

**Test Report** No. CANEC1308466305 Date: 21 Jun 2013 Page 1 of 7

#### ELECSOUND ELECTRONICS COMPANY LIMITED

7A,HONGFUGE,CAIFU BUILDING,CAITIAN SOUTH ROAD,FUTIAN DISTRICT,SHENZHEN CITY,GUANGDON PROVINCE,518026,CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as: Trimming Potentiometor

SGS Job No.: CP13-028942 - SZ

Date of Sample Received: 05 Jun 2013

Testing Period: 05 Jun 2013 - 09 Jun 2013

Test Requested : Selected test(s) as requested by client.

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

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

Conclusion: Based on the performed tests on submitted samples, the results of Lead,

Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE) comply with the limits as set by RoHS

Directive 2011/65/EU Annex II; recasting 2002/95/EC.

Signed for and on behalf of SGS-CSTC Ltd.

Trophy Zhang
Approved Signatory

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/terms">http://www.sgs.com/terms</a> and conditions. <a href="http://www.sgs.com/terms</a> e-document. <a href="http://www.sgs.co



# **Test Report** No. CANEC1308466305 Date: 21 Jun 2013 Page 2 of 7

Test Results:

### **Test Part Description:**

Specimen No.	SGS Sample ID	Description
1	CAN13-084663.011	Blue plastic
2	CAN13-084663.012	Silver-grey metal(semi-product)
3	CAN13-084663.013	Silver-grey metal pin (semi-product)
4	CAN13-084663.014	Brassy metal

#### Remarks:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected ( < MDL)
- (4) "-" = Not Regulated

### RoHS Directive 2011/65/EU

Test Method: With reference to IEC 62321:2008

- (1) Determination of Cadmium by ICP-OES.
- (2) Determination of Lead by ICP-OES.
- (3) Determination of Mercury by ICP-OES.
- (4) Determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.
- (5) Determination of PBBs / PBDEs content by GC-MS.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>011</u>
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	ND
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	1,000	mg/kg	2	ND
Sum of PBBs	1,000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/terms">http://www.sgs.com/terms</a> and conditions.

<a href="http://www.sgs.com/terms">http://www.sgs.com/terms</a> endocument. Attention is drawn to the limitation of liability incommunication and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its bredention of the same of the

fices Co., Ltd. 198 Kezhu Road,Scientech Park Guangzhou Economic & Technology Development District,Guangzhou,China 510663 t (86–20) 82155555 f (86–20) 82075113 www.cn.sgs.com 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075113 e sgs.china@sgs.com



Test Report	No. CANEC1308466305		Date: 21 Jun 2013		Page 3 of 7
Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>011</u>	
Decabromobiphenyl	-	mg/kg	5	ND	
Sum of PBDEs	1,000	mg/kg	-	ND	
Monobromodiphenyl ether	-	mg/kg	5	ND	
Dibromodiphenyl ether	-	mg/kg	5	ND	
Tribromodiphenyl ether	-	mg/kg	5	ND	
Tetrabromodiphenyl ether	-	mg/kg	5	ND	
Pentabromodiphenyl ether	-	mg/kg	5	ND	
Hexabromodiphenyl ether	-	mg/kg	5	ND	
Heptabromodiphenyl ether	-	mg/kg	5	ND	
Octabromodiphenyl ether	-	mg/kg	5	ND	
Nonabromodiphenyl ether	-	mg/kg	5	ND	
Decabromodiphenyl ether	-	mg/kg	5	ND	

#### Notes:

(1) The maximum permissible limit is quoted from the directive 2011/65/EU, Annex II

### RoHS Directive 2011/65/EU

Test Method: With reference to IEC 62321:2008

- (1) Determination of Cadmium by ICP-OES.
- (2) Determination of Lead by ICP-OES.
- (3) Determination of Mercury by ICP-OES.
- (4) Determination of Hexavalent Chromium by Spot test / Colorimetric Method using UV-Vis.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>012</u>	<u>013</u>	<u>014</u>
Cadmium (Cd)	100	mg/kg	2	ND	ND	ND
Lead (Pb)	1,000	mg/kg	2	ND	ND	41
Mercury (Hg)	1,000	mg/kg	2	ND	ND	ND
Hexavalent Chromium (CrVI)	-	-	$\Diamond$	Negative	Negative	Negative

### Notes:

- (1) The maximum permissible limit is quoted from the directive 2011/65/EU, Annex II
- (2) Spot-test:

Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;

(The tested sample should be further verified by boiling-water-extraction method if the spot test result is Negative or cannot be confirmed.)

◇Boiling-water-extraction:

Negative = Absence of CrVI coating

Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm2 sample surface area.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/terms\_and\_conditions.">httm.and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability incernation and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its presentation of the soft instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from the services in all the properties of the properties of the services and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. The unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

The properties of the services are also as a supplication of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

fices Co., Ltd. 198 Kezhu Road,Scientech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075113 www.cn.sgs.com 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075113 e sgs.china@sgs.com



No. CANEC1308466305 Date: 21 Jun 2013

Information on storage conditions and production date of the tested sample is unavailable and thus results of Cr(VI) represent status of the sample at the time of testing.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/terms\_and\_conditions.">httm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability incommitted in an incompany subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability incommitted in the first subject of the subject of th

nices Co., Ltd. 198 Kezhu Road,Scientech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075113 www.cn.sgs.com 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075113 e sgs.china@sgs.com

Page 4 of 7



No. CANEC1308466305

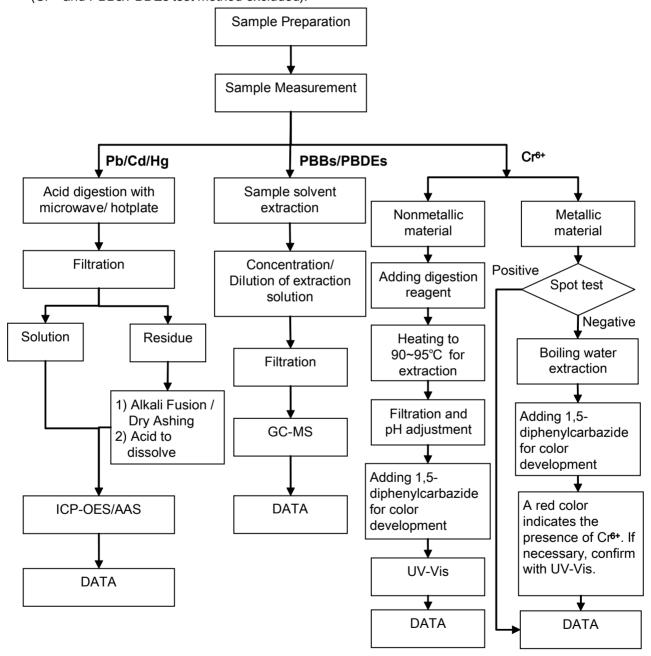
Date: 21 Jun 2013 Pa

Page 5 of 7

#### **ATTACHMENTS**

### **RoHS Testing Flow Chart**

- 1) Name of the person who made testing: Michael Tso / Cutey Yu
- 2) Name of the person in charge of testing: Adams Yu / Yolanda Wei
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart (Cr<sup>6+</sup> and PBBs/PBDEs test method excluded).



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/terms\_and\_conditions.htm">http://www.sgs.com/terms\_and\_conditions.htm</a>, and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability incommittention and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its interactions of the printing of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from the company of the printing of the company of the company. This document cannot be reproduced except in full, without prior written approval of the Company. The company of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

The company of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

198 Kezhu Road,Scientech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075113 www.cn.sgs.com 中国・广州・经济技术开发区科学城科珠路198号 邮編: 510663 t (86–20) 82155555 f (86–20) 82075113 e sgs.china@sgs.com

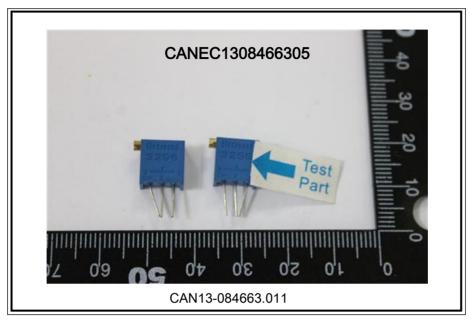


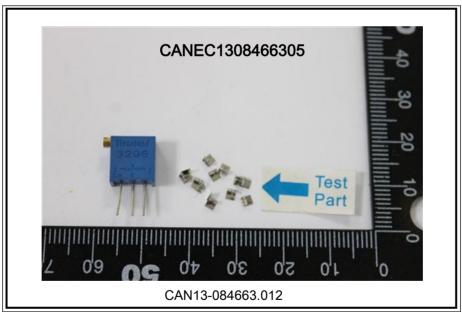
No. CANEC1308466305

Page 6 of 7

Date: 21 Jun 2013

### Sample photo:





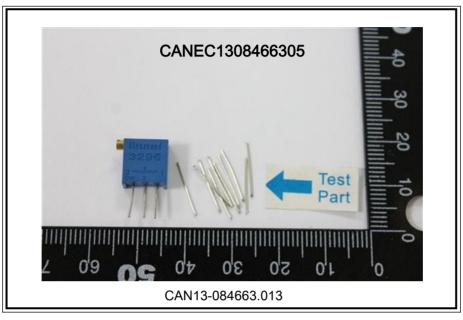
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/terms\_and\_conditions.">httm.and.for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability incommitted in and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its presention of the analysis of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all the properties of the produced except in full, without prior written approval of the Company. The company of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

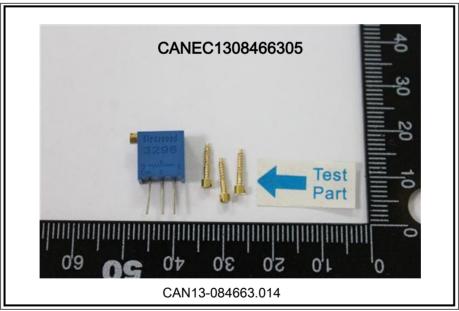
Julies of the results shown in this test report refer only to the sample(s) tested.

| 198 Kezhu Road, Scientech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075113 www.cn.sgs.com | 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075113 e sgs.china@sgs.com



No. CANEC1308466305 Date: 21 Jun 2013 Page 7 of 7





SGS authenticate the photo on original report only

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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/terms\_and\_conditions.">httm.and.for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability incommitted in an incompany subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability incommitted at the time of its presentation of the same of its presentation o

198 Kezhu Road, Scientech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075113 www.cn.sgs.com中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075113 e sgs.china@sgs.com