

Test Report

No. 2027580/EC

Date: Sep 20 2005

Page 1 of 3

MULTICOMP PRODUCTS MANUFACTURED BY SOLI ELECTRONICS INDUSTRY (HUI-DONG) CO LTD TAI YANG INDUSTRIAL ZONE, HUI-DONG HSIEN, HUI-ZHOU CITY, GUANG DONG, CHINA

Report on the submitted sample said to be ALUMINUM AXIAL ELECTROLYTIC CAPACITORS.

SGS Job No.

1796584

Part Description

LV SERIES, 85°C

Buyer

PREMIER FARNELL ASIA PTE LTD

Supplier

SOLI ELECTRONICS INDUSTRY (HUI-DONG) CO LTD

Sample Receiving Date Testing Period

JUN 20 2005 JUN 21 - 30 2005

Test Requested

With reference to RoHS Directive 2002/95/EEC

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

Test Method

- 1) As specified in BS EN 1122:2001, Method B, analysis was performed by Inductively Coupled Argon Plasma - Atomic Emission Spectrometry (ICP-
- 2) As specified in EPA Method 3050B. Analysis was performed by Inductively Coupled Argon Plasma - Atomic
- Emission Spectrometry (ICP-AES). As specified in EPA Method 3052. 3) Analysis was performed by Inductively Coupled Argon Plasma – Atomic Emission Spectrometry (ICP-AES).
- 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. In house method. The sample was digested by acid. Analysis was performed
- by Atomic Absorption or Inductively Coupled Argon Plasma Atomic Emission Spectrometry (ICP-AES).
- With reference to SGS in-house method. Analysis was performed by GC/MS.

**Test Results** 

1-6) Please refer to next page.

Conclusion

1-6) When tested as specified, the submitted samples comply 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 Laboratory Executive

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company.

H12205663



**Test Report** 

No. 2027580/EC

Date : Sep 20 2005

Page 2 of 3

Test Results

1-5)				
Element	1	2	3	Limit of RoHS Consultant Document
Cadmium (Cd)	< 2 ppm	< 2 ppm	< 2 ppm	100 ppm
Lead (Pb)	< 2 ppm	21 ppm	< 2 ppm	1000 ppm
Mercury (Hg)	< 2 ppm	< 2 ppm	< 2 ppm	1000 ppm
Hexavalent Chromium (Cr 6+)	< 2 ppm	< 2 ppm	< 2 ppm	1000 ppm
Element	4	<u>5</u>	<u>6</u>	Limit of RoHS Consultant Document
Cadmium (Cd)	< 2 ppm	< 2 ppm	< 2 ppm	100 ppm
Lead (Pb)	4 ppm	3 ppm	17 ppm	1000 ppm
Mercury (Hg)	< 2 ppm	< 2 ppm	< 2 ppm	1000 ppm
Hexavalent Chromium (Cr 6+)	< 2 ppm	< 2 ppm	< 2 ppm	1000 ppm

(Results shown are of the total weight of samples)

Note: < = Less than ppm = mg/kg

6)

Flame Retardants	1	2	3	Detection Limit	Limit of RoHS Consultant Document
Polybrominated Biphenyls (PBBs)	ESS ROOMS	*******		alti ber with	1000 ppm
Monobromobiphenyl	ND	ND	ND	5 ppm	
Dibromobiphenyl	ND	ND	ND	5 ppm	Park
Tribromobiphenyl	ND	ND	ND	5 ppm	
Tetrabromobiphenyl	ND	ND	ND	5 ppm	44-49
Pentabromobiphenyl	ND	ND	ND	5 ppm	mater state
Hexabromobiphenyl	ND	ND	ND	5 ppm	_ ==
Heptabromobiphenyl	ND	ND	ND	5 ppm	
Octabromobiphenyl	ND	ND	ND	5 ppm	
Nonabromobiphenyl	ND	ND	ND	5 ppm	**=
Decabromobiphenyl	ND	ND	ND	5 ppm	200
Polybrominated Diphenylethers (PBDEs)		75.574 F4	10-0 LW POL		1000 ppm
Monobromodiphenyl ether	ND	ND	ND	5 ppm	ent bió
Dibromodiphenyl ether	ND	ND	ND	5 ppm	
Tribromodiphenyl ether	ND	ND	ND	5 ppm	***
Tetrabromodiphenyl ether	ND	ND	ND	5 ppm	
Pentabromodiphenyl ether	ND	ND	ND	5 ppm	
Hexabromodiphenyl ether	ND	ND	ND	5 ppm	A-44
Heptabromodiphenyl ether	ND	ND	ND	5 ppm	
Octabromodiphenyl ether	ND	ND	ND	5 ppm	NO PM
Nonabromodiphenyl ether	ND	ND	ND	5 ppm	
Decabromodiphenyl ether	ND	ND	ND	5 ppm	

Note: ND = Not Detected

Non-detected is lower than detection limit value.

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company.



**Test Report** 

No. 2027580/EC

Date: Sep 20 2005

Page 3 of 3

Test Results (Cont'd):

6)

Flame Retardants	4	5	6	Detection Limit	Limit of RoHS Consultant Document
Polybrominated Biphenyls (PBBs)	the late	de fortes	ph ent eò	EMENT	1000 ppm
Monobromobiphenyl	ND	ND	ND	5 ppm	
Dibromobiphenyl	ND	ND	ND	5 ppm	
Tribromobiphenyl	ND	ND	ND	5 ppm	Sec. and
Tetrabromobiphenyl	ND	ND	ND	5 ppm	
Pentabromobiphenyl	ND	ND	ND	5 ppm	
Hexabromobiphenyl	ND	ND	ND	5 ppm	ete from
Heptabromobiphenyl	ND	ND	ND	5 ppm	
Octabromobiphenyl	ND	ND	ND	5 ppm	Parent
Nonabromobiphenyl	ND	ND	ND	5 ppm	***
Decabromobiphenyl	ND	ND	ND	5 ppm	
Polybrominated Diphenylethers (PBDEs)		and partition		Markey See	1000 ppm
Monobromodiphenyl ether	ND	ND	ND	5 ppm	A+14
Dibromodiphenyl ether	ND	ND	ND	5 ppm	
Tribromodiphenyl ether	ND	ND	ND	5 ppm	<b>-</b> -
Tetrabromodiphenyl ether	ND	ND	ND	5 ppm	<u> </u>
Pentabromodiphenyl ether	ND	ND	ND	5 ppm	No. ob-
Hexabromodiphenyl ether	ND	ND	ND	5 ppm	
Heptabromodiphenyl ether	ND	ND	ND	5 ppm	
Octabromodiphenyl ether	ND	ND	ND	5 ppm	peres
Nonabromodiphenyl ether	ND	ND	ND	5 ppm	
Decabromodiphenyl ether	ND	ND	ND	5 ppm	

Note: ND = Not Detected

Non-detected is lower than detection limit value.

## Sample Description:

- 1. Black Plastic w/ White Printing (Capacitor Jacket)
- 2. Black Plastic (Capacitor Base)
- 3. Light Brown Paper Soaking With Electrolyte (Inside Capacitor)
- 4. Silvery Metal (Capacitor Case)
- 5. Silvery Metal (Foil Inside Capacitor Case)
- 6. Silvery Metal (Pin) w/ Silvery Metal (Plate Connecting Pin) w/ Solder

Remark: Photo appendix is included

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

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company.

H12205665

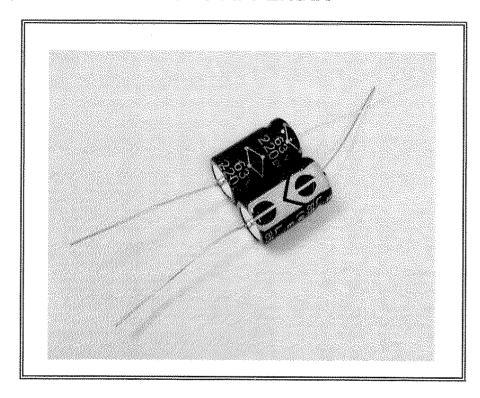


Test Report No. :

2027580/EC

Sample Receiving Date: JUN 20 2005

## PHOTO APPENDIX



SGS authenticate the photo on original report only

Page 1 of 1

Authorized Signature Ho/Ka Ting, Family Laboratory Executive

This test document cannot be reproduced in any way, except in full context, without prior approval in writing from SGS.