

Test Report

No. 2021997/EC

Date: Jun 30 2005

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MULTICOMP PRODUCTS MANUFACTURED BY PAN OVERSEAS ELECTRONIC CO LTD 11F,NO,480, RUEIGUANG ROAD NEIHU CHIU, TAIPEI, 114, TAIWAN, R.O.C.

Report on the submitted sample said to be MULTILAYER CERAMIC CHIP CAPACITOR, 0603 CASE SIZE

SGS Job No.

1758269

Part Description

X7R dielectric

Buyer

PREMIER FARNELL ASIA PTE LTD

Supplier

PAN OVERSEAS ELECTRONIC CO., LTD.

Sample Receiving Date Testing Period

MAY 06 2005 MAY 06-17 2005

Test Requested

With reference to RoHS Directive 2002/95/EC

- To determine the Cadmium content in the submitted sample.
- To determine the Lead content in the submitted sample. 2)
- To determine the Mercury content in the submitted sample. 3)
- To determine the Hexavalent Chromium content on the submitted sample. 4)
- Determination of PBBs (polybrominated biphenyls), PBDEs (Polybrominated

diphenylethers) of the submitted sample.

**Test Method** 

1-3) In-House Method.

The sample was digested by acid. Analysis was performed by Inductively Coupled Argon Plasma - Atomic Emission Spectrometry (ICP-AES) or Atomic Absorption Spectrometry.

As specified in EPA Method 3060A & 7196A. 4)

The sample was alkaline digested by using EPA Method 3060A, and then

analyzed by using Colorimetric method 7196A.

5) With reference to SGS in-house method. Analysis was performed by GC/MS.

Test Results

1-5) Please refer to next page.

Conclusion

1-5) When tested as specified, the submitted sample complies with the

requirements of RoHS Directive Consultation document on 2002/95/EC.

Signed for and on behalf of SGS Hong Kong Ltd

Ho Ka Ting, Family Laborator Executive

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**Test Results** 

 Element
 1
 Limit of RoHS Consultant Document

 1) Cadmium (Cd)
 < 2 ppm</td>
 100 ppm

 2) Lead (Pb)
 6 ppm
 1000 ppm

 3) Mercury (Hg)
 < 2 ppm</td>
 1000 ppm

 4) Hexavalent Chromium (Cr <sup>6+</sup>)
 < 2 ppm</td>
 1000 ppm

(Results shown are of the total weight of samples)

Note: <= Less than ppm = mg/kg

5)

| Flame Retardants                     | 1   | Detection<br>Limit | Limit of RoHS<br>Consultant Document |
|--------------------------------------|-----|--------------------|--------------------------------------|
| Polybrominated Biphenyls (PBBs)      | ND  | 50 ppm             | 1000 ppm                             |
| Monobromobiphenyl                    | ND  | 5 ppm              |                                      |
| Dibromobiphenyl                      | ND  | 5 ppm              | <b></b>                              |
| Tribromobiphenyl                     | ND  | 5 ppm              |                                      |
| Tetrabromobiphenyl                   | ND  | 5 ppm              | <u></u>                              |
| Pentabromobiphenyl                   | NĎ  | 5 ppm              |                                      |
| Hexabromobiphenyl                    | ND_ | 5 ppm              |                                      |
| Heptabromobiphenyl                   | ND  | 5 ppm              |                                      |
| Octabromobiphenyl                    | ND  | 5 ppm              |                                      |
| Nonabromobiphenyl                    | ND  | 5 ppm              |                                      |
| Decabromobiphenyl                    | ND  | 5 ppm              |                                      |
| Polybrominated Diphenylether (PBDEs) | ND  | 50 ppm             | 1000 ppm                             |
| Monobromodiphenyl ether              | ND  | 5 ppm              |                                      |
| Dibromodiphenyl ether                | ND  | 5 ppm              |                                      |
| Tribromodiphenyl ether               | ND  | 5 ppm              | <del></del>                          |
| Tetrabromodiphenyl ether             | ND  | 5 ppm              |                                      |
| Pentabromodiphenyl ether             | ND  | 5 ppm              |                                      |
| Hexabromodiphenyl ether              | ND  | 5 ppm              |                                      |
| Heptabromodiphenyl ether             | ND  | 5 ppm              |                                      |
| Octabromodiphenyl ether              | ND  | 5 ppm              |                                      |
| Nonabromodiphenyl ether              | ND  | 5 ppm              |                                      |
| Decabromodiphenyl ether              | ND  | 5 ppm              | <u></u>                              |

Note: ND = Not Detected

Non-detected is lower than detection limit value.

## Sample Description:

1. Light Grey Ceramic w/ Silvery Metal

Remark: Photo appendix is included.

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

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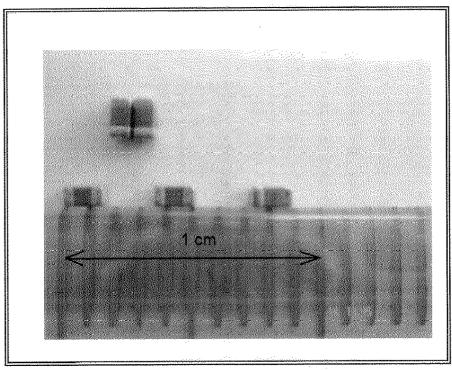
Test Report No. :

2021997EC

Sample Receiving Date :

MAY 06 2005

## **PHOTO APPENDIX**



SGS authenticate the photo on original report only

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Authorized Signature Ho Ka Ting, Family Laboratory Executive

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