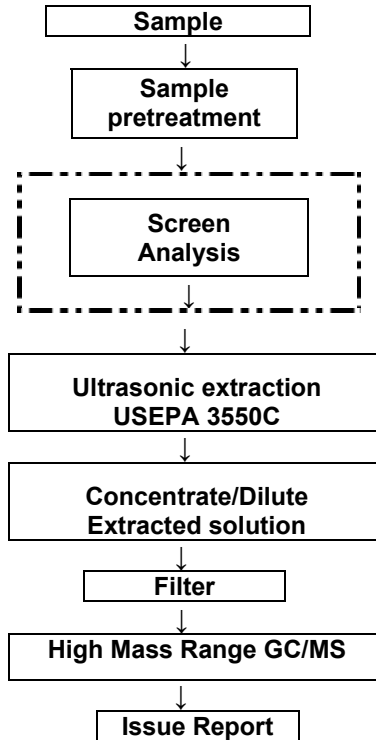
Y.C. Tham  
Laboratory Manager

Test Location: 26 Ayer Rajah Crescent, #07-07, Singapore 139944

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**Process Flow of PBBs and PBDEs Flame Retardants by GC/MS**

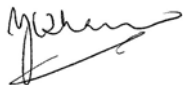
First Testing Process → Optional screen process ..... Confirmation process ...→



Lab Analyst : Irene Li

Sample received has been totally digested and dissolved by preconditioning method.

Signed for and on behalf of  
SGS Testing & Control Services Singapore Pte Ltd



Y.C. Tham  
Laboratory Manager

\*\*\*End of Report\*\*\*

Test Location: 26 Ayer Rajah Crescent, #07-07, Singapore 139944

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