P1 Wire Wound Type Common Mode Filter DCM321620F2SF-600T02

		ECN HIS		Г	
REV	DATE	DESCRIPTION	APPROVED	CHECKED	DRAWN
1.0	17/06/08	新發行	楊祥忠	林錦政	張展耀
1.1	17/09/04	CP 值改為 18	楊祥忠	林錦政	張展耀
備					
註					

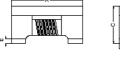
Wire Wound Type Common Mode Filter

DCM321620F2SF-600T02

1. Features

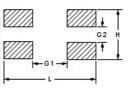
- 1. High common mode impedance at high frequency effects excellent noise suppression performance.
- 2. DCM321620F2SF series realizes small size and low profile. 3.2x1.6X2.0 mm.
- 3. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

2. Dimension





Recommended PC Board Pattern



PC board should be designed so that products are not sufficient under mechanical stress as warping the board.

Products shall be positioned in the sideway direction against the mechanical stress to prevent failure.

Series	A(mm)	B(mm)	C(mm)	D1(mm)	D2(mm)	E(mm)	L(mm)	H(mm)	G1(mm)	G2(mm)
321620F2SF	3.4±0.2	1.6±0.2	2.0±0.2	0.64±0.1	0.66±0.1	0.12 (typ.)	3.7	1.7	2.3	0.5

Units: mm

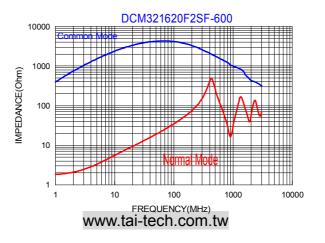
3. Part Numbering

DCM	321620	F	2	S	F	-	600	Т	02
А	В	С	D	Е	F		G	Н	Т
A: Serie	es								

- B: DimensionC: MaterialFerrite CoreD: Number of Lines2=2 linesE: TypeS=Shielded , N=UnshieldedF: Lead free600=60uHH: PackagingT=Taping and Reel
- H: Packaging T=Taping and Re I: Rated Current 02=200mA

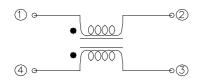
4. Specification

TAI-TECH Part Number	Inductance(uH) [100kHz/0.1V] Min.	Capacitance (pF)Max	DC Resistance (Ω)Max.	Rated Current (mA)	Rated Volt. (Vdc)	Withstand Volt. (Vdc) max.	IR(Ω) min.
DCM321620F2SF-600T02	60	18	1.7	200	50	125	10M



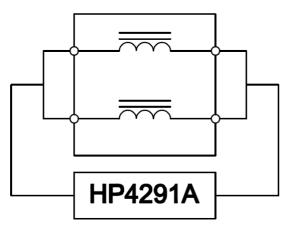


TAI-TECH 5.Schematic Diagram

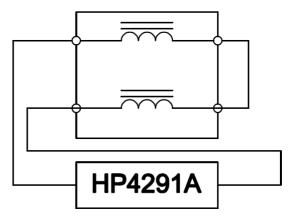


6. MEASURING CIRCUITS 2LINE

Common mode

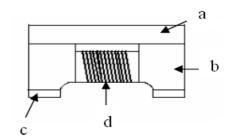


Differential mode



7. Materials

No.	Description	Specification
a.	Upper Plate	Ferrite
b.	Core	Ferrite Core
с	Termination	Tin (Pb Free)
d	Wire	Enameled Copper Wire



8. Reliability and Test Condition

ltem	Performance	Test Condition
Operating temperature	-40~+85°C (Including self - temperature rise)	
Storage temperature	-40~+85℃ (on board)	
Electrical Performance	e Test	
L(common mode)		Agilent-4291A+ Agilent -16197A
DCR	Refer to standard electrical characteristics list.	Agilent-4338B
I.R.		Agilent4339
Temperature Rise Test	Rated Current < 1A ΔT 20℃ Max Rated Current ≧ 1A ΔT 40℃ Max	1.Applied the allowed DC current. 2.Temperature measured by digital surface thermometer
Reliability Test		
Life Test		Preconditioning: Run through IR reflow for 2 times.(IPC/JEDEC J-STD-020DClassification Reflow Profiles) Temperature : 85±2℃ Applied current : rated current Duration : 1000±12hrs Measured at room temperature after placing for 24±2 hrs
Load Humidity		Preconditioning: Run through IR reflow for 2 times.(IPC/JEDEC J-STD-020DClassification Reflow Profiles Humidity : 85±2%R.H, Temperature : 85°C±2°C Duration : 1000hrs Min. with 100% rated current Measured at room temperature after placing for 24±2 hrs
Moisture Resistance	Appearance : No damage. Inductance : within±10% of initial value RDC : within ±15% of initial value and shall not exceed the specification value	Preconditioning: Run through IR reflowing for 2+12 ms Preconditioning: Run through IR reflow for 2 times. (IPC/JEDEC J-STD-020DClassification Reflow Profiles 1. Baked at50°C for 25hrs, measured at room temperature after placing for 4 hrs. 2. Raise temperature to 65±2°C 90-100%RH in 2.5hrs, and keep 3 hours, cool down to 25°C in 2.5hrs. 3. Raise temperature to 65±2°C 90-100%RH in 2.5hrs, and keep 3 hours, cool down to 25°C in 2.5hrs,keep at 25°C for 2 hrs then keep at -10°C for 3 hrs 4. Keep at 25°C 80-100%RH for 15min and vibrate at the frequency of 10 to 55 Hz to 10 Hz, measure at room temperature after placing for 1-2 hrs.
Thermal shock		Preconditioning: Run through IR reflow for 2 times.(IPC/JEDEC J-STD-020DClassification Reflow Profiles Condition for 1 cycle Step1 : $-40\pm2^{\circ}$ C 30 \pm 5min Step2 : $25\pm2^{\circ}$ C \leq 0.5min Step3 : $85\pm2^{\circ}$ C 30 \pm 5min Number of cycles : 500
Vibration		Measured at room temperature after placing for 24±2 hrs Oscillation Frequency: 10 ~ 2K ~ 10Hz for 20 minutes Equipment : Vibration checker Total Amplitude:1.52mm±10% Testing Time : 12 hours(20 minutes, 12 cycles each of 3 orientations) ₀

Item	Performance	Test Condition					
Bending	Appearance ∶ No damage. Inductance ∶ within±10% of initial value	Shall be mounted on a FR4 substrate of the following dimensions: >=0805 inch(2012mm):40x100x1.2mm <0805 inch(2012mm):40x100x0.8mm Bending depth: >=0805 inch(2012mm):1.2mm <0805 inch(2012mm):0.8mm duration of 10 sec.					
	RDC : within ±15% of initial value and shall not exceed the specification value	Peak Normal duration (D) (g's) Wave form Velocity change (Vi)ft/sec					
Shock		SMD 50 11 Half-sine 11.3					
		Lead 50 11 Half-sine 11.3					
Solder ability	More than 95% of the terminal electrode should be covered with solder。	Preheat: 150°C,60sec.。 Solder: Sn96.5% Ag3% Cu0.5% Temperature: 245±5°C 。 Flux for lead free: Rosin. 9.5% 。 Dip time: 4±1sec 。 Depth: completely cover the termination					
Resistance to Soldering Heat		Depth: completely cover the termination Temperature(°C) Time(s) Temperature ramp/immersion and emersion rate heat cycles 260 ±5 10 ±1 25mm/s ±6 mm/s 1					
Terminal Strength	Appearance : No damage. Inductance : within±10% of initial value RDC : within ±15% of initial value and shall not exceed the specification value	Preconditioning: Run through IR reflow for 2 times.(IPC/JEDEC J-STD-020DClassification Reflow Profiles With the component mounted on a PCB with the device to be tested, apply a force(>0805:1Kg, <=0805:0.5kg)to the side of a device being tested. This force shall be applied for 60 +1 seconds. Also the force shall be applied gradually as not to apply a shock to the component being tested.					
		substrate press tool					

9. Soldering and Mounting

9-1. Soldering

Mildly activated rosin fluxes are preferred. TAI-TECH terminations are suitable for all wave and re-flow soldering systems. If hand soldering cannot be avoided, the preferred technique is the utilization of hot air soldering tools.

9-1.1 Solder re-flow:

Recommended temperature profiles for re-flow soldering in Figure 1.

9-1.2 Soldering Iron(Figure 2):

- Products attachment with a soldering iron is discouraged due to the inherent process control limitations. In the event that a soldering iron must be employed the following precautions are recommended.
- Preheat circuit and products to 150°C
 Never contact the ceramic with the iron tip
 Use a 20 watt soldering iron with tip diameter of 1.0mm
 1.0mm tip diameter (max)
 Limit soldering time to 4~5 sec.
- 355℃ tip temperature (max)
- Limit soldering time to 4~5 sec.

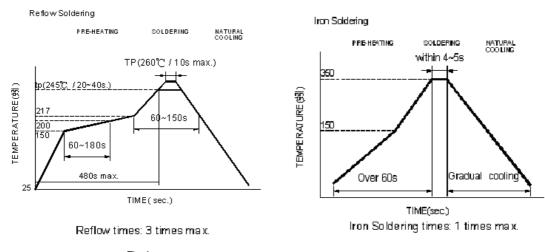


Fig.1

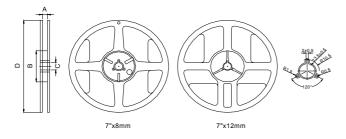
Fig.2

www.tai-tech.com.tw

TAI-TECH

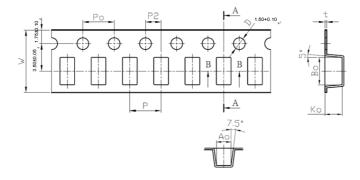
10.Packaging Information

10-1. Reel Dimension



Туре	A(mm)	B(mm)	C(mm)	D(mm)
7"x8mm	9.0±0.5	60±2	13.5±0.5	178±2

10-2. Tape Dimension / 8mm

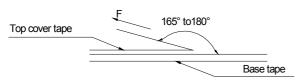


	Series	P(mm)	Po(mm)	P2(mm)	Bo(mm)	Ao(mm)	Ko(mm)	W(mm)	t(mm)
DC	CM321620	4.00±0.10	4.00±0.10	2.00±0.05	3.50±0.10	1.88±0.10	2.20±0.10	8.00±0.10	0.26±0.05

10-3. Packaging Quantity

Chip size	Chip/Reel	Inner Box	Middle Box	Carton
DCM321620F2S	2000	10000	50000	100000

10-4. Tearing Off Force



The force for tearing off cover tape is 15 to 80 grams in the arrow direction under the following conditions.

Room Temp.	Room Humidity	Room atm	Tearing Speed	
(°C)	(%)	(hPa)	mm/min	
5~35	45~85	860~1060	300	

Application Notice

- Storage Conditions (component level)
- To maintain the solderability of terminal electrodes:
- 1. TAI-TECH products meet IPC/JEDEC J-STD-020D standard-MSL, level 1.
- 2. Temperature and humidity conditions: Less than 40 $^\circ\!\mathrm{C}$ $\,$ and 60% RH.
- 3. Recommended products should be used within 12 months form the time of delivery.
- 4. The packaging material should be kept where no chlorine or sulfur exists in the air.

Transportation

- 1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- 2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
- 3. Bulk handling should ensure that abrasion and mechanical shock are minimized.

www.tai-tech.com.tw



測試報告 號碼(No.): CE/2016/A1220 日期(Date): 2016/10/14 頁數(Page): 1 of 15 **Test Report**

西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD. (臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.) (耀鑽科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.) (慶邦電子元器件(泗洪)有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.) 桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN, R. O. C.) (江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA)

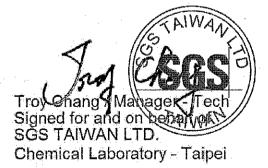
(桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿遷市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE · SIHONG COUNTY · SUQIANCITY · JIANGSU PROVINCE · P, R · CHINA)

以下测試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as):

樣品名稱(Sample Description)	:	WIREWOUND SERIES
樣品型號(Style/Item No.)	:	WCM、WCL、HSF、HDMI、DVI、BCM、PCM、TCM、LCM、LPF、TXF、ACM、DCM、WIH
		SERIES
收件日期(Sample Receiving Date)	:	2016/10/07
測試期間(Testing Period)	:	2016/10/07 TO 2016/10/14

測試結果(Test Results)

請見下一頁 (Please refer to next pages).



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-and-Conditions aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-

25, Wu Chyuan 7th Road, M t+886 (02)2299 3939 Faipei Industrial Park, Wu Ku District, New Taipei City, Taiwan /新北市五股區新北產業園區五權七路25號 f+886 (02)2299 3237 www.sgs.tw





西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD. (臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.) (耀鑽科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.) (慶邦電子元器件(泗洪)有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.) 桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN, R. O. C.) (江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA)

(社廠省託山市建防託嘉高科技工業區科澤路 / GUO-2E ROAD, KUNJIA HI-IECH INDUSIRIAL PARA, KUN-SHAN, JIANG-SU, CHINA) (桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿遷市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE, SIHONG COUNTY, SUQIANCITY, JIANGSU PROVINCE, P.R., CHINA)

<u>測試結果(Test_Results)</u>

測試部位(PART NAME)No.1

整體混測(MIXED ALL PARTS)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) No.1
鎘 / Cadmium (Cd)	mg/kg	参考IEC 62321-5 (2013),以感應耦合 電漿原子發射光譜儀檢測. / With reference to IEC 62321-5 (2013) and performed by ICP-AES.	2	n. d.
鉛 / Lead (Pb)	mg/kg	參考IEC 62321-5 (2013),以感應耦合 電漿原子發射光譜儀檢測. / With reference to IEC 62321-5 (2013) and performed by ICP-AES.	2	n, d,
汞 / Mercury (Hg)	mg/kg	參考IEC 62321-4 (2013),以感應耦合 電漿原子發射光譜儀檢測. / With reference to IEC 62321-4 (2013) and performed by ICP-AES.	2	n. d.
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	参考IEC 62321 (2008),以UV-VIS檢 測. / With reference to IEC 62321 (2008) and performed by UV-VIS.	2	n. d.
六溴環十二烷及所有主要被辨別出的異構物 / Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α - HBCDD, β - HBCDD, γ - HBCDD) (CAS No.: 25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	mg/kg	參考IEC 62321 (2008),以氣相層析/ 質譜儀檢測. / With reference to IEC 62321 (2008). Analysis was performed by GC/MS.	5	n. d.

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/eir/Terms-and-Conditions for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/eir/Terms-and-Conditions for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/eir/Terms-and-Conditions for electronic Documents at http://www.sgs.com/eir/Terms-and-Conditions for electronic Documents at http://www.sgs.com/eir/Terms-and-Conditions and for the limits of leality, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that Information contained hereon reflects 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 document. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or fatsification 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.

頁數(Page): 2 of 15



測試報告

號碼(No.): CE/2016/A1220 日期(Date): 2016/10/14 頁數(Page): 3 of 15

Test Report

西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD.

(臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.)

(耀鑽科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.)

(慶邦電子元器件 (泗洪) 有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.)

桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN, R. O. C.)

(江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA) (桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿遷市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE , SIHONG COUNTY , SUQIANCITY , JIANGSU PROVINCE , P, R , CHINA)

测試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值	結果 (Result)
			(MDL)	No. 1
多溴聯苯總和 / Sum of PBBs	mg/kg			n. d.
一溴聯苯 / Monobromobiphenyl	mg/kg		5	n. d.
二溴聯苯 / Dibromobiphenyl	mg/kg		5	n. d.
三溴聯苯 / Tribromobiphenyl	mg/kg		5	n. d.
四溴聯苯 / Tetrabromobiphenyl	mg/kg		5	n. d.
五溴聯苯 / Pentabromobiphenyl	_ mg/kg		5	n. d.
六溴聯苯 / Hexabromobiphenyl	mg/kg		5	n. d.
七溴聯苯 / Heptabromobiphenyl	mg/kg		5	n. d .
八溴聯苯 / Octabromobiphenyl	mg/kg]	5	n. d.
九溴聯苯 / Nonabromobiphenyl	mg/kg	參考IEC 62321-6 (2015),以氣相層析	5	n. d.
十溴聯苯 / Decabromobiphenyl	mg/kg	/質譜儀檢測. / With reference to	5	n. d.
多溴聯苯醚總和 / Sum of PBDEs	mg/kg	IEC 62321-6 (2015) and performed		n. d.
一溴聯苯醚 / Monobromodiphenyl ether	mg/kg	by GC/MS.	5	n. d.
二溴聯苯醚 / Dibromodiphenyl ether	mg/kg]	5	n. d.
三溴聯苯醚 / Tribromodiphenyl ether	mg/kg] [5	n. d.
四溴聯苯醚 / Tetrabromodiphenyl ether	mg/kg		5	n. d.
五溴聯苯醚 / Pentabromodiphenyl ether	mg/kg] . [5	n. d.
六溴聯苯醚 / Hexabromodiphenyl ether	mg/kg		5	n. d.
七溴聯苯醚 / Heptabromodiphenyl ether	mg/kg		5	n. d.
八溴聯苯醚 / Octabromodiphenyl ether	mg/kg] [- 5	n. d.
九溴聯苯醚 / Nonabromodiphenyl ether	mg/kg]	5	n. d.
十溴聯苯醚 / Decabromodiphenyl ether	mg/kg		5	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sas.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sas.com/en/Terms-and-Conditions/Terms-Documenta.sapx 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 instruction, 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 approad 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.

25, Wu Chyuan 7th Road, New Taipei Industrial Park, Wu Ku District, New Taipei City, Taiwan /新北市五股區新北產業園區五橋七路26號 t+886 (02)2299 3939 f+886 (02)2299 3237 www.sgs.tw SGS Taiwan Ltd. 台灣檢驗科技股份有限公司



測試報告 Test Report 號碼(No.): CE/2016/A1220

西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD. [編 (臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.) (耀鑽科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.) (慶評電子元器件 (泗洪) 有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.) 桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY,

TAIWAN, R. O. C.) (江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA) (桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿遷市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE, SIHONG COUNTY, SUQIANCITY, JIANGSU PROVINCE, P, R, CHINA)

日期(Date): 2016/10/14

頁數(Page): 4 of 15

测試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
鄰苯二甲酸丁苯甲酯 / BBP(Buty1 Benzyl phthalate)(CAS No.: 85-68-7)	mg/kg		50	<u>No. 1</u> n. d.
鄰苯二甲酸二丁酯 / DBP (Dibuty1 phthalate) (CAS No.: 84-74-2)	mg/kg		50	n. d.
鄰苯二甲酸二 (2-乙基己基)酯 / DEHP (Di- (2-ethylhexyl) phthalate) (CAS No.: 117-81-7)	mg/kg		50	n. d
鄰苯二甲酸二異丁酯 / DIBP (Di- isobutyl phthalate) (CAS No.: 84-69- 5)	mg/kg	參考IEC 62321-8/CD(2013),以氣相	50	n. d.
鄰苯二甲酸二異癸酯 / DIDP (Di- isodecyl phthalate) (CAS No.: 26761- 40-0; 68515-49-1)	mg/kg	層析儀/質譜儀檢測. / With reference to IEC 62321-8/CD (2013). Analysis was performed by GC/MS.	50	n. d.
鄰苯二甲酸二異壬酯 / DINP (Di- isononyl phthalate) (CAS No.: 28553- 12-0; 68515-48-0)	mg/kg	GC/MS.	50	n. d.
鄰苯二甲酸二正辛酯 / DNOP(Di-n- octyl phthalate)(CAS No.: 117-84-0)	mg/kg		50	n. d.
鄰苯二甲酸二正己酯 / DNHP(Di-n- hexyl phthalate)(CAS No.: 84-75-3)	mg/kg		50	n. d.
鄰苯二甲酸二戊酯 / Di-n-pentyl phthalate (CAS No.: 131-18-0)	mg/kg		50	n. d.
聚氯乙烯 / PVC	**	以紅外光譜分析及焰色法檢測. / Analysis was performed by FTIR and FLAME Test.		Negative

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.egs.com/ey/Terms-and-Conditions.apx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.egs.com/ey/Terms-and-Conditions.apx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.egs.com/ey/Terms-and-Conditions/Terms-and-Condit

SGS Taiwan Ltcl. 台灣檢驗科技股份有限公司 25, Wu Chyuan 7th Road, New Taipei Industrial Park, Wu Ku District, New Taipei City, Taiwan 前北市五股區新北產業層區五備上路25號



测試報告 Test Report ^{號碼(No.)}: CE/2016/A1220

西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD. (臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.)

(耀鑽科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.)

(慶邦電子元器件(泗洪)有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.)

桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN, R. O. C.)

(江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA) (桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿還市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE, SIHONG COUNTY, SUQIANCITY, JIANGSU PROVINCE, P.R., CHINA)

日期(Date): 2016/10/14

測試項目 (Test Items)	單位 (Unit)	测試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
鹵素 / Halogen				
鹵素(氟)/ Halogen-Fluorine (F) (CAS No.: 14762-94-8)	mg/kg		50	n. d.
鹵素(氯)/ Halogen-Chlorine (Cl) (CAS No.: 22537-15-1)	mg/kg	参考BS EN 14582(2007),以離子層析 儀分析. / With reference to BS EN	50	n. d.
鹵素(溴)/ Halogen-Bromine (Br) (CAS No.: 10097-32-2)	mg/kg	14582 (2007). Analysis was performed by IC.	50	n. d.
鹵素 (碘) / Halogen-Iodine (I) (CAS No.: 14362-44-8)	mg/kg		50	n. d.
全氟辛烷磺酸 / Perfluorooctane sulfonates (PFOS-Acid, Metal Salt, Amide)	mg/kg	参考US EPA 3550C (2007),以液相層 析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by LC/MS.	10	n. d.
全氟辛酸 / PFOA (CAS No.: 335-67-1)	mg/kg	参考US EPA 3550C (2007),以液相層 析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by LC/MS.	10	n. d.
銻 / Antimony (Sb)	mg/kg	参考US EPA 3052 (1996),以感應耦合 電漿原子發射光譜儀檢測. / With reference to US EPA 3052 (1996). Analysis was performed by ICP-AES.	2	n. d.
鈹 / Beryllium (Be)	mg/kg	参考US EPA 3052 (1996),以感應耦合 電漿原子發射光譜儀檢測. / With reference to US EPA 3052 (1996). Analysis was performed by ICP-AES.	2	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sds.com/et/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>http://www.sds.com/et/Terms-and-Conditions.aspx</u> 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 instruction, 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.

.

Member of the SGS Groun

SGS Taiwan Ltd. 台灣被驗科技股份有限公司 25, Wu Chyuan 7th Road, New Taipel Industrial Park, Wu Ku District, New Taipel City, Taiwan/新北市五股區新北蘇鐵圈區五冊七路25號

頁數(Page): 5 of 15



測試報告 Test Report

西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD. (臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.) (耀鑽科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.) (慶邦電子元器件(泗洪)有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.) 桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN, R. O. C.) (江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA)

號碼(No.): CE/2016/A1220

(桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿還市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE, SIHONG COUNTY, SUQIANCITY, JIANGSU PROVINCE, P, R, CHINA)

日期(Date): 2016/10/14

備註(Note):

- 1. mg/kg = ppm; 0.1wt% = 1000ppm
- 2. n.d. = Not Detected (未檢出)
- 3. MDL = Method Detection Limit (方法偵測極限值)
- 4. "-" = Not Regulated (無規格值)
- 5. **= Qualitative analysis (No Unit) 定性分析(無單位)
- 6. Negative = Undetectable 陰性(未偵測到); Positive = Detectable 陽性(已偵測到)
- 7. 樣品的測試是基於申請人要求混合測試,報告中的混合測試結果不代表其中個別單一材質的含量. (The samples was/were analyzed on behalf of the applicant as mixing sample in one testing. The above results was/were only given as the informality value.)

PFOS参考資訊(Reference Information): 持久性有機污染物 POPs - (EU) 757/2010

PFOS濃度在物質或製備中不得超過0.001%(10ppm),在半成品、成品或零部件中不得超過0.1%(1000ppm),在紡織品或塗 層材料中不得超過1µg/m²。

(Outlawing PFOS as substances or preparations in concentrations above 0.001% (10ppm), in semi-finished products or articles or parts at a level above 0.1%(1000ppm), in textiles or other coated materials above $1\mu g/m^2$.)

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 for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Condi

頁數(Page): 6 of 15



西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD.

(臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.)

(耀鑽科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.)

(慶邦電子元器件(泗洪)有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.)

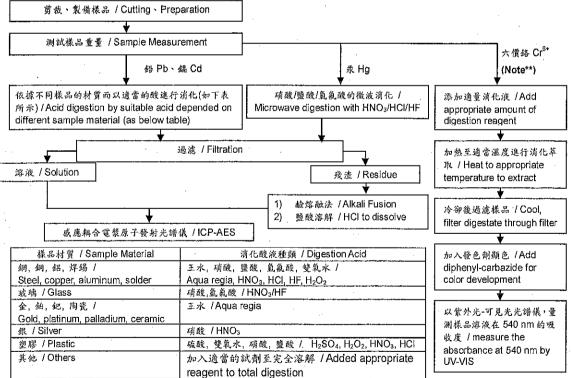
桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN, R. O. C.)

(江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA) (桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿遷市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE, SIHONG COUNTY, SUQIANCITY, JIANGSU PROVINCE, P, R, CHINA)

重金屬流程圖 / Analytical flow chart of Heavy Metal (IEC 62321)

- 根據以下的流程圖之條件,樣品已完全溶解。(六價絡測試方法除外) /
- These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr⁸⁺ test method excluded) ■ 测试人員:王志瑋 / Technician: JR Wang
- 測試負責人:張啟興 / Supervisor: Troy Chang





Note**: (1) 針對非金屬材料加入鹼性消化液,加熱至 90~95℃ 萃取. / For non-metallic material, add alkaline digestion reagent and heat to 90~95℃.

(2) 針對金屬材料加入純水,加熱至沸腾萃取. / For metallic material, add pure water and heat to boiling

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 <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-an

SGS Taiwan Ltd. 台灣核驗科技股份有限公司 _ 25, Wu Chyuan 7th Road, New Taipei Industrial Park, Wu Ku District, Naw Taipei City, Taiwan 新北市和超新北產集團區五批七點25號

頁數(Page): 7 of 15



塑膠 / Plastic

其他 / Others

測試報告 ^{號碼(No.)}: CE/2016/A1220 日期(Date): 2016/10/14 **Test Report**

西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD. (臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.) (羅鑽科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.) (慶邦電子元器件 (泗洪) 有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.) 桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN, R. O. C.)

(江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA) (桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿遷市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE, SIHONG COUNTY, SUQIANCITY, JIANGSU PROVINCE, P, R, CHINA)

根據以下的流程圖之條件,樣品已完全溶解。 / These samples were dissolved totally by pre-conditioning method according to below flow chart.

■ 測試人員:王志瑋 / Technician: JR Wang

■ 測試負責人:張啟興 / Supervisor: Troy Chang

元素以 ICP-AES 分析的消化流程圖 (Flow Chart of digestion for the elements analysis performed by ICP-AES)

剪裁、製備樣品 / Cutting、Preparation 測試樣品重量 / Sample Measurement 依據不同樣品的材質而以適當的酸進行消化(如下表所示) / Acid digestion by suitable acid depended on different sample material (as below table) 過濾 / Filtration 殘渣 / Residue 溶液 / Solution 1) 鹼熔融法 / Alkali Fusion 2) 鹽酸溶解 / HCI to dissolve 感應耦合電漿原子發射光譜儀 / ICP-AES 王水,硝酸,鹽酸,氫氟酸,雙氧水 / 鋼,銅,鋁,焊錫 / Steel, copper, aluminum, solder Aqua regia, HNO₃, HCI, HF, H₂O₂ 玻璃 / Glass 硝酸,氫氟酸 / HNO3/HF 金,鉑,鈀,陶瓷 / Gold, platinum, palladium, ceramic 王水 / Aqua regia 銀 / Silver 硝酸 / HNO3

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/ev/Terms-and-Conditions for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/ev/Terms-and-Conditions/Terms-Document.aspx. Attention is a drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the limits at the limits of client's instruction, 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 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.

硫酸,雙氧水,硝酸,鹽酸 / H2SO4, H2O2, HNO3, HCI

加入適當的試劑至完全溶解 / Added appropriate

reagent to total digestion

頁數(Page): 8 of 15

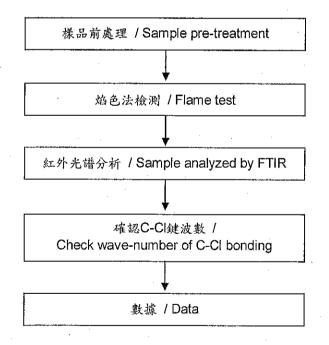


西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD. (臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.) (耀鑽科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.) (慶邦電子元器件(泗洪)有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.) 桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN, R. O. C.) (江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA)

(桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿遷市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE, SIHONG COUNTY, SUQIANCITY, JIANGSU PROVINCE, P, R, CHINA)

聚氯乙烯物質判定分析流程圖 / Analysis flow chart - PVC

■ 测試人員:凃雅苓 / Technician: Yaling Tu



■ 測試負責人:張啟興 / Supervisor: Troy Chang

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/ev/Terms-and-Conditions aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/ev/Terms-and-Conditions/Terms-And-Conditions/Terms-And-Condit

SGS Taiwan Ltd、台灣檢驗科技股份有限公司 25, Wu Chyuan 7th Road, New Taipei Industrial Park, Wu Ku District, New Taipei City, Taiwan 航北市五股區新北產業團區五個七路25號

頁數(Page): 9 of 15



測試報告 Test Report ^{號碼(No.)}: CE/2016/A1220

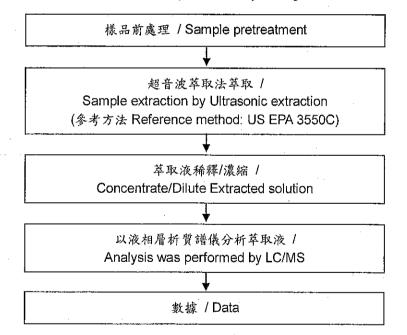
西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD. []] (臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.) (耀鑽科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.) (慶邦電子元器件(泗洪)有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.) 桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN, R. O. C.)

(江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA) (桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿遷市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE, SIHONG COUNTY, SUQIANCITY, JIANGSU PROVINCE, P, R, CHINA)

全氟辛酸/全氟辛烷磺酸分析流程圖 / Analytical flow chart - PFOA/PFOS

日期(Date): 2016/10/14

- 測試人員: 凃雅苓 / Technician: Yaling Tu
- 測試負責人:張啟興 / Supervisor: Troy Chang



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sas.com/er/Terms-and-Conditions for Electronic Documents at http://www.sas.com/er/Terms-and-Conditions for Electronic Documents at http://www.sas.com/er/Terms-and-Conditions for Electronic Documents at http://www.sas.com/er/Terms-and-Conditions/Terms-Document.aspx. Tatention is 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 instruction, 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.

SGS Taiwan Ltd、台灣檢驗科技股份有限公司

頁數(Page): 10 of 15

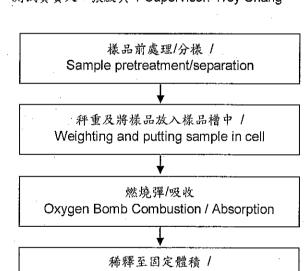


西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD. (臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.) (耀鑚科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.) (慶邦電子元器件(泗洪)有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.) (慶邦電子元器件(泗洪)有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.) 桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN, R. O. C.)

(江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA) (桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿遷市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE, SIHONG COUNTY, SUQIANCITY, JIANGSU PROVINCE, P, R, CHINA)

<u> 鹵素分析流程圖 / Analytical flow chart - Halogen</u>

📕 测試人員:陳恩臻 / Technician: Rita Chen



测試負責人:張啟興 / Supervisor: Troy Chang

離子層析儀分析 / Analysis was performed by IC

Dilution to fixed volume

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sas.com/en/Temms-and-Conditions-aspx. Attentions as and, for electronic format documents, subject to its General Conditions for Electronic Document at http://www.sas.com/en/Temms-and-Conditions-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 instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate partices 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 faisification 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.

頁數(Page): 11 of 15



測試報告 號碼(No.): CE/2016/A1220 **Test Report**

西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD. (臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.) (耀鑽科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.) (慶邦電子元器件(泗洪)有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.) 桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN, R. O. (C,)

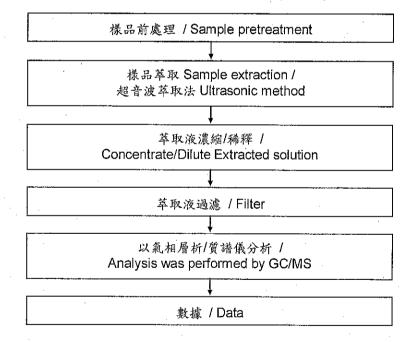
(江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA) (桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿遷市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE , SIHONG COUNTY , SUQIANCITY , JIANGSU PROVINCE , P, R , CHINA)

六溴環十二烷分析流程圖 / Analytical flow chart - HBCDD

日期(Date): 2016/10/14

測試人員:涂雅苓 / Technician: Yaling Tu

測試負責人:張啟興 / Supervisor: Troy Chang



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sos.com/en/Terms-and. and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sos.com/en/Terms-and-Londitions/Terms-and-Londitio not evon the fullest extent of

Member of the SGS Group

www.sgs.tw

頁數(Page): 12 of 15



測試報告 Test Report

號碼(No.): CE/2016/A1220

(江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA) (桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿遷市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE, SIHONG COUNTY, SUQIANCITY, JIANGSU PROVINCE, P, R, CHINA)

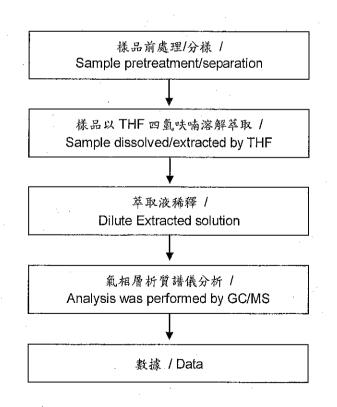
日期(Date): 2016/10/14

<u> 可塑劑分析流程圖 / Analytical flow chart - Phthalate</u>

■ 測試人員:徐毓明 / Technician: Andy Shu

■ 測試負責人:張啟興 / Supervisor: Troy Chang

【测試方法/Test method: IEC 62321-8】



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 and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions for deaven to the limitation of lability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects 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 subject to the fullest extent 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.

25, Wu Chyuan 7th Road, New Taipei Industrial Park, Wu Ku District, New Taipei City, Taiwan 所北市五股區新北產素園區五橋七路25號

頁數(Page): 13 of 15



西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD. []] (臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.) (耀鑽科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.) (慶邦電子元器件(泗洪)有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.) 桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN, R. O. C.)

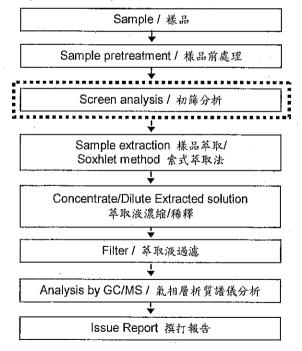
(江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA) (桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿遷市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE, SIHONG COUNTY, SUQIANCITY, JIANGSU PROVINCE, P, R, CHINA)

多溴聯苯/多溴聯苯醚分析流程圖 / Analytical flow chart - PBB/PBDE

■ 測試人員: 涂雅苓 / Technician: Yaling Tu

■ 測試負責人:張啟興 / Supervisor: Troy Chang

初次測試程序 / First testing process ______ 選擇性篩檢程序 / Optional screen process _____ 確認程序 / Confirmation process _____



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.sos.com/en/Terms-and-Conditions-and-Condit-and-Condit-and-Conditions-an

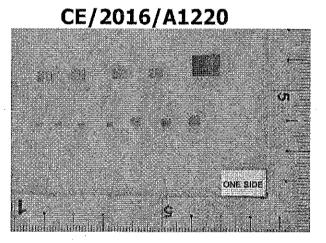
頁數(Page): 14 of 15



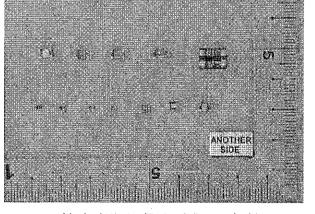
西北臺慶科技股份有限公司 / TAI-TECH ADVANCED ELECTRONICS CO., LTD. (臺慶精密電子(昆山)有限公司 / TAI-TECH ADVANCED ELECTRONICS (KUN-SHAN) CO. LTD.) (耀鑽科技股份有限公司 / YOSONIC TECHNOLOGY CO., LTD.) (慶邦電子元器件(泗洪)有限公司 / TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.) 桃園市楊梅區幼獅工業區幼四路1號 / NO. 1, YOU 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN, R. O. C.)

(江蘇省昆山市篷朗昆嘉高科技工業區郭澤路 / GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA) (桃園市中壢區中壢工業區長春六路15號 / NO. 15, CHANGCHUN 6TH RD., JHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN) (中國,江蘇省,宿遷市,泗洪縣,經濟開發區杭州路南側,建設北路東側 / THE SOUTH HANGZHOU ROAD AND THE EAST JIANSHE ROAD, ECONOMIC DEVELOPMENT ZONE, SIHONG COUNTY, SUQIANCITY, JIANGSU PROVINCE, P, R, CHINA)

> * 照片中如有箭頭標示,則表示為實際檢測之樣品/部位. * (The tested sample / part is marked by an arrow if it's shown on the photo.)







** 報告結尾 (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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Conditions.terms-an

SGS Taiwan Ltd、台灣接驗科技股份有限公司 25, Wu Chyuan 7th Road, New Taipei Industrial Park, Wu Ku District, New Taipei City, Taiwan /新北市山腔面新北產業園區五權七點25號 1+886 (02)2299 3939 1+886 (02)2299 3939 1+886 (02)2299 3237 www.sgs.tw

頁數(Page): 15 of 15