

承认书

SPECIFICATION

品 名
Model Type

PHONE JACK

料 号
Part No.

PJ857-F06G1BR-A

客 户 料 号
Customer Part No.

客 户 名 称
Customer Name

鸿海精密

Approved by Customer:



东莞宇球电子股份有限公司
DONGGUAN YUQIU ELECTRONICS CO., LTD.

广东省东莞市寮步镇刘屋巷管理区

Liuwuxiang Precinct, Liaobu Town, Dongguan City, Guangdong, P. R. China

TEL: 86-769-83529888, 83230666

FAX: 86-769-83263566, 83267066

www.chinayuqiu.com

东莞宇球电子股份有限公司

浙江宇球电子有限公司

DONGGUAN YUQIU ELECTRONICS CO. LTD

ZHEJIANG YUQIU ELECTRONICS CO. LTD

广东省东莞市寮步镇刘屋巷管理区

中国浙江省乐清市虹桥镇虹桥路工业区

Liuwuxiang Precinct, Liaobu Town,

Hongqiao Industrial Estate, Hongqiao

Dongguan City, Guangdong, P. R. China

Town, Yueqing City, Zhejiang, P. R. China

TEL: 86-769-83529888, 83230666

TEL: 86-577-62316888, 62323666

FAX: 86-769-83263566, 83267066

FAX: 86-577-62312753



宇球电子股份有限公司
YUQIU ELECTRONICS CO., LTD.
2018 年 01 月 08 日
★ 工 程 部 ★
ENGINEERING DEPT. (R & D)

Table of contents

1. COVER -----	Page 1
2. TABLE OF CONTENTS -----	Page 2
3. RECORD OF REVISION -----	Page 3
4. CERTIFICATE OF COUNTRY OF ORIGIN -----	Page 4
5. SPECIFICATION -----	Page 5-7
6. ASSEMBLY DRAWING -----	Page 8
7. PACKING SPEC -----	Page 9
8.PARTS LIST-----	Page 10
9.SGS REPORT-----	Page 11-39
10.TEST REPORT -----	Page 40-51

RECORD OF REVISION

Model Type:	PHONE JACK	Part No.:	PJ857-F06G1BR-A	Customer Part NO.:	
-------------	------------	-----------	-----------------	-----------------------	--

NO	REVISION	DESCRIPTION OF CHANGES	REMARKS	DATE	WRITTEN BY
A0.	New application			2016.08.31	Zhangwumei
1.	A1	Dimension added. Mark”  ”	Page 8	2017.07.10	Zhangwumei

CERTIFICATE OF COUNTRY OF ORIGIN

COUNTRY OF ORIGIN



CHINA

MANUFACTURER



ZHEJIANG YUQIU ELECTRONICS CO., LTD



DONGGUAN YUQIU ELECTRONICS CO., LTD

SPECIFICATION

Model Type:	PHONE JACK	WRITTEN BY	CHECKED BY	APPROVED BY	QA Dept
Part No.:	PJ857-F06G1BR-A	Mei	Zhuyuehua	Pengxue	Luyajun

1.Application

This specification covers the requirements for Earphone Jacks used for radios, radio cassette,cassette rape recorders, TV'S, video disk units, etc.

2. Rated:

2-1. Practical temperature range: -25℃ to +70℃

Humidity range: 85% RH.MAX..

2-2. Preservation temperature range: -40℃to +85℃

Humidity range 85%RH. MAX.

2-3. Rated voltage and current: 12V DC ,1.0A

3. Construction:

3-1.Appearance:

Must be no curve, crack, dirty, corrosion, discoloration and significant discoloration.

3-2.Outline and dimension

The parts and materials shown be in material identification sheet and certification of material.

4. Electrical efficiency:

Item	Property	Test condition	Performance
4-1	Withstand voltage	The Jack shall be withstanded 500V(AC50/60Hz RMS) between mutually insulated pin contacts for one minute.	Without breakdown.
4-2	Insulation resistance	Using a 500 volts DC insulation resistance meter between mutually insulated terminals.	100 MΩ Min
4-3	Contact resistance	Between terminals of the jack to be made a closed circuit.	50 mΩ Max

5. Mechanical efficiency

5-1	Insertion and extraction force	Measures with a load cell or equivalent. The matching plug shall be inserted into the jack and extracted from the jack slowly.	2.94N to29.4N(0.3 to 3 Kgf) Using mating plug(Fig.2)
5-2	Terminal strength	Every terminal shall be capable of withstand a force of 5N for 10 seconds.	Without losing and breakdown, but deformation of terminal is accepted.

SPECIFICATION

Model Type:	PHONE JACK
Part No.:	PJ857-F06G1BR-A

5. Mechanical efficiency

Item	Property	Test condition	Performance
5-3	Loosen strength of contact	The jack shall be capable of withstand a force of 5N, applied in direction of extraction of contact terminal for 10 seconds.	Without losing and breakdown.

6. Life efficiency

Item	Property	Test condition	Performance
6-1	Life test	The life test shall consist of 5000 cycles of insertion and extraction with gauge plug covered with a thin coat of grease in order to prevent from hearing and wearing ,at a rate of 20 to 30 cycles per minutes.	At the conclusion of the test, The jack shall be comply with paragraphs 4-1 and 5. Insulation resistance: 100 M Ω Min Contact resistance: 100 m Ω Max

7. Solder-ability

7-1	Resistance to soldering heat test	The jack terminal shall be dipped in solder under the condition as specified below: Temperature of solder: $260 \pm 5^{\circ}\text{C}$.. Dip time: 10 ± 1 seconds.	The jack shall be comply with paragraphs 4 and 5, and not show.
7-2	Soldering test	Temperature of solder: $245 \pm 5^{\circ}\text{C}$. Time of dip: 3 ± 0.5 seconds. Length of dip: 2.5mm (from top of terminal).	Areas of soldering shall be capable of 95% or more of dip terminal area.

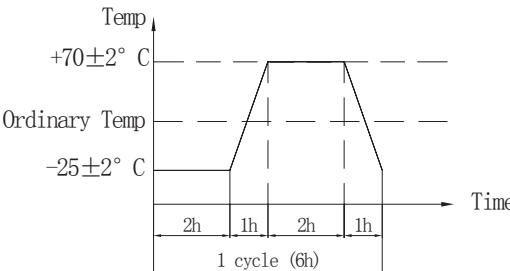
8. Environmental.

8-1	Cold test	The jack shall be subjected to temperature of $-25 \pm 2^{\circ}\text{C}$ for a period of 96 hours , then shall be allowed to remain in room ambient conditions for 30 minutes.	At the conclusion of the test, The jack shall be comply with paragraphs 4 and 5.
8-2	Heat test	The jack shall be subjected to temperature of $70 \pm 2^{\circ}\text{C}$ for a period of 96 hours , then shall be allowed to remain in room ambient conditions for 30 minutes.	At the conclusion of the test, The jack shall be comply with paragraphs 4 and 5.

SPECIFICATION

Model Type:	PHONE JACK
Part No.:	PJ857-F06G1BR-A

8.Environmental.

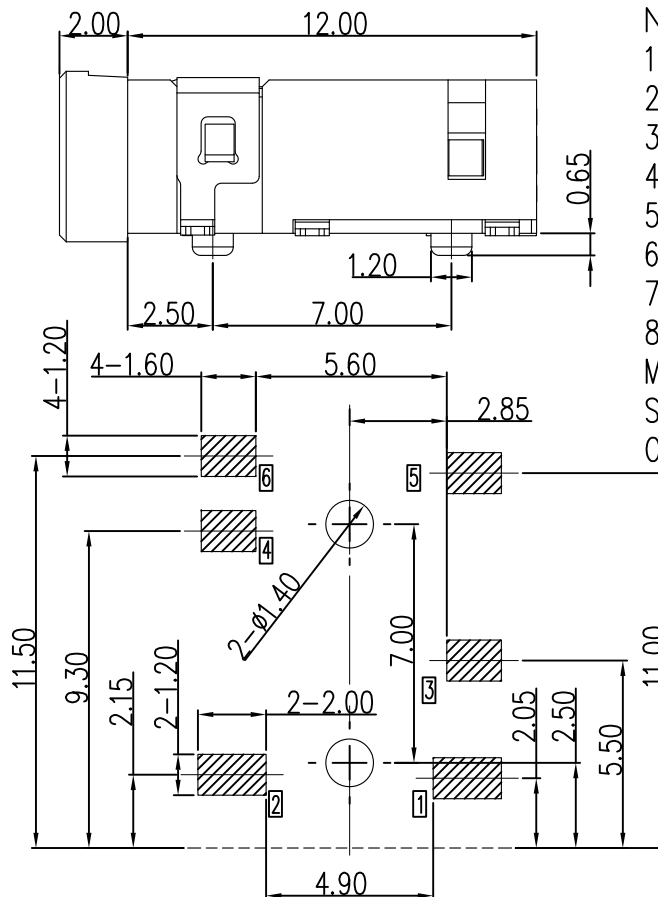
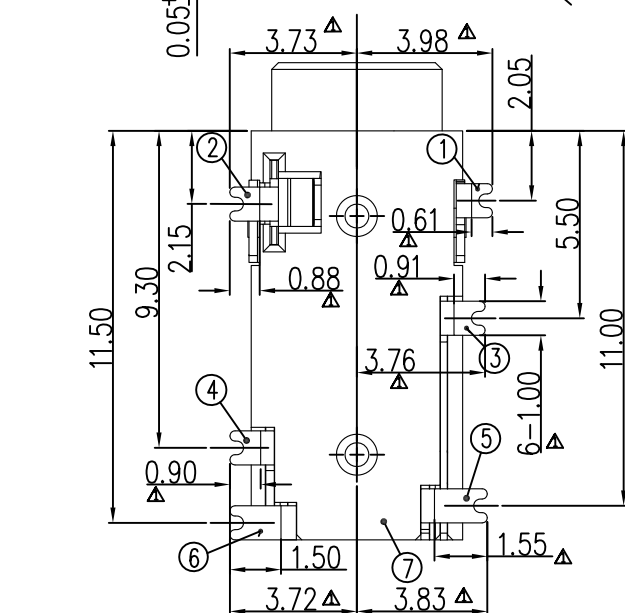
Item	Property	Test condition	Performance
8-3	Temperature cycle test	The jack be subjected to conditions 5cycle as shown in below, and the shall returned and allowed to remain in ambient condition for 30 minutes. 	At the conclusion of the test, The jack shall be comply with paragraphs 4 and 5.
8-4	Humidity test	The jack shall be subjected to temperature of $40 \pm 2^{\circ}\text{C}$ and relative humidity of 90% to 95% for a period of 96 hours. Upon completion of the exposure, dew drops shall be blown out and removed from the jack, after which the jack shall conditioned at room ambient conditions for 30 minutes.	At the conclusion of the test, The jack shall be comply with paragraphs 4 and 5. Insulation resistance: 100 M Ω Min Contact resistance: 100 m Ω Max
8-5	Salt mist test	EIA 364-26 Temperature : $35 \pm 2^{\circ}\text{C}$ Concentration: 5% (weight) Humidity : 95 ~ 98% (R.H.) PH Value : 6.5 ~ 7.2 Duration : 24hours	Item 4 and Item 5 shall be assured. Insulation resistance: 100 M Ω Min Contact resistance: 100 m Ω Max

9. Test condition

Unless otherwise specified herein , all measurements and tests shall be made at temperature of 5°C to 35°C and relative humidity of 45% to 85%.

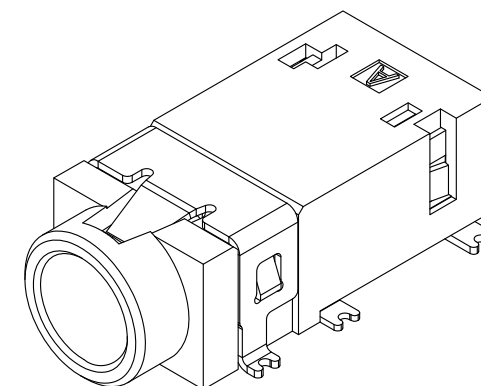
10. Amendment

When the amendment of this specification comes into necessity , it shall made by the mutual consultation and agreement between manufacture and customer.

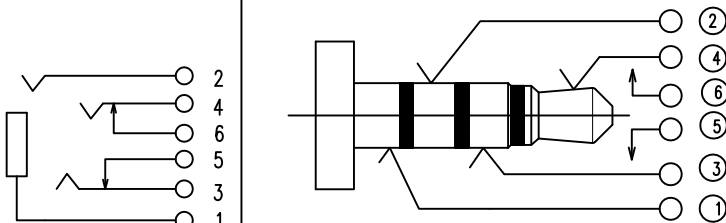


RECOMMENDED PCB LAYOUT(TOP VIEW)
(GENERAL TOLERANCE ± 0.05)

- 1.Contact Current Rating:12V 1A.
- 2.Contact Resistance: 50mΩ MAX.
- 3.Insulation Resistnace:100MΩ Min.500V DC.
- 4.Dielectric Withstandeing:500V AC Min.
- 5.Durability:5000 Cycles Min.
- 6.Connector Mating Forces: 29.4N(3.00Kgf) MAX.
- 7.Connector Unmating Forces: 2.94N(0.30Kgf) Min.
- 8.The Product Machine With A GAP That: The Finished Machine With Socket Before/Up/Down/Left/Right Side Of 5,Protection GAP First Proposed,The Desing OF 0.15mm.



AFTER INSERT SCHEMATIC



★ 工 程 部 ★
ENGINEERING DEPT. (R & D)

⑦	HOUSING		1	PPA 94V-2	BLACK
⑥	TERMINAL-6	6	1	C2680-H	GOLD FLASH ON CONTACT AREA AND SOLDER AREA, ALL OVER Ni 30μMIN.
⑤	TERMINAL-5	5	1	C2680-H	
④	TERMINAL-4	4	1	C5210-H	
③	TERMINAL-3	3	1	C5210-H	
②	TERMINAL-2	2	1	C5191-H	
①	TERMINAL-1	1	1	C5191-H	
NO.	PART NAME	TER.NO.	QTY.	MATERIAL	REMARK

DSND	Di	DATE	2016.08.11	SCALE: 1:1	MODEL TYPE: PHONE JACK PART NO. PJ857-F06G1BR-A
CHKD	Zhuhong	DATE	2016.08.11	VIEW 	
APVD	Zhuhong	DATE	2016.08.11	UNIT: mm	

$\triangle$ X					ANGULAR	$\pm 5^\circ$
$\triangle$ X					$63 < L$	± 0.5
$\triangle$ X					$16 < L \leq 63$	± 0.4
$\triangle$ 1	Dimension added	2017.07.06	zhuyuehua	pengxue	$4 < L \leq 16$	± 0.3
MARK	DESCRIPTION	DATE	REVISED	APPROVED	$L \leq 4$	± 0.2
	REVISIONS				UNSPECIFIED TOLERANCE	



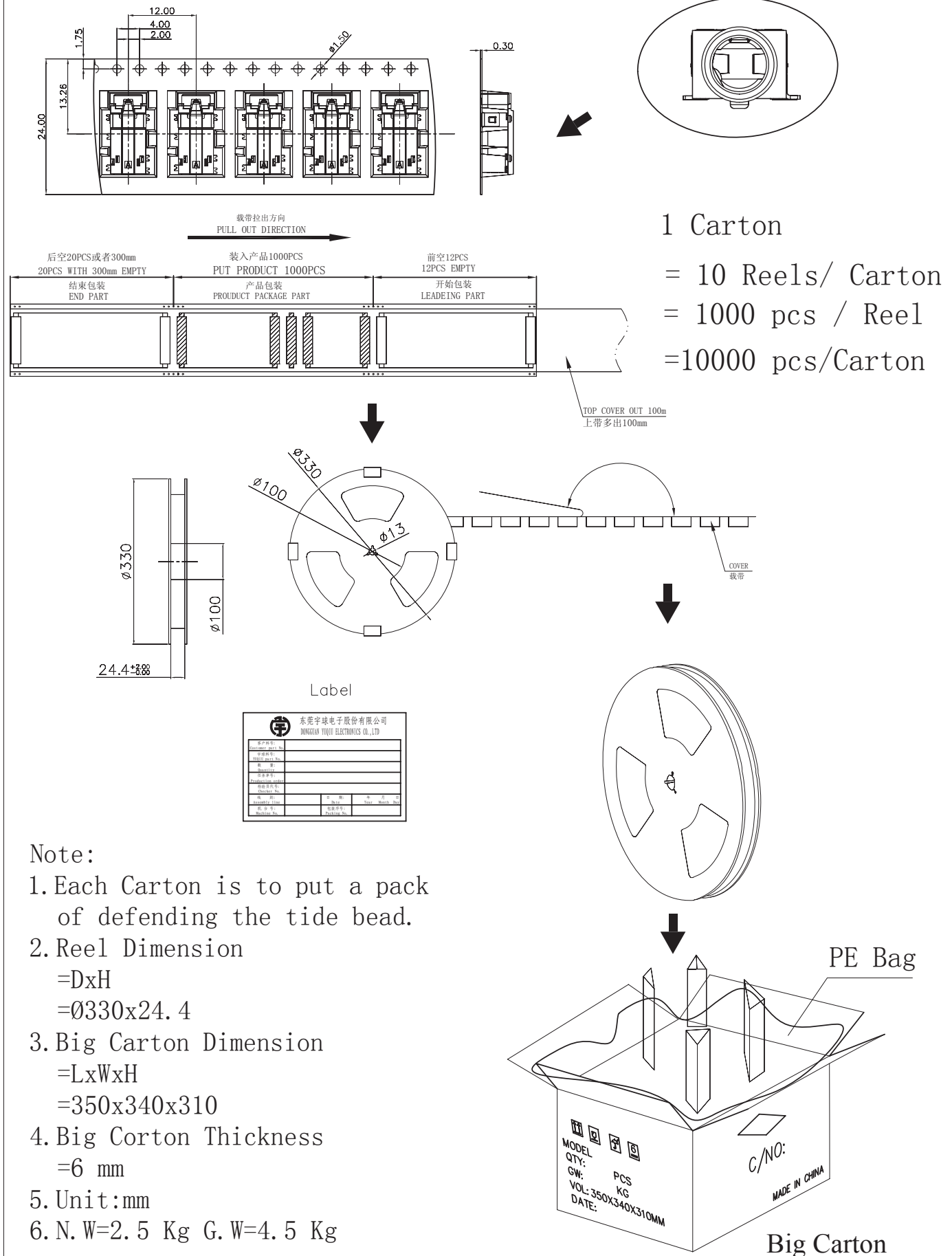
YUQIU ELECTRONICS CO.,LTD.

DWN.NO.	REVISION
Q/YQ.QW-001B-0006	A/0

SPECIFICATION

Model Type:	PHONE JACK
Part No.:	PJ857-F06G1BR-A

PACKING SPEC



SPECIFICATION

PARTS LIST

Part NO.: PJ857-F06G1BR-A

No.	PART NAME	Q' TY	RAW MATERIAL	NAME OF MATERIAL	UL FLAME CLASS	UL FILE NO.	MANUFACTURE OF RAW MATERIAL	FINISH & COLOR
1	HOUSING	1	PPA 94V-2	PPA	94V-2	—	SHEN ZHEN FU SHENG COMPOSITES CO.LTD .	BLACK
2	TERMINAL-1	1	COPPER ALLOY	C5191	—	—	DONGGUAN GANXING HARDWARE CO. , LTD	GOLD FLASH ON CONTACT AREA AND SOLDER AREA, ALL OVER Ni 30 μ "MIN.
3	TERMINAL-2	1	COPPER ALLOY	C5191	—	—	DONGGUAN GANXING HARDWARE CO. , LTD	
4	TERMINAL-3	1	COPPER ALLOY	C5210	—	—	DONGGUAN GANXING HARDWARE CO. , LTD	
5	TERMINAL-4	1	COPPER ALLOY	C5210	—	—	DONGGUAN GANXING HARDWARE CO. , LTD	
6	TERMINAL-5	1	COPPER ALLOY	C2680	—	—	DONGGUAN GANXING HARDWARE CO. , LTD	
7	TERMINAL-6	1	COPPER ALLOY	C2680	—	—	DONGGUAN GANXING HARDWARE CO. , LTD	

YUQIU ELECTRONICS CO.,LTD.

Test Report

No. CANEC1703580001

Date: 21 Mar 2017

Page 1 of 6

SHEN ZHEN FU SHENG COMPOSITES CO.LTD

NO.1 A BUILDING,XINPOTOU INDUSTRIAL PARK,XINPOTOU VILLAGE,GUANGMING NEW DISTRICT,SHENZHEN
CHINA

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

SGS Job No. : CP17-011099 - SZ

Model No. : BN1101

Client Ref. Info. : PA9T-GN2330,PA9T-GW2458,PA9T-GP2450,PA46-F6,PA6T,
PA46-F8,PA6,PA66,PA46,TPPA-BN1101,TPPA-BN1102,
TPPA-BN1103,TPPA-BN1104,TPPA-FS1101,PAHTN,PPA

Date of Sample Received : 09 Mar 2017

Testing Period : 09 Mar 2017 - 18 Mar 2017

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 sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP) , Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) , and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Nana

Nana Zhang

Approved Signatory



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory.

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification 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 intervention only and within the limits 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 their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com

198 Kazhu Road, Sciotech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgs.com.cn
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. CANEC1703580001

Date: 21 Mar 2017

Page 2 of 6

Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN17-035800.001	Black plastic grains

Remarks :

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

RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

- Test Method :
- (1)With reference to IEC 62321-5:2013, determination of Cadmium by ICP-OES.
 - (2)With reference to IEC 62321-5:2013, determination of Lead by ICP-OES.
 - (3)With reference to IEC 62321-4:2013, determination of Mercury by ICP-OES.
 - (4)With reference to IEC 62321:2008, determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.
 - (5)With reference to IEC 62321-6:2015, determination of PBBs and PBDEs by GC-MS.
 - (6)With reference to IEC 62321-8:2013 (111/321/CD) , determination of phthalates by GC-MS.

Test Item(s)	Limit	Unit	MDL	001
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	5
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
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1,000	mg/kg	-	ND



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory.

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification 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 intervention only and within the limits 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 their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kazhu Road, Sciencetech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgs.com.cn
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. CANEC1703580001

Date: 21 Mar 2017

Page 3 of 6

Test Item(s)	Limit	Unit	MDL	001
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
Dibutyl phthalate (DBP)	1000	mg/kg	50	ND
Butyl benzyl phthalate (BBP)	1000	mg/kg	50	ND
Bis (2-ethylhexyl) phthalate (DEHP)	1000	mg/kg	50	ND
Diisobutyl Phthalates (DIBP)	1000	mg/kg	50	ND

Notes :

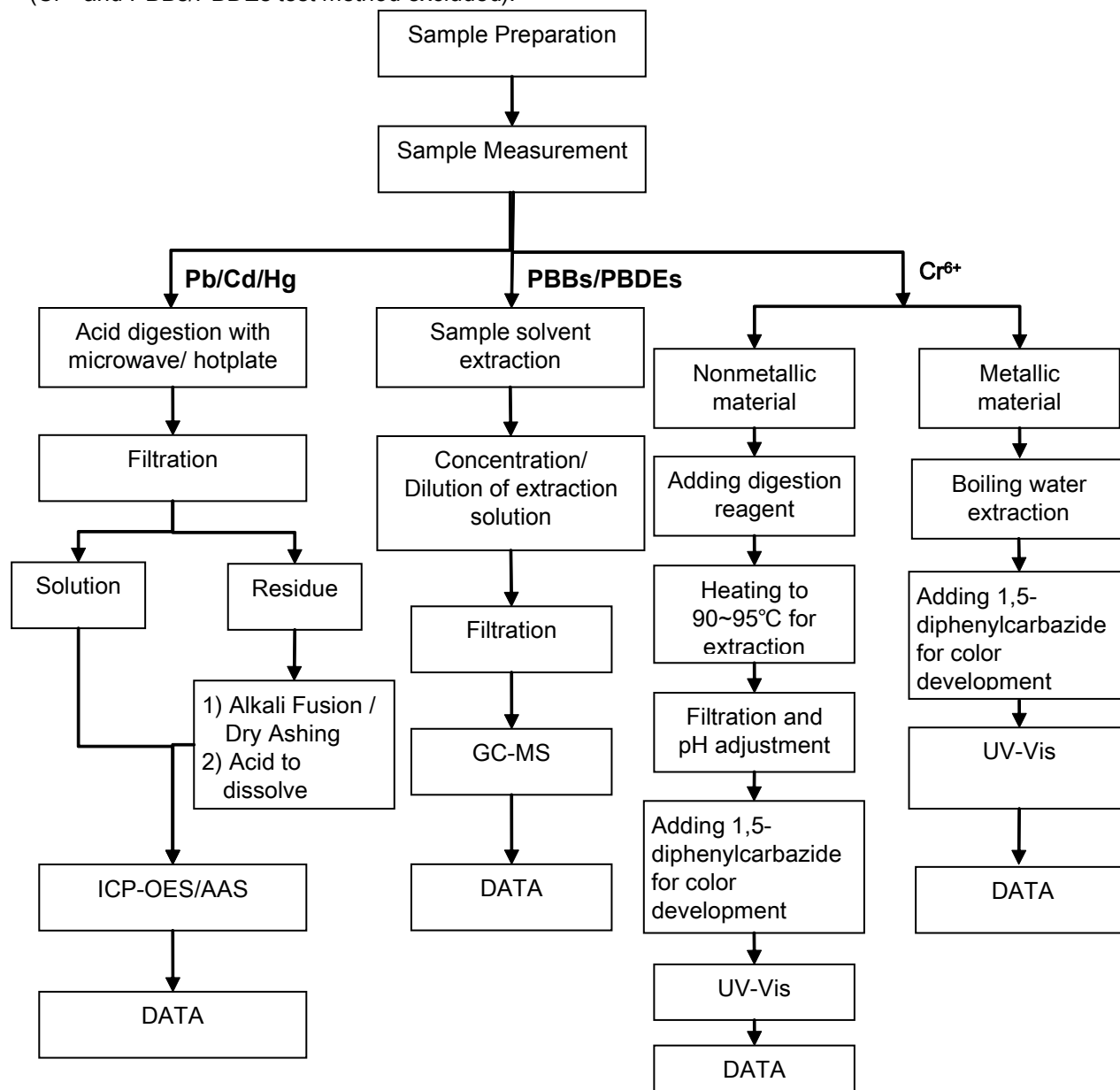
- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.



ATTACHMENTS

Pb/Cd/Hg/Cr⁶⁺/PBBs/PBDEs Testing Flow Chart

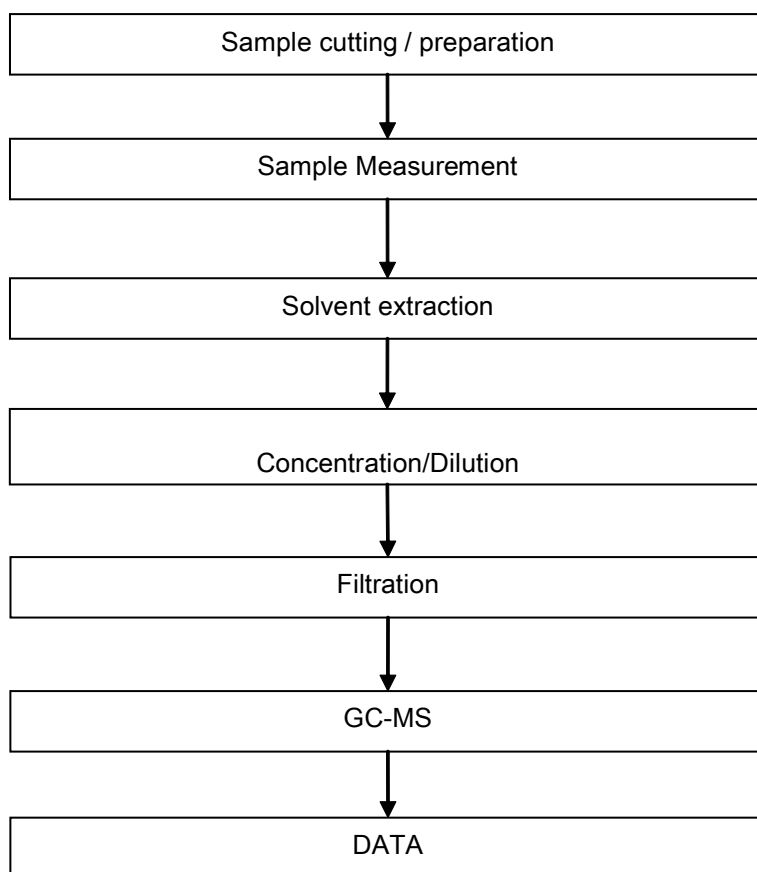
- 1) Name of the person who made testing: Edith Zhang / Sunny Hu
- 2) Name of the person in charge of testing: Bella Wang / Qiong Liu
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart (Cr⁶⁺ and PBBs/PBDEs test method excluded).



ATTACHMENTS

Phthalates Testing Flow Chart

- 1) Name of the person who made testing: Sunny Hu
- 2) Name of the person in charge of testing: Qiong Liu



Test Report

No. CANEC1703580001

Date: 21 Mar 2017

Page 6 of 6

Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



SGS-CSTC Standard & Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification 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 intervention only and within the limits 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 their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kazhu Road, Sciotech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgs.com.cn
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. CANEC1703580011

Date: 21 Mar 2017

Page 1 of 4

SHEN ZHEN FU SHENG COMPOSITES CO.LTD

NO.1 A BUILDING,XINPOTOU INDUSTRIAL PARK,XINPOTOU VILLAGE,GUANGMING NEW DISTRICT,SHENZHEN
CHINA

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

SGS Job No. : CP17-011099 - SZ
Model No. : BN1101
Client Ref. Info. : PA9T-GP2450,,PA6T,PAHTN,PA46,TPPA-BN1101,PA66,
TPPA-BN1102,TPPA-BN1103,TPPA-BN1104, TPPA-FS1101,PPA
Date of Sample Received : 09 Mar 2017
Testing Period : 09 Mar 2017 - 18 Mar 2017
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).

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Nana

Nana Zhang
Approved Signatory



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory.

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification 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 intervention only and within the limits 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 their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kezhu Road, Science Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgs.com.cn
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. CANEC1703580011

Date: 21 Mar 2017

Page 2 of 4

Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN17-035800.002	Black plastic grains

Remarks :

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

Halogen

Test Method : With reference to EN 14582:2016, analysis was performed by IC.

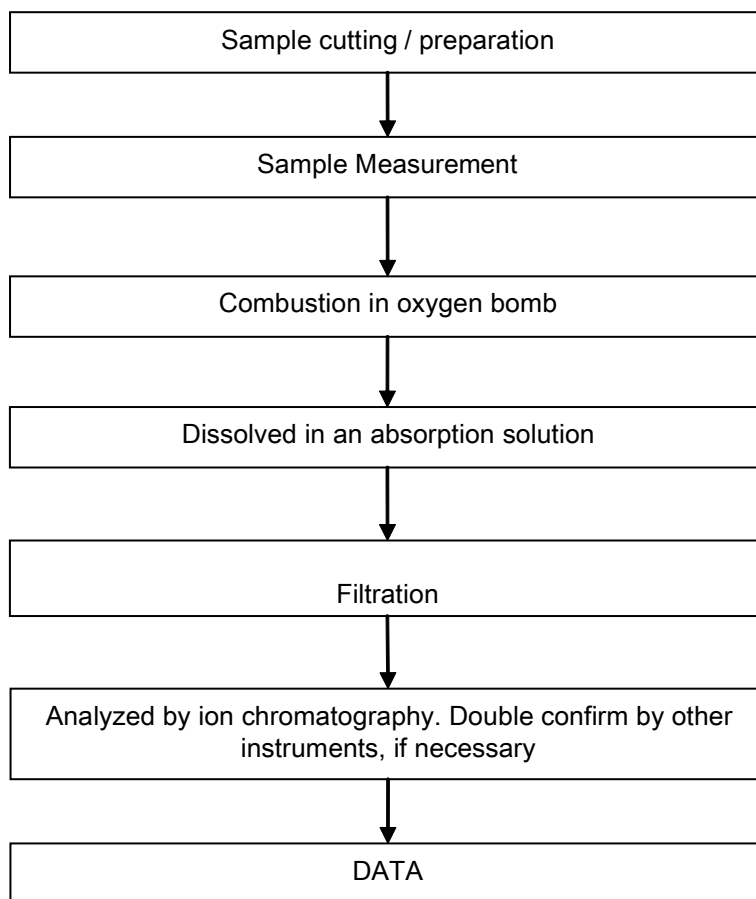
Test Item(s)	Unit	MDL	002
Fluorine (F)	mg/kg	50	719
Chlorine (Cl)	mg/kg	50	ND
Bromine (Br)	mg/kg	50	ND
Iodine (I)	mg/kg	50	ND



ATTACHMENTS

Halogen Testing Flow Chart

- 1) Name of the person who made testing: Bruce Xiao
- 2) Name of the person in charge of testing: Bella Wang



Test Report

No. CANEC1703580011

Date: 21 Mar 2017

Page 4 of 4

Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



Test Report

Report No. A2170031719103009

Page 1 of 4

Applicant DONGGUAN YUQIU ELECTRONIC CO., LTD

Address LIUWUXIANG PRECINCT, LIAOBU TOWN, DONGGUAN CITY, GUANGDONG PROVINCE IN CHINA

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

Sample Name Phosphorus Bronze

Sample Received Date Jul. 29, 2017

Testing Period Jul. 29, 2017 to Aug. 7, 2017

Test Requested As specified by client, to test Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)) in the submitted sample(s).

Test Method Please refer to the following page(s).

Test Result(s) Please refer to the following page(s).

Tested By

Rachel Zhang

Approved By

Hill Zheng

Hill Zheng

Technical Manager

Reviewed By

Tori Xia

Date

Aug. 7, 2017

No. R158923812

Centre Testing International Group Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

Test Report

Report No. A2170031719103009

Page 2 of 4

Test Method

Test Item(s)	Test Method	Measured Equipment(s)
Lead(Pb)	IEC 62321-5:2013 Ed.1.0	ICP-OES
Cadmium(Cd)	IEC 62321-5:2013 Ed.1.0	ICP-OES
Mercury(Hg)	IEC 62321-4:2013 Ed.1.0	ICP-OES
Hexavalent Chromium(Cr(VI))	IEC 62321-7-1:2015	UV-Vis

Test Result(s)

Tested Item(s)	Result	MDL
Lead(Pb)	N.D.	2 mg/kg
Cadmium(Cd)	N.D.	2 mg/kg
Mercury(Hg)	N.D.	2 mg/kg
Hexavalent Chromium(Cr(VI))	N.D. ▼	0.10 µg/cm ² (LOQ)

Tested Sample/Part Description Metal base

Remark: The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.
 -MDL = Method Detection Limit
 -N.D. = Not Detected (<MDL or LOQ)
 -mg/kg = ppm = parts per million
 -LOQ = Limit of Quantification, The LOQ of Hexavalent chromium is 0.10 µg/cm²
 -▼The sample is negative for Cr(VI) – The Cr(VI) concentration is below 0.10 µg/cm². The coating is considered a non-Cr(VI) based coating.

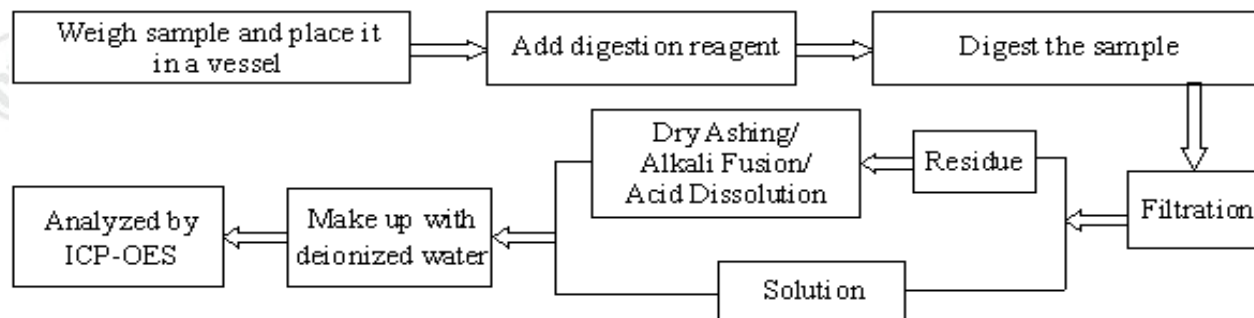
Test Report

Report No. A2170031719103009

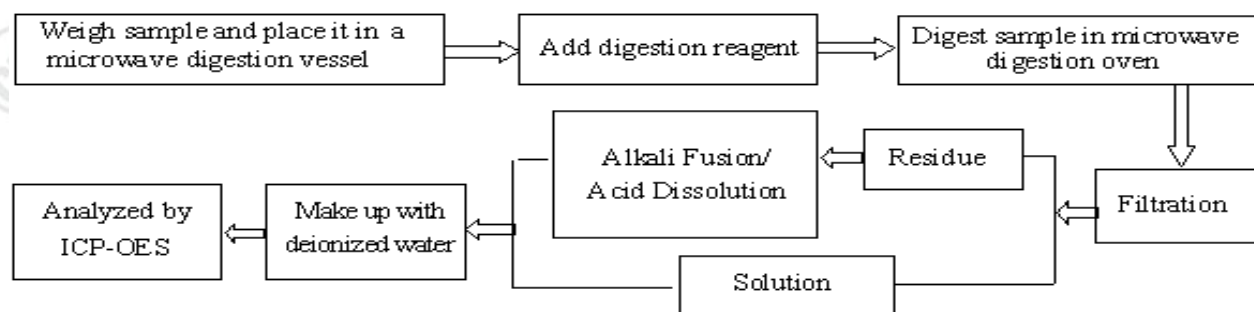
Page 3 of 4

Test Process

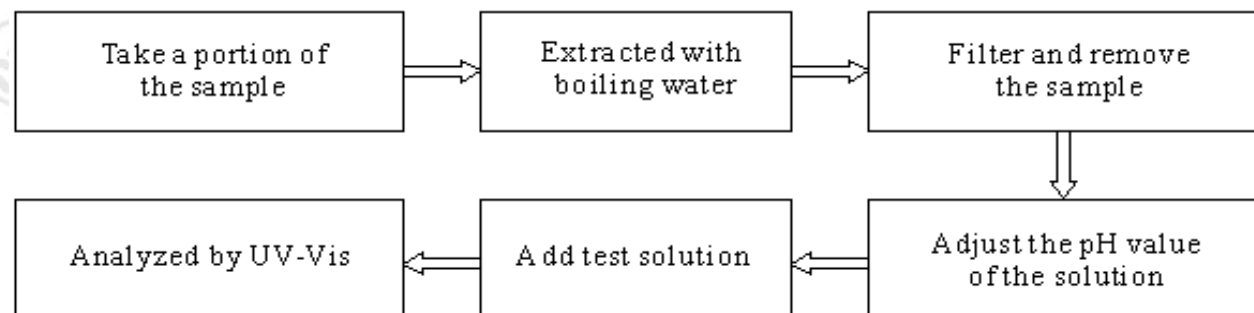
1. Lead(Pb), Cadmium(Cd)



2. Mercury(Hg)



3. Hexavalent Chromium(Cr(VI))

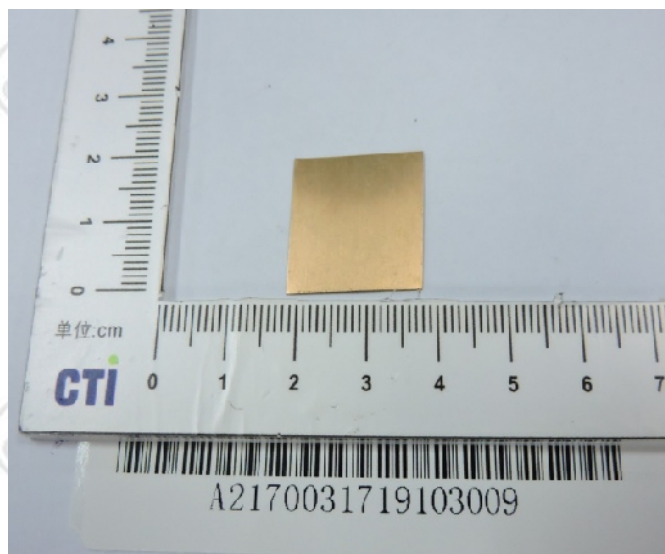


Test Report

Report No. A2170031719103009

Page 4 of 4

Photo(s) of the sample(s)



*** End of report ***

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

Test Report

Report No. A2170031719103008

Page 1 of 4

Applicant DONGGUAN YUQIU ELECTRONIC CO., LTD

Address LIUWUXIANG PRECINCT, LIAOBU TOWN, DONGGUAN CITY, GUANGDONG PROVINCE IN CHINA

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

Sample Name Brass

Sample Received Date Jul. 29, 2017

Testing Period Jul. 29, 2017 to Aug. 7, 2017

Test Requested As specified by client, to test Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)) in the submitted sample(s).

Test Method Please refer to the following page(s).

Test Result(s) Please refer to the following page(s).

Tested By

Rachel Zhang

Approved By

Mill Zheng

Mill Zheng

Technical Manager

Reviewed By

Tori Xia

Date

Aug. 7, 2017

No. R158923812

Centre Testing International Group Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

Test Report

Report No. A2170031719103008

Page 2 of 4

Test Method

Test Item(s)	Test Method	Measured Equipment(s)
Lead(Pb)	IEC 62321-5:2013 Ed.1.0	ICP-OES
Cadmium(Cd)	IEC 62321-5:2013 Ed.1.0	ICP-OES
Mercury(Hg)	IEC 62321-4:2013 Ed.1.0	ICP-OES
Hexavalent Chromium(Cr(VI))	IEC 62321-7-1:2015	UV-Vis

Test Result(s)

Tested Item(s)	Result	MDL
Lead(Pb)	12 mg/kg	2 mg/kg
Cadmium(Cd)	N.D.	2 mg/kg
Mercury(Hg)	N.D.	2 mg/kg
Hexavalent Chromium(Cr(VI))	N.D. ▼	0.10 µg/cm ² (LOQ)

Tested Sample/Part Description Metal base

Remark: The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.
 -MDL = Method Detection Limit
 -N.D. = Not Detected (<MDL or LOQ)
 -mg/kg = ppm = parts per million
 -LOQ = Limit of Quantification, The LOQ of Hexavalent chromium is 0.10 µg/cm²
 -▼The sample is negative for Cr(VI) – The Cr(VI) concentration is below 0.10 µg/cm². The coating is considered a non-Cr(VI) based coating.

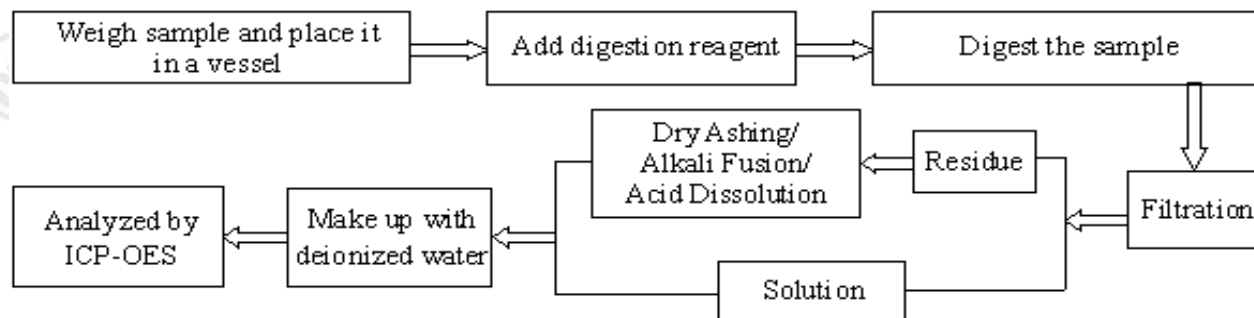
Test Report

Report No. A2170031719103008

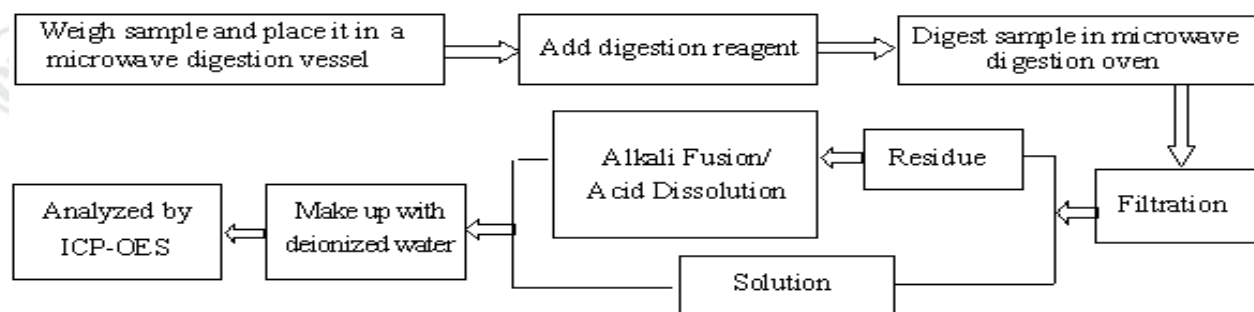
Page 3 of 4

Test Process

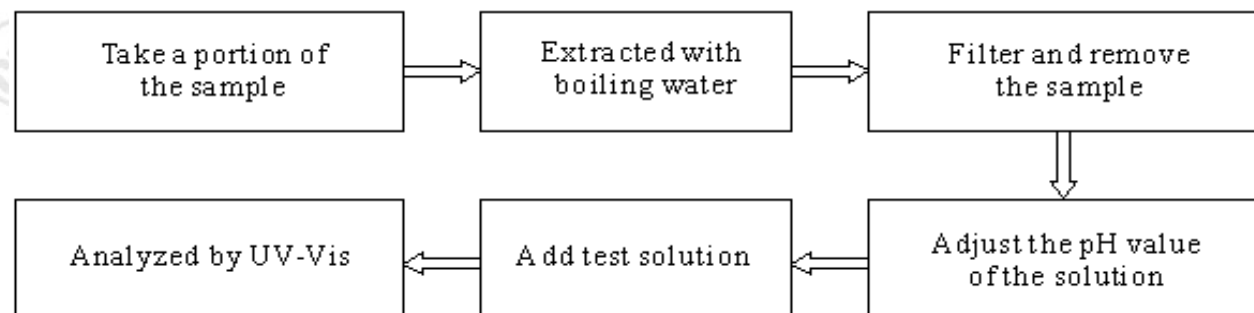
1. Lead(Pb), Cadmium(Cd)



2. Mercury(Hg)



3. Hexavalent Chromium(Cr(VI))

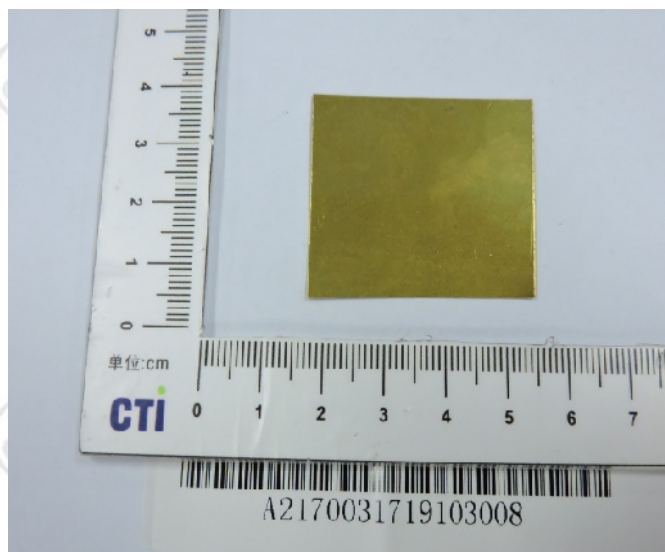


Test Report

Report No. A2170031719103008

Page 4 of 4

Photo(s) of the sample(s)



*** End of report ***

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

Test Report

No. CANEC1710157407

Date: 08 Jun 2017

Page 1 of 5

SHENZHEN NA PU METALLIC CO.,LTD

NO.7 ZHEN XING ROAD,BUYONG INDUSTRIAL AREA,SHA JING TOWN,BAOAN DISTRICT,SHENZHEN CITY
CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as : PLATING NI(COPPER ALLOY SUBSTRATE)

SGS Job No. : CP17-029991 - SZ

Date of Sample Received : 02 Jun 2017

Testing Period : 02 Jun 2017 - 08 Jun 2017

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 sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Violet

Violet,Shi
Approved Signatory



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification 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 intervention only and within the limits 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 their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kazhu Road,Scientech Park Guangzhou Economic & Technology Development District,Guangzhou,China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgsgroup.com.cn
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. CANEC1710157407

Date: 08 Jun 2017

Page 2 of 5

Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN17-101574.004	Silvery plated 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 (EU) 2015/863 amending Annex II to Directive 2011/65/EU

- Test Method :
- (1)With reference to IEC 62321-5:2013, determination of Cadmium by ICP-OES.
 - (2)With reference to IEC 62321-5:2013, determination of Lead by ICP-OES.
 - (3)With reference to IEC 62321-4:2013, determination of Mercury by ICP-OES.
 - (4)With reference to IEC 62321-7-1:2015 , determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.
 - (5)With reference to IEC 62321-6:2015, determination of PBBs and PBDEs by GC-MS.

Test Item(s)	Limit	Unit	MDL	004
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 (Cr(VI))▼	-	µg/cm ²	0.10	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
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1,000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND



SGS-CSTC Inspection & Testing Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification 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 intervention only and within the limits 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 their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kazhu Road, Science Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgs.com.cn
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. CANEC1710157407

Date: 08 Jun 2017

Page 3 of 5

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>004</u>
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 RoHS Directive (EU) 2015/863.

IEC 62321 series is equivalent to EN 62321 series

http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25

(2) ▼= a. The sample is positive for CrVI if the CrVI concentration is greater than 0.13 µg/cm². The sample coating is considered to contain CrVI

b. The sample is negative for CrVI if CrVI is ND (concentration less than 0.10 µg/cm²). The coating is considered a non-CrVI based coating

c. The result between 0.10 µg/cm² and 0.13 µg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination

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



SGS-CSTC Inspection & Testing Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification 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 intervention only and within the limits 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 their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

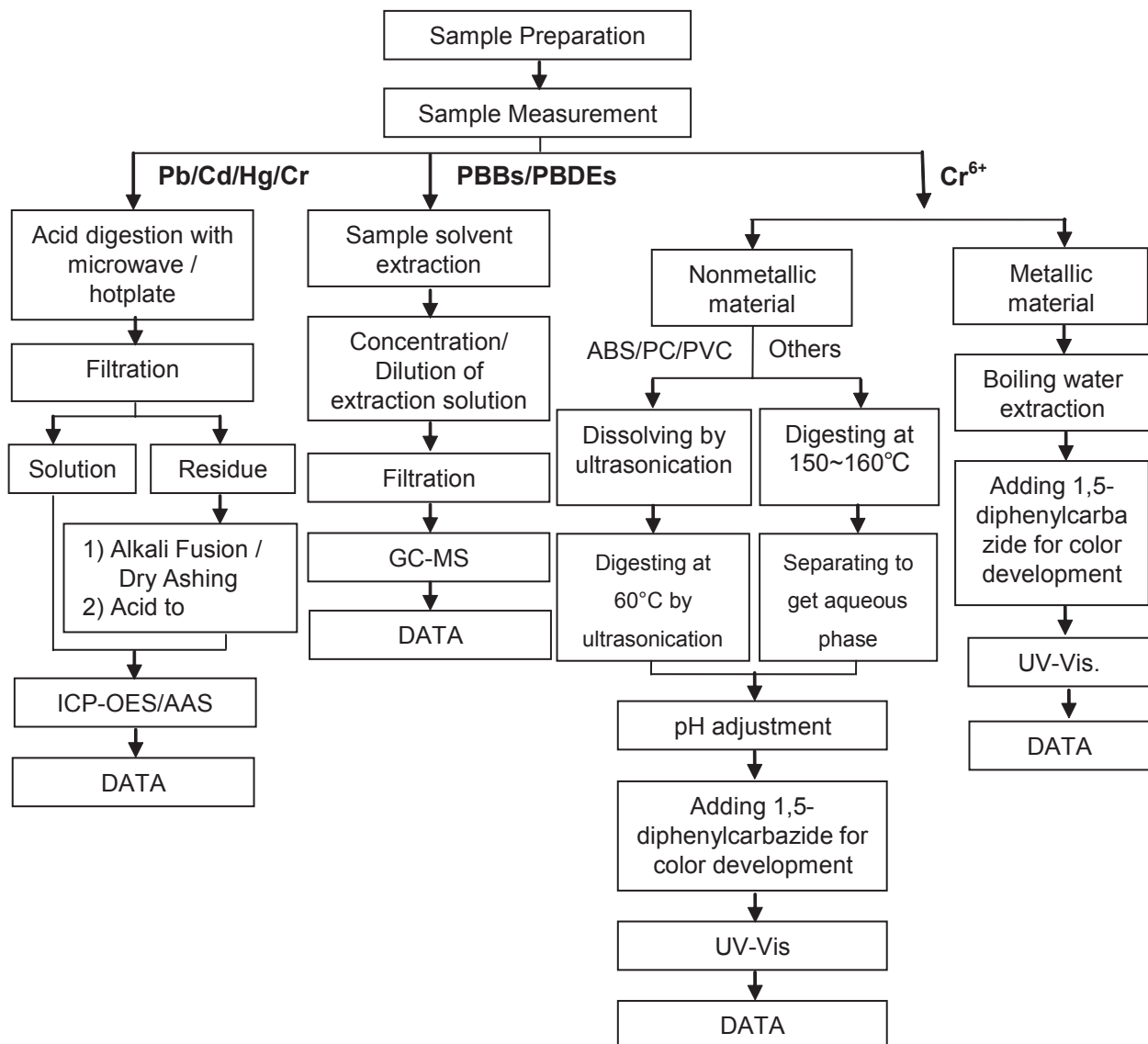
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kazhu Road, Science Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgsgroup.com.cn
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

ATTACHMENTS

Pb/Cd/Hg/Cr⁶⁺/PBBs/PBDEs Testing Flow Chart

- 1) Name of the person who made testing: Edith Zhang / Sunny Hu
- 2) Name of the person in charge of testing: Bella Wang / Qiong Liu
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart.
(Cr⁶⁺ and PBBs/PBDEs test method excluded).



Test Report

No. CANEC1710157407

Date: 08 Jun 2017

Page 5 of 5

Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



SGS-CTC (Shanghai) Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification 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 intervention only and within the limits 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 their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kazhu Road, Science Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.ssgroup.com.cn
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. CANEC1710157405

Date: 08 Jun 2017

Page 1 of 6

SHENZHEN NA PU METALLIC CO.,LTD

NO.7 ZHEN XING ROAD,BUYONG INDUSTRIAL AREA,SHA JING TOWN,BAOAN DISTRICT,SHENZHEN CITY
CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as : PLATING AU(COPPER ALLOY SUBSTRATE)

SGS Job No. : CP17-029991 - SZ

Date of Sample Received : 02 Jun 2017

Testing Period : 02 Jun 2017 - 08 Jun 2017

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 sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

violet

Violet,Shi
Approved Signatory



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification 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 intervention only and within the limits 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 their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kazhu Road,Scientech Park Guangzhou Economic & Technology Development District,Guangzhou,China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgsgroup.com.cn
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. CANEC1710157405

Date: 08 Jun 2017

Page 2 of 6

Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN17-101574.003	Golden plated 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 (EU) 2015/863 amending Annex II to Directive 2011/65/EU

- Test Method :
- (1) With reference to IEC 62321-5:2013, determination of Cadmium by ICP-OES.
 - (2) With reference to IEC 62321-5:2013, determination of Lead by ICP-OES.
 - (3) With reference to IEC 62321-4:2013, determination of Mercury by ICP-OES.
 - (4) With reference to IEC 62321-7-1:2015, determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.
 - (5) With reference to IEC 62321-6:2015, determination of PBBs and PBDEs by GC-MS.

Test Item(s)	Limit	Unit	MDL	003
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 (Cr(VI))▼	-	µg/cm ²	0.10	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
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1,000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND



SGS-CSTC Service & Technology Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification 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 intervention only and within the limits 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 their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kazhu Road, Science Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgs.com.cn
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. CANEC1710157405

Date: 08 Jun 2017

Page 3 of 6

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>003</u>
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 RoHS Directive (EU) 2015/863.

IEC 62321 series is equivalent to EN 62321 series

http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25

(2) ▼= a. The sample is positive for CrVI if the CrVI concentration is greater than 0.13 µg/cm². The sample coating is considered to contain CrVI

b. The sample is negative for CrVI if CrVI is ND (concentration less than 0.10 µg/cm²). The coating is considered a non-CrVI based coating

c. The result between 0.10 µg/cm² and 0.13 µg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination

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

PFOA & PFOS (Perfluorooctanoic acid & Perfluorooctane sulfonates)

Test Method : With reference to CEN/TS15968:2010, analysis was performed by LC-MS.

<u>Test Item(s)</u>	<u>CAS NO.</u>	<u>Unit</u>	<u>MDL</u>	<u>003</u>
Perfluorooctanoic acid (PFOA)	335-67-1	µg/m ²	1.0	ND
Perfluorooctane Sulfonates (PFOS) [^]	-	µg/m ²	1.0	ND

Notes :

(1) [^] PFOS refer to Perfluorooctanesulfonic acid and its derivatives including Perfluorooctanesulfonic acid, Perfluorooctane sulfonamide, N-Methylperfluorooctane sulfonamide, N-Ethylperfluorooctane sulfonamide, N-Methylperfluorooctane sulfonamidoethanol and N-Ethylperfluorooctane sulfonamidoethanol.



SGS-CSTC Inspection & Testing Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification 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 intervention only and within the limits 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 their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

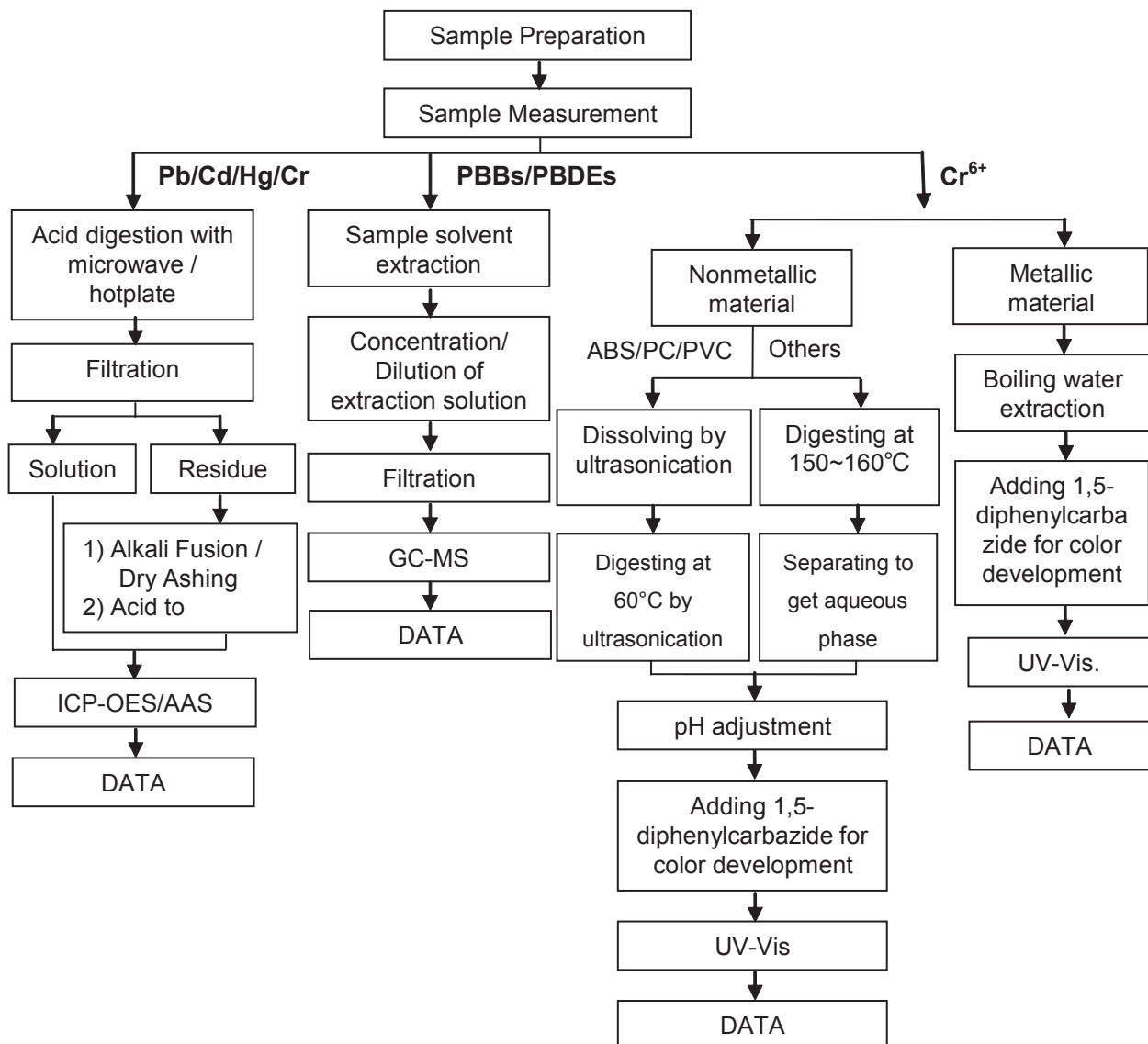
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kazhu Road, Science Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.ssgroup.com.cn
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

ATTACHMENTS

Pb/Cd/Hg/Cr⁶⁺/PBBs/PBDEs Testing Flow Chart

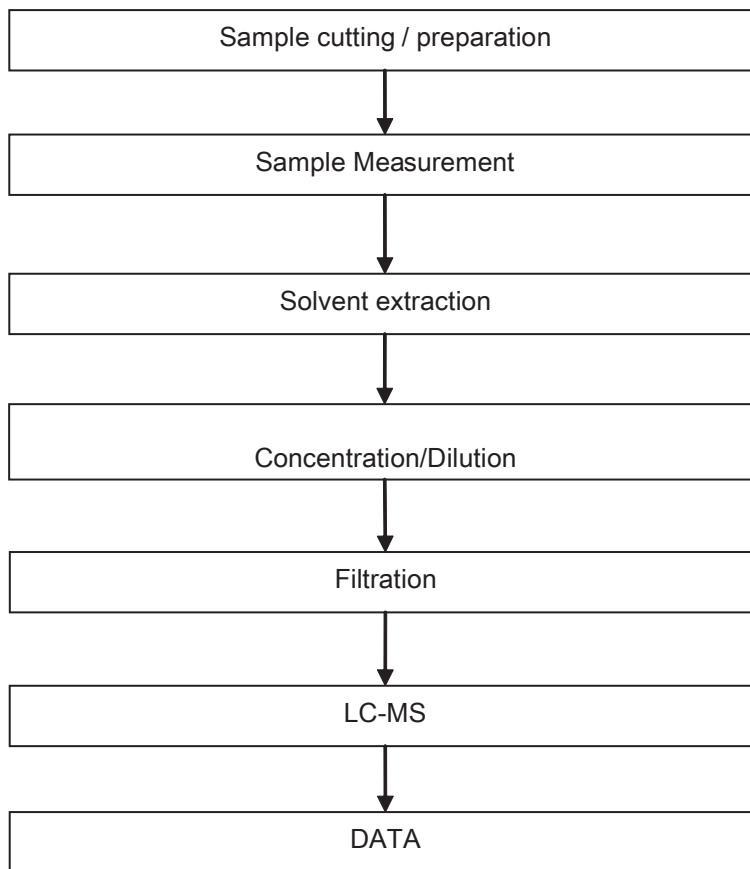
- 1) Name of the person who made testing: Edith Zhang / Sunny Hu
- 2) Name of the person in charge of testing: Bella Wang / Qiong Liu
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart.
(Cr⁶⁺ and PBBs/PBDEs test method excluded).



ATTACHMENTS

PFOA / PFOS Testing Flow Chart

- 1) Name of the person who made testing: Zhihong Wang
- 2) Name of the person in charge of testing: Qiong Liu



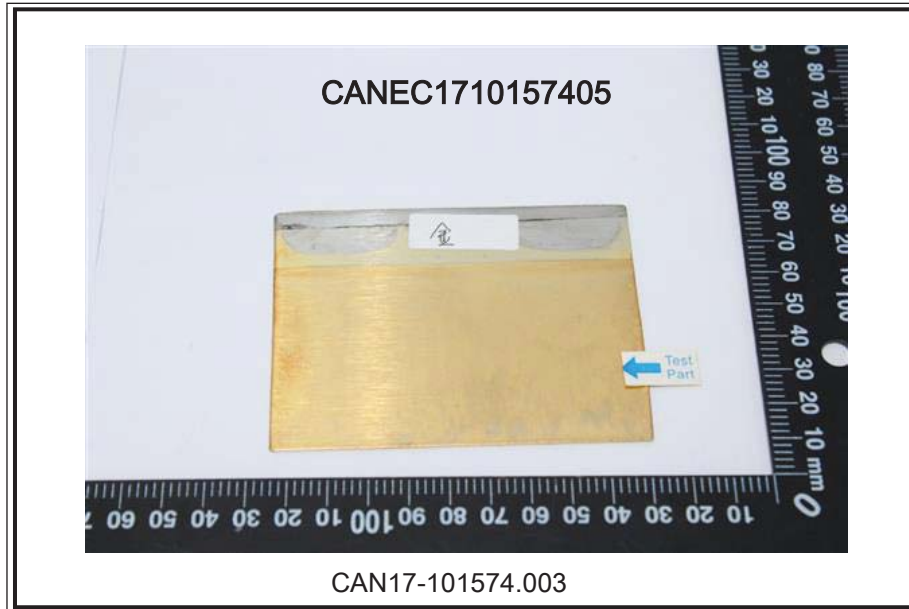
Test Report

No. CANEC1710157405

Date: 08 Jun 2017

Page 6 of 6

Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



SGS-CSTC 检验检测专用章
Guangzhou Branch Testing Center Chemical Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification 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 intervention only and within the limits 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 their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

198 Kazhu Road, Science Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgsgroup.com.cn
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

TO: 鸿海精密

TEST REPORT

(INITIAL DATA)

Date:2017/05/20

MODEL TYPE: PHONE JACK

CUSTOMER PART NO:

PART NAME: PJ857-F06G1BR-A

WRITTEN	CHECKED	APPROVED
CHENTAO	LIANGLIANG	LUYAJUN

YUQIU ELECTRONICS CO.,LTD

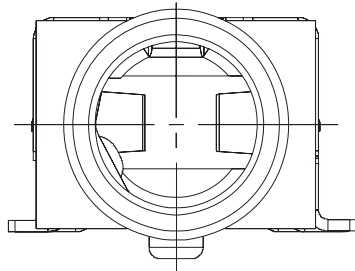
YUQIU ELECTRONICS CO.,LTD.

INITIAL TEST REPORT

CUSTOMER	鸿海精密	MODEL TYPE	PHONE JACK
DATE	2017.05.20	PART NO.	PJ857-F06G1BR-A
SMPL Q'TY	10 PCS	CUSTOMER PART NO.	

INITIAL DATA

DRAWING:



NO.	ITEM	SPEC	1	2	3	4	5
1	Withstand Voltage	AC500V/1min	OK	OK	OK	OK	OK
2	Insulation Resistance	100 MΩ Min	OK	OK	OK	OK	OK
3	Contact resistance	50 mΩ Max	10.8	11.3	10.4	9.6	10.1
4	Insertion force	2.94-29.4N	11.4	10.8	10.9	11.2	11.5
5	extraction force	2.94-29.4N	7.8	8.2	7.1	6.8	7.5
6	Terminal strength	5N/10S	OK	OK	OK	OK	OK
7	Appearance	No damage on appearance	OK	OK	OK	OK	OK

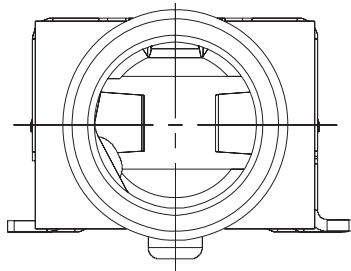
YUQIU ELECTRONICS CO.,LTD.

INITIAL TEST REPORT

CUSTOMER	鸿海精密	MODEL TYPE	PHONE JACK
DATE	2017.05.20	PART NO.	PJ857-F06G1BR-A
SMPL Q'TY	10 PCS	CUSTOMER PART NO.	

INITIAL DATA

DRAWING:



NO.	ITEM	SPEC	6	7	8	9	10
1	Withstand Voltage	AC500V/1min	OK	OK	OK	OK	OK
2	Insulation Resistance	100 MΩ Min	OK	OK	OK	OK	OK
3	Contact resistance	50 mΩ Max	9.8	10.3	9.5	9.7	10.2
4	Insertion force	2.94-29.4N	10.8	11.2	10.7	10.5	10.3
5	extraction force	2.94-29.4N	7.4	6.8	7.3	6.7	6.5
6	Terminal strength	5N/10S	OK	OK	OK	OK	OK
7	Appearance	No damage on appearance	OK	OK	OK	OK	OK

TO : 鸿海精密

TEST REPORT

(RELIABILITY DATA)

Date:2017/05/27

MODEL TYPE: PHONE JACK

CUSTOMER PART NO:

PART NAME: PJ857-F06G1BR-A

WRITTEN	CHECKED	APPROVED
CHENTAO	LIANGLIANG	LUYAJUN

YUQIU ELECTRONICS CO.,LTD

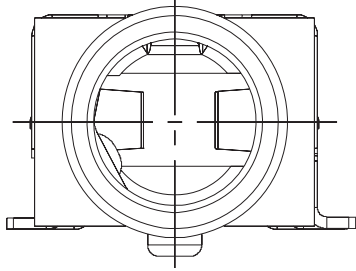
YUQIU ELECTRONICS CO.,LTD

RELIABILITY TEST REPORT

CUSTOMER	鸿海精密	MODEL TYPE	PHONE JACK
DATE	2017.05.27	PART NO.	PJ857-F06G1BR-A
SMPL Q'TY	5 PCS	CUSTOMER PART NO.	

LIFE TEST

DRAWING:



TEST CONDITIONS:

The life test shall consist of 5000 cycles of insertion and extraction with gauge plug covered with a thin coat of grease in order to prevent from hearing and wearing ,at a rate of 20 to 30 cycles per minutes.

NO.	ITEM	SPEC	1	2	3	4	5
1	Withstand Voltage	AC500V/1min	OK	OK	OK	OK	OK
2	Insulation Resistance	100 MΩ Min	OK	OK	OK	OK	OK
3	Contact resistance	100 mΩ Max	14.8	15.7	15.2	14.3	15.1
4	Insertion force	2.94-29.4N	10.2	10.3	11.4	10.5	11.1
5	extraction force	2.94-29.4N	6.4	6.3	6.8	6.5	6.7
6	Terminal strength	5N/10S	OK	OK	OK	OK	OK
7	Appearance	No damage on appearance	OK	OK	OK	OK	OK

page: 1/8

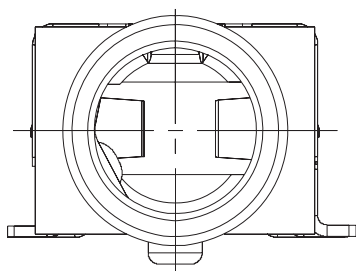
YUQIU ELECTRONICS CO.,LTD

RELIABILITY TEST REPORT

CUSTOMER	鸿海精密	MODEL TYPE	PHONE JACK
DATE	2017.05.27	PART NO.	PJ857-F06G1BR-A
SMPL Q'TY	5 PCS	CUSTOMER PART NO.	

RESISTANCE TO SOLDERING HEAT TEST

DRAWING:



TEST CONDITIONS:

The jack terminal shall be dipped in solder under the condition as specified below:

Temperature of solder: $260 \pm 5^{\circ}\text{C}.$

Dip time: 10 ± 1 seconds.

NO.	ITEM	SPEC	1	2	3	4	5
1	Withstand Voltage	AC500V/1min	OK	OK	OK	OK	OK
2	Insulation Resistance	100 M Ω Min	OK	OK	OK	OK	OK
3	Contact resistance	50 m Ω Max	10.3	9.5	9.8	9.7	10.7
4	Insertion force	2.94-29.4N	10.3	9.8	9.7	10.2	10.4
5	extraction force	2.94-29.4N	6.5	6.8	7.2	7.5	7.3
6	Terminal strength	5N/10S	OK	OK	OK	OK	OK
7	Appearance	No damage on appearance	OK	OK	OK	OK	OK

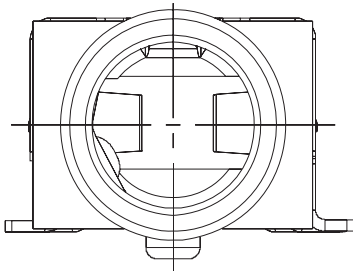
YUQIU ELECTRONICS CO.,LTD

RELIABILITY TEST REPORT

CUSTOMER	鸿海精密	MODEL TYPE	PHONE JACK
DATE	2017.05.27	PART NO.	PJ857-F06G1BR-A
SMPL Q'TY	5 PCS	CUSTOMER PART NO.	

SOLDERABILITY TEST

DRAWING:



TEST CONDITIONS:

Temperature of solder: $245 \pm 5^{\circ}\text{C}$.

Time of dip: 3 ± 0.5 seconds.

Length of dip: 2.5mm (from top of terminal)

NO.	ITEM	SPEC	1	2	3	4	5
1	Withstand Voltage	AC500V/1min	/	/	/	/	/
2	Insulation Resistance	100 MΩ Min	/	/	/	/	/
3	Contact resistance	50 mΩ Max	/	/	/	/	/
4	Insertion force	2.94-29.4N	/	/	/	/	/
5	extraction force	2.94-29.4N	/	/	/	/	/
6	Terminal strength	5N/10S	/	/	/	/	/
7	Appearance	Areas of soldering shall be capable of 95% or more of dip terminal area.	OK	OK	OK	OK	OK

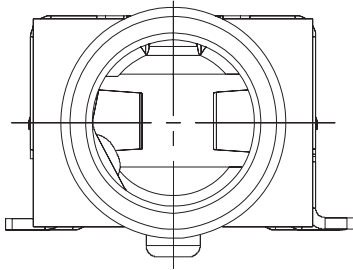
YUQIU ELECTRONICS CO.,LTD

RELIABILITY TEST REPORT

CUSTOMER	鸿海精密	MODEL TYPE	PHONE JACK
DATE	2017.05.27	PART NO.	PJ857-F06G1BR-A
SMPL Q'TY	5 PCS	CUSTOMER PART NO.	

COLD TEST

DRAWING:



TEST CONDITIONS:

The jack shall be subjected to temperature of $-25\pm 2^{\circ}\text{C}$ for a period of 96 hours , then shall be allowed to remain in room ambient conditions for 30 minutes.

NO.	ITEM	SPEC	1	2	3	4	5
1	Withstand Voltage	AC500V/1min	OK	OK	OK	OK	OK
2	Insulation Resistance	100 MΩ Min	OK	OK	OK	OK	OK
3	Contact resistance	100 mΩ Max	10.8	11.2	10.5	11.6	11.1
4	Insertion force	2.94-29.4N	9.9	9.6	10.5	10.1	10.3
5	extraction force	2.94-29.4N	7.2	6.8	6.7	7.3	7.5
6	Terminal strength	5N/10S	OK	OK	OK	OK	OK
7	Appearance	No damage on appearance	OK	OK	OK	OK	OK

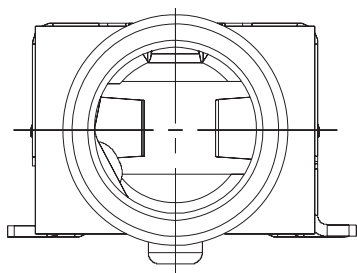
YUQIU ELECTRONICS CO.,LTD

RELIABILITY TEST REPORT

CUSTOMER	鸿海精密	MODEL TYPE	PHONE JACK
DATE	2017.05.27	PART NO.	PJ857-F06G1BR-A
SMPL Q'TY	5 PCS	CUSTOMER PART NO.	

HEAT TEST

DRAWING:



TEST CONDITIONS:

The jack shall be subjected to temperature of $70\pm 2^{\circ}\text{C}$ for a period of 96 hours , then shall be allowed to remain in room ambient conditions for 30 minutes.

NO.	ITEM	SPEC	1	2	3	4	5
1	Withstand Voltage	AC500V/1min	OK	OK	OK	OK	OK
2	Insulation Resistance	100 MΩ Min	OK	OK	OK	OK	OK
3	Contact resistance	100 mΩ Max	10.2	10.5	11.4	11.6	11.1
4	Insertion force	2.94-29.4N	10.3	11.8	10.4	9.5	10.6
5	extraction force	2.94-29.4N	6.6	6.7	7.3	7.5	7.2
6	Terminal strength	5N/10S	OK	OK	OK	OK	OK
7	Appearance	No damage on appearance	OK	OK	OK	OK	OK

page:5/8

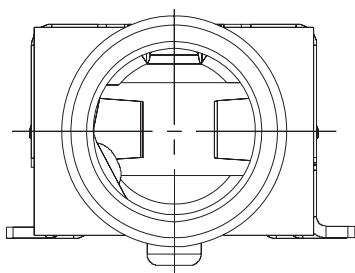
YUQIU ELECTRONICS CO.,LTD

RELIABILITY TEST REPORT

CUSTOMER	鸿海精密	MODEL TYPE	PHONE JACK
DATE	2017.05.27	PART NO.	PJ857-F06G1BR-A
SMPL Q'TY	5 PCS	CUSTOMER PART NO.	

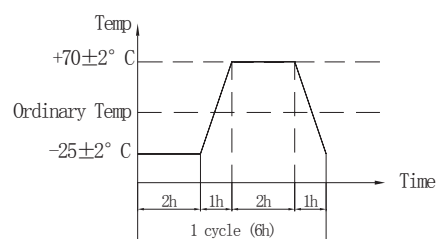
TEMPERATURE CYCLE TEST

DRAWING:



TEST CONDITIONS:

The jack be subjected to conditions 5cycle as shown in below, and the shall returned and allowed to remain in ambient condition for 30 minutes.



NO.	ITEM	SPEC	1	2	3	4	5
1	Withstand Voltage	AC500V/1min	OK	OK	OK	OK	OK
2	Insulation Resistance	100 MΩ Min	OK	OK	OK	OK	OK
3	Contact resistance	100 mΩ Max	11.3	11.2	10.5	10.8	11.7
4	Insertion force	2.94-29.4N	10.2	9.6	9.9	9.7	10.1
5	extraction force	2.94-29.4N	6.8	6.3	6.9	7.5	7.1
6	Terminal strength	5N/10S	OK	OK	OK	OK	OK
7	Appearance	No damage on appearance	OK	OK	OK	OK	OK

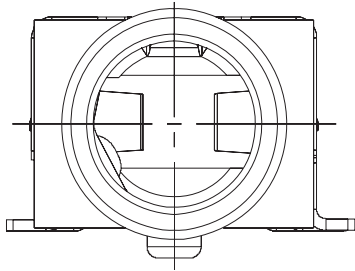
YUQIU ELECTRONICS CO.,LTD

RELIABILITY TEST REPORT

CUSTOMER	鸿海精密	MODEL TYPE	PHONE JACK
DATE	2017.05.27	PART NO.	PJ857-F06G1BR-A
SMPL Q'TY	5 PCS	CUSTOMER PART NO.	

HUMIDITY TEST

DRAWING:



TEST CONDITIONS:

The jack shall be subjected to temperature of $40\pm 2^{\circ}\text{C}$ and relative humidity of 90% to 95% for a period of 96 hours. Upon completion of the exposure, dew drops shall be blown out and removed from the jack, after which the jack shall conditioned at room ambient conditions for 30 minutes.

NO.	ITEM	SPEC	1	2	3	4	5
1	Withstand Voltage	AC500V/1min	OK	OK	OK	OK	OK
2	Insulation Resistance	100 MΩ Min	OK	OK	OK	OK	OK
3	Contact resistance	100 mΩ Max	11.2	10.3	10.5	11.4	10.3
4	Insertion force	2.94-29.4N	9.9	9.6	10.3	10.1	10.5
5	extraction force	2.94-29.4N	6.5	6.8	6.9	7.1	7.4
6	Terminal strength	5N/10S	OK	OK	OK	OK	OK
7	Appearance	No damage on appearance	OK	OK	OK	OK	OK

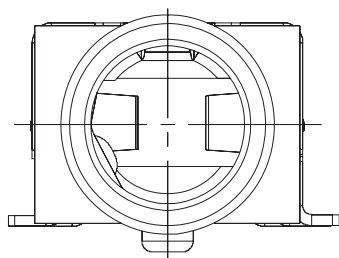
YUQIU ELECTRONICS CO.,LTD

RELIABILITY TEST REPORT

CUSTOMER	鸿海精密	MODEL TYPE	PHONE JACK
DATE	2017.05.27	PART NO.	PJ857-F06G1BR-A
SMPL Q'TY	5 PCS	CUSTOMER PART NO.	

SALT MIST TEST

DRAWING:



TEST CONDITIONS:

Testing bath:

The temperature shall be $35^{\circ}\text{C} \pm 2^{\circ}\text{C}$ in the ambient of the test specimen during the test.

Spray apparatus:

The apparatus shall be capable of producing fine dense mist uniformly.

Salt water:

The concentration of the salt water shall be adjusted at $5 \pm 1\%$ weight ratio at $35^{\circ}\text{C} \pm 2^{\circ}\text{C}$.

Testing time: 24 ± 0.5 hours.

NO.	ITEM	SPEC	1	2	3	4	5
1	Withstand Voltage	AC500V/1min	OK	OK	OK	OK	OK
2	Insulation Resistance	100 MΩ Min	OK	OK	OK	OK	OK
3	Contact resistance	100 mΩ Max	11.3	10.5	10.9	11.4	11.2
4	Insertion force	2.94-29.4N	10.1	10.4	10.3	9.9	10.6
5	extraction force	2.94-29.4N	6.8	6.4	7.3	7.5	7.6
6	Terminal strength	5N/10S	OK	OK	OK	OK	OK
7	Appearance	No damage on appearance	OK	OK	OK	OK	OK