

High Current Ferrite Bead

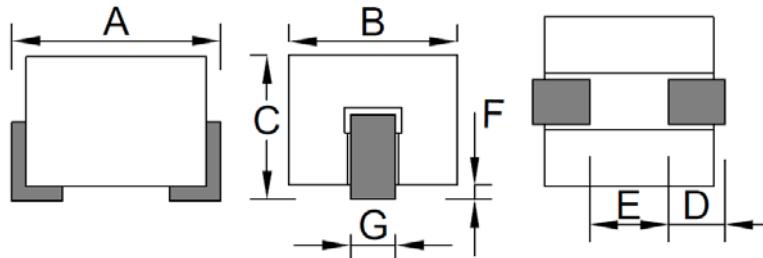
BPH323023W5-390T

1. Features

1. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
2. Operating temperature -40~+125°C (Including self - temperature rise)



2. Dimension



PRODUCT SIZE						
A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)
3.08 +0.10/-0.15	2.90±0.10	2.20±0.10	0.80±0.20	1.20 Min.	0.00~0.11	0.85±0.10

3. Part Numbering

BPH **323023** **W5** - **390** **T**

A B C D E

A: Series

B: Dimension

C: Material

Ferrite Core

D: Impedance

390=39Ω

E: Packaging

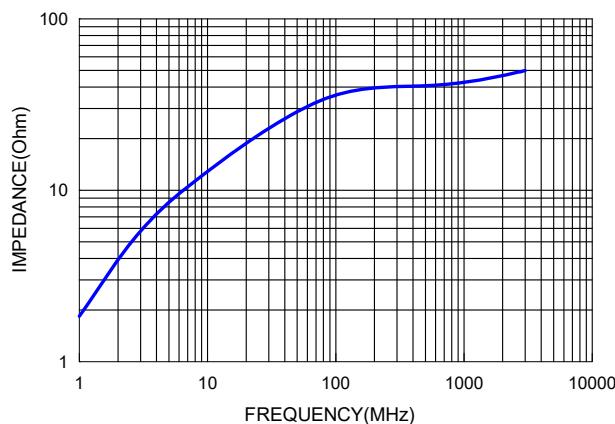
T=Taping and Reel

4. Specification

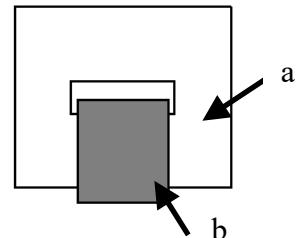
TAI-TECH Part Number	Inductance (μ H) [100KHz/1V]	ELECTRICAL REQUIREMENTS 1			ELECTRICAL REQUIREMENTS 2			DCR (mΩ) Max.	Rated Current(A)	
		Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)	Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)		$\Delta T=40^\circ C$ TYP.	$\Delta T=60^\circ C$ TYP.
BPH323023W5-390T	0.36±20%	20	±25	25	39	±25	100	0.60	21.0	26.0

Note:

Rated Current: Chroma high current test fixture.

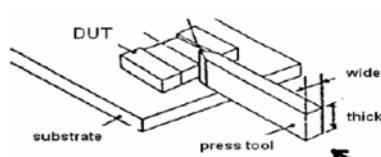
Typical Impedance v.s. Frequency Curve**5. Material List**

No.	Description	Specification
a.	Core	Ferrite Core
b.	Wire	Electroplated nickel-tin flat copper wire (0.8W X 0.25T)mm



6. Reliability and Test Condition

Item	Performance	Test Condition
Operating temperature	-40~+125°C (Including self - temperature rise)	
Storage temperature	-40~+125°C (on board)	
Electrical Performance Test		
Z(Impedance)	Refer to standard electrical characteristics list.	Agilent E4991A + Keysight 16092A
DCR		Agilent-34420A
Heat Rated Current (Irms)	Approximately $\Delta T \leq 40^\circ\text{C}$	<p>Heat Rated Current (Irms) will cause the coil temperature rise $\Delta T^\circ\text{C}$ without core loss.</p> <p>1. Applied the allowed DC current(keep 1 min.).</p> <p>2. Temperature measured by digital surface thermometer</p>
Reliability Test		
Life Test	<p>Appearance : No damage.</p> <p>Impedance : within$\pm 15\%$ of initial value</p> <p>Inductance : within$\pm 10\%$ of initial value</p> <p>RDC : within $\pm 15\%$ of initial value and shall not exceed the specification value</p>	<p>Preconditioning: Run through IR reflow for 3 times.(IPC/JEDEC J-STD-020E Classification Reflow Profiles)</p> <p>Temperature : $125 \pm 2^\circ\text{C}$ (Inductor)</p> <p>Applied current : rated current</p> <p>Duration : 1000 ± 12 hrs</p> <p>Measured at room temperature after placing for 24 ± 2 hrs</p>
Load Humidity		<p>Preconditioning: Run through IR reflow for 3 times.(IPC/JEDEC J-STD-020E Classification Reflow Profiles)</p> <p>Humidity : $85 \pm 2\%$ R.H,</p> <p>Temperature : $85^\circ\text{C} \pm 2^\circ\text{C}$</p> <p>Duration : 1000hrs Min. Bead : with 100% rated current , Inductance: with 10% rated current</p> <p>Measured at room temperature after placing for 24 ± 2 hrs</p>
Moisture Resistance		<p>Preconditioning: Run through IR reflow for 3 times.(IPC/JEDEC J-STD-020E Classification Reflow Profiles)</p> <p>1. Baked at 50°C for 25hrs, measured at room temperature after placing for 4 hrs.</p> <p>2. Raise temperature to $65 \pm 2^\circ\text{C}$ 90-100%RH in 2.5hrs, and keep 3 hours, cool down to 25°C in 2.5hrs.</p> <p>3. Raise temperature to $65 \pm 2^\circ\text{C}$ 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</p> <p>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.</p>
Thermal shock		<p>Preconditioning: Run through IR reflow for 3 times.(IPC/JEDEC J-STD-020E Classification Reflow Profiles)</p> <p>Condition for 1 cycle</p> <p>Step1 : $-40 \pm 2^\circ\text{C}$ 30 ± 5min</p> <p>Step2 : $125 \pm 2^\circ\text{C}$ ≤ 0.5min</p> <p>Step3 : $125 \pm 2^\circ\text{C}$ 30 ± 5min</p> <p>Number of cycles : 500</p> <p>Measured at room temperature after placing for 24 ± 2 hrs</p>
Vibration		<p>Oscillation Frequency: 10Hz~2KHz~10Hz for 20 minute</p> <p>Equipment : Vibration checker</p> <p>Total Amplitude:10g</p> <p>Testing Time : 12 hours(20 minutes, 12 cycles each of 3 orientations) \circ</p>

Item	Performance	Test Condition															
Bending	Appearance : No damage. Impedance : within $\pm 15\%$ of initial value Inductance : within $\pm 10\%$ of initial value RDC : within $\pm 15\%$ of initial value and shall not exceed the specification value	Shall be mounted on a FR4 substrate of the following dimensions: $>=0.0805$ inch(20.12mm):40x100x1.2mm <0.0805 inch(20.12mm):40x100x0.8mm Bending depth: $>=0.0805$ inch(20.12mm):1.2mm <0.0805 inch(20.12mm):0.8mm duration of 10 sec.															
Shock		<table border="1"> <thead> <tr> <th>Type</th><th>Peak value (g's)</th><th>Normal duration (D) (ms)</th><th>Wave form</th><th>Velocity change (Vi)ft/sec</th></tr> </thead> <tbody> <tr> <td>SMD</td><td>50</td><td>11</td><td>Half-sine</td><td>11.3</td></tr> <tr> <td>Lead</td><td>50</td><td>11</td><td>Half-sine</td><td>11.3</td></tr> </tbody> </table> <p>3 shocks in each direction along 3 perpendicular axes. (18 shocks).</p>	Type	Peak value (g's)	Normal duration (D) (ms)	Wave form	Velocity change (Vi)ft/sec	SMD	50	11	Half-sine	11.3	Lead	50	11	Half-sine	11.3
Type	Peak value (g's)	Normal duration (D) (ms)	Wave form	Velocity change (Vi)ft/sec													
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.	<p>a. Method B, 4 hrs @155°C dry heat @235°C$\pm 5\%$ Testing Time :5 +0/-0.5 seconds</p> <p>b. Method D category 3. (8hours \pm 15 min)@ 260°C$\pm 5\%$ Testing Time :30 +0/-0.5 seconds</p>															
Resistance to Soldering Heat		<p>Depth: completely cover the termination</p> <table border="1"> <thead> <tr> <th>Temperature(°C)</th><th>Time(s)</th><th>Temperature ramp/immersion and emersion rate</th><th>Number of heat cycles</th></tr> </thead> <tbody> <tr> <td>260 ± 5 (solder temp)</td><td>10 ± 1</td><td>25mm/s ± 6 mm/s</td><td>1</td></tr> </tbody> </table>	Temperature(°C)	Time(s)	Temperature ramp/immersion and emersion rate	Number of heat cycles	260 ± 5 (solder temp)	10 ± 1	25mm/s ± 6 mm/s	1							
Temperature(°C)	Time(s)	Temperature ramp/immersion and emersion rate	Number of heat cycles														
260 ± 5 (solder temp)	10 ± 1	25mm/s ± 6 mm/s	1														
Terminal Strength	Appearance : No damage. Impedance : within $\pm 15\%$ of initial value Inductance : within $\pm 10\%$ of initial value RDC : within $\pm 15\%$ of initial value and shall not exceed the specification value	<p>Preconditioning: Run through IR reflow for 3 times.(IPC/JEDEC J-STD-020E Classification Reflow Profiles With the component mounted on a PCB with the device to be tested, apply a force(>0.0805:1kg, $<=0.0805$: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.</p> 															

7. Soldering and Mounting

7-1. Soldering

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

7-1.1 IR Soldering Reflow:

Recommended temperature profiles for lead free re-flow soldering in Figure 1. Table 1.1&1.2 (J-STD-020E)

7-1.2 Solder Wave:

Wave soldering is perhaps the most rigorous of surface mount soldering processes due to the steep rise in temperature seen by the circuit when immersed in the molten solder wave. Due to the risk of thermal damage to products, wave soldering of large size products is discouraged. Recommended temperature profile for wave soldering is shown in Figure 3.

7-1.3 Soldering Iron:

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. (Figure 2.)

- Preheat circuit and products to 150°C
- 350°C tip temperature (max)
- Never contact the ceramic with the iron tip
- 1.0mm tip diameter (max)
- Use a 20 watt soldering iron with tip diameter of 1.0mm
- Limit soldering time to 4~5sec.

Fig.1 IR Soldering Reflow

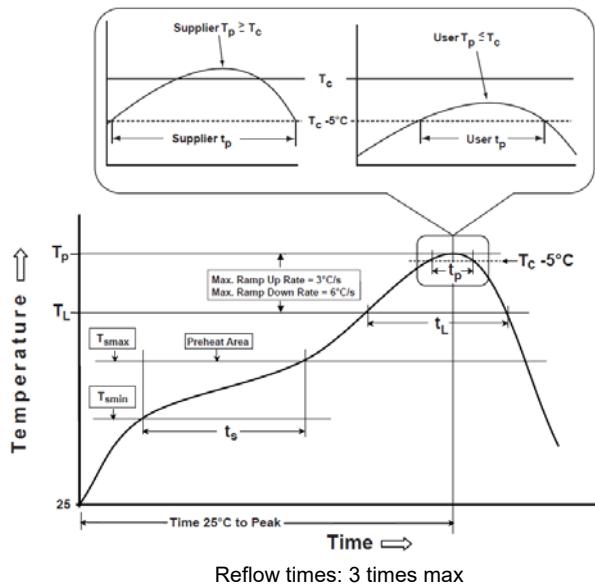


Fig.2 Iron soldering temperature profiles

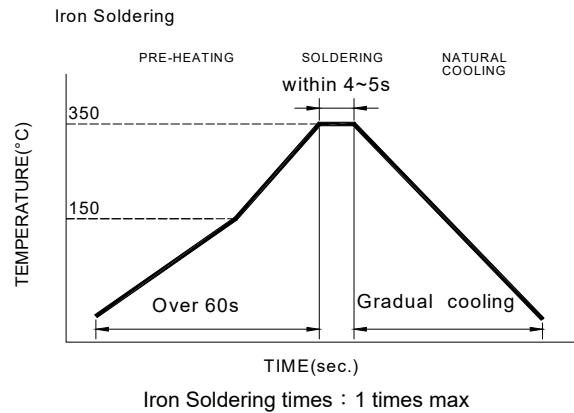


Fig.3 Wave Soldering

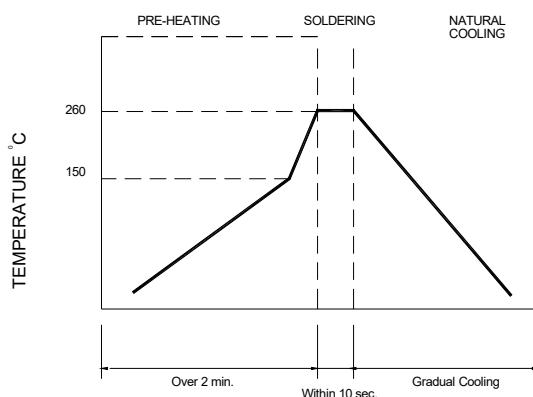


Table (1.1): Reflow Profiles

Profile Type:	Pb-Free Assembly
Preheat	
-Temperature Min(T_{smin})	150°C
-Temperature Max(T_{smax})	200°C
-Time(t_s)from(T_{smin} to T_{smax})	60-120seconds
Ramp-up rate(T_L to T_p)	3°C /second max.
Liquidus temperature(T_L)	217°C
Time(t_L)maintained above T_L	60-150 seconds
Classification temperature(T_c)	See Table (1.2)
Time(t_p) at $T_c - 5^\circ\text{C}$ (T_p should be equal to or less than T_c)	< 30 seconds
Ramp-down rate(T_p to T_f)	6°C /second max.
Time 25°C to peak temperature	8 minutes max.

T_p: maximum peak package body temperature, **T_c**: the classification temperature.

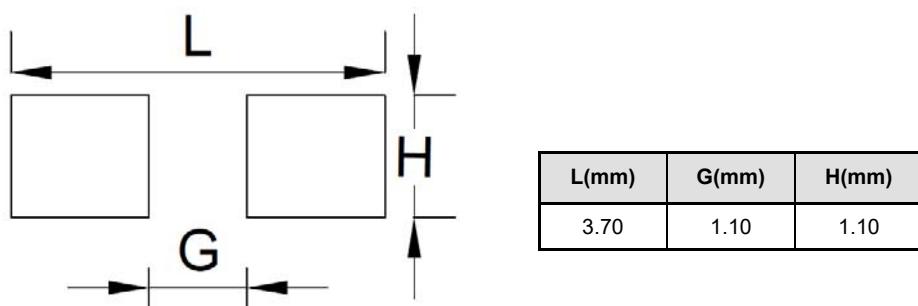
For user (customer) **T_p** should be equal to or less than **T_c**.

Table (1.2) Package Thickness/Volume and Classification Temperature (T_c)

	Package Thickness	Volume mm ³ <350	Volume mm ³ 350-2000	Volume mm ³ >2000
PB-Free Assembly	<1.6mm	260°C	260°C	260°C
	1.6-2.5mm	260°C	250°C	245°C
	≥2.5mm	250°C	245°C	245°C

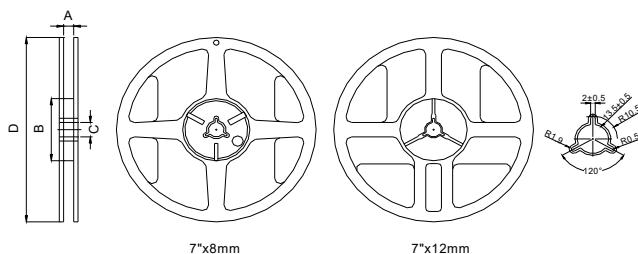
Reflow is referred to standard IPC/JEDEC J-STD-020E.

7-2. Recommended PC Board Pattern



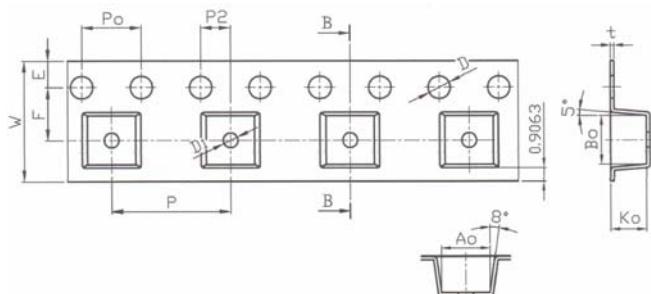
8. Packaging Information

8-1. Reel Dimension



Type	A(mm)	B(mm)	C(mm)	D(mm)
7" x 12mm	13.5±0.5	60.0±2.0	13.5±0.5	178.0±2.0

8-2. Tape Dimension / 8mm

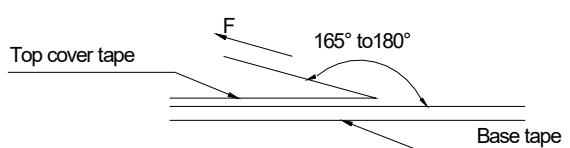


Series	Size	W(mm)	P(mm)	E(mm)	F(mm)	P2(mm)	D(mm)	D1(mm)	Po(mm)	Ao(mm)	Bo(mm)	Ko(mm)	t(mm)	10Po(mm)
BPH	323023	12.00±0.1	8.00±0.1	1.75±0.1	5.50±0.05	2.00±0.05	1.5+0.1/-0	1.5±0.10	4.00±0.1	3.5±0.1	3.35±0.1	2.40±0.1	0.30±0.05	40.0±0.20

8-3. Packaging Quantity

Chip size	Chip / Reel	Inner box	Middle box	Carton
323023	1000	4000	20000	40000

8-4. 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. (°C)	Room Humidity (%)	Room atm (hPa)	Tearing Speed 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-020E standard-MSL, level 1.
 - 2. Temperature and humidity conditions: Less than 40°C and 60% RH.
 - 3. Recommended products should be used within 12 months from 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.



測試報告

Test Report

號碼(No.): ETR21303719 日期(Date): 19-Mar-2021

頁數(Page): 1 of 13

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.)

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, YOUNG-LI INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN R. O. C.)

江蘇省昆山市簷朗昆嘉高科技工業區郭澤路 (GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANGSU, CHINA)

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, SUQUANCITY, JIANGSU PROVINCE, P.R. CHINA)

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

樣品名稱(Sample Name) : WIREWOUND SERIES

樣品型號(Style/Item No.) : WCM(YCW)、WCL、HSF、HDMI、DVI、BCM、PCM、TCM、LCM、LPF、TXF、ACM、DCM(YLW)、WIH、BPH、TNH、YCM、STF、APO、QLL、FGO SERIES

=====
收件日(Sample Receiving Date) : 12-Mar-2021

測試期間(Testing Period) : 12-Mar-2021 to 19-Mar-2021

測試需求(Test Requested) : 依據客戶要求進行測試，測試項目請參閱測試結果表格。 (Testing item(s) is/are specified by client. Please refer to result table for testing item(s).)

測試結果(Test Results) : 請參閱下頁 (Please refer to following pages.)

Troy Chang / Manager - Tel: SGS TAIWAN LTD.
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory - Taipei



PIN CODE: 9054E7A2

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測試部位敘述 (Test Part Description)

No.1 : 整體混測 (MIXED ALL PARTS)

測試結果 (Test Results)

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)
			No.1	
鎘 (Cd) (Cadmium (Cd)) (CAS No.: 7440-43-9)	參考IEC 62321-5: 2013 · 以感應耦合電漿發射光譜儀分析。(With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.
鉛 (Pb) (Lead (Pb)) (CAS No.: 7439-92-1)	mg/kg	2	n.d.	
汞 (Hg) (Mercury (Hg)) (CAS No.: 7439-97-6)	參考IEC 62321-4: 2013+ AMD1: 2017 · 以感應耦合電漿發射光譜儀分析。(With reference to IEC 62321-4: 2013+ AMD1: 2017, analysis was performed by ICP-OES.)	mg/kg	2-	n.d.
六價鉻 Cr(VI) (Hexavalent Chromium Cr(VI)) (CAS No.: 18540-29-9)	參考IEC 62321-7-2: 2017 · 以紫外光-可見光分光光度計分析。(With reference to IEC 62321-7-2: 2017, analysis was performed by UV-VIS.)	mg/kg	8	n.d.
一溴聯苯 (Monobromobiphenyl)	參考IEC 62321-6: 2015 · 以氣相層析儀/質譜儀分析。(With reference to IEC 62321-6: 2015, analysis was performed by GC/MS.)	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	5	n.d.
十溴聯苯 (Decabromobiphenyl)		mg/kg	5	n.d.
多溴聯苯總和 (Sum of PBBs)		mg/kg	-	n.d.

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測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result) No.1
			mg/kg	
一溴聯苯醚 (Monobromodiphenyl ether)		mg/kg	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)	參考IEC 62321-6: 2015 · 以氣相層析儀/質譜儀分析。(With reference to IEC 62321-6: 2015, analysis was performed by GC/MS.)	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.
多溴聯苯醚總和 (Sum of PBDEs)		mg/kg	-	n.d.
六溴環十二烷及所有主要被辨別出的異構物(HBCDD) (α - HBCDD, β - HBCDD, γ - HBCDD) (Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α - HBCDD, β - HBCDD, γ - HBCDD)) (CAS No.: 25637-99-4, 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	參考IEC 62321: 2008 · 以氣相層析儀/質譜儀分析。(With reference to IEC 62321: 2008, analysis was performed by GC/MS.)	mg/kg	5	n.d.
氟 (F) (Fluorine (F)) (CAS No.: 14762-94-8)	參考BS EN 14582: 2016 · 以離子層析儀分析。(With reference to BS EN 14582: 2016, analysis was performed by IC.)	mg/kg	50	n.d.
氯 (Cl) (Chlorine (Cl)) (CAS No.: 22537-15-1)		mg/kg	50	n.d.
溴 (Br) (Bromine (Br)) (CAS No.: 10097-32-2)		mg/kg	50	n.d.
碘 (I) (Iodine (I)) (CAS No.: 14362-44-8)		mg/kg	50	n.d.

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測試報告

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測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)
				No.1
鄰苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl phthalate (BBP)) (CAS No.: 85-68-7)	參考IEC 62321-8: 2017 · 以氣相層析儀/質譜儀分析。(With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.
鄰苯二甲酸二丁酯 (DBP) (Dibutyl phthalate (DBP)) (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 (DEHP)) (CAS No.: 117-81-7)		mg/kg	50	n.d.
鄰苯二甲酸二異丁酯 (DIBP) (Diisobutyl phthalate (DIBP)) (CAS No.: 84-69-5)		mg/kg	50	n.d.
鄰苯二甲酸二異癸酯 (DIDP) (Diisodecyl phthalate (DIDP)) (CAS No.: 26761-40-0, 68515-49-1)		mg/kg	50	n.d.
鄰苯二甲酸二異壬酯 (DINP) (Diisononyl phthalate (DINP)) (CAS No.: 28553-12-0, 68515-48-0)		mg/kg	50	n.d.
鄰苯二甲酸二正辛酯 (DNOP) (Di-n-octyl phthalate (DNOP)) (CAS No.: 117-84-0)		mg/kg	50	n.d.
鄰苯二甲酸二正戊酯 (DNPP) (Di-n-pentyl phthalate (DNPP)) (CAS No.: 131-18-0)		mg/kg	50	n.d.
鄰苯二甲酸二正己酯 (DNHP) (Di-n-hexyl phthalate (DNHP)) (CAS No.: 84-75-3)		mg/kg	50	n.d.

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測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result) No.1
聚氯乙烯 (Polyvinyl chloride) (PVC)	參考ASTM E1252: 2013，以傅立葉轉換紅外線光譜儀及焰色法分析。(With reference to ASTM E1252: 2013, analysis was performed by FT-IR and Flame Test.)	**	-	Negative
鍍 (Be) (Beryllium (Be)) (CAS No.: 7440-41-7)	參考US EPA 3052: 1996，以感應耦合電漿發射光譜儀分析。(With reference to US EPA 3052: 1996, analysis was performed by ICP-OES.)	mg/kg	2	n.d.
銻 (Sb) (Antimony (Sb)) (CAS No.: 7440-36-0)	參考US EPA 3052: 1996，以感應耦合電漿發射光譜儀分析。(With reference to US EPA 3052: 1996, analysis was performed by ICP-OES.)	mg/kg	2	n.d.

備註(Note) :

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. MDL = Method Detection Limit (方法偵測極限值)
3. n.d. = Not Detected (未檢出) ; 小於MDL / Less than MDL
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 sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value.

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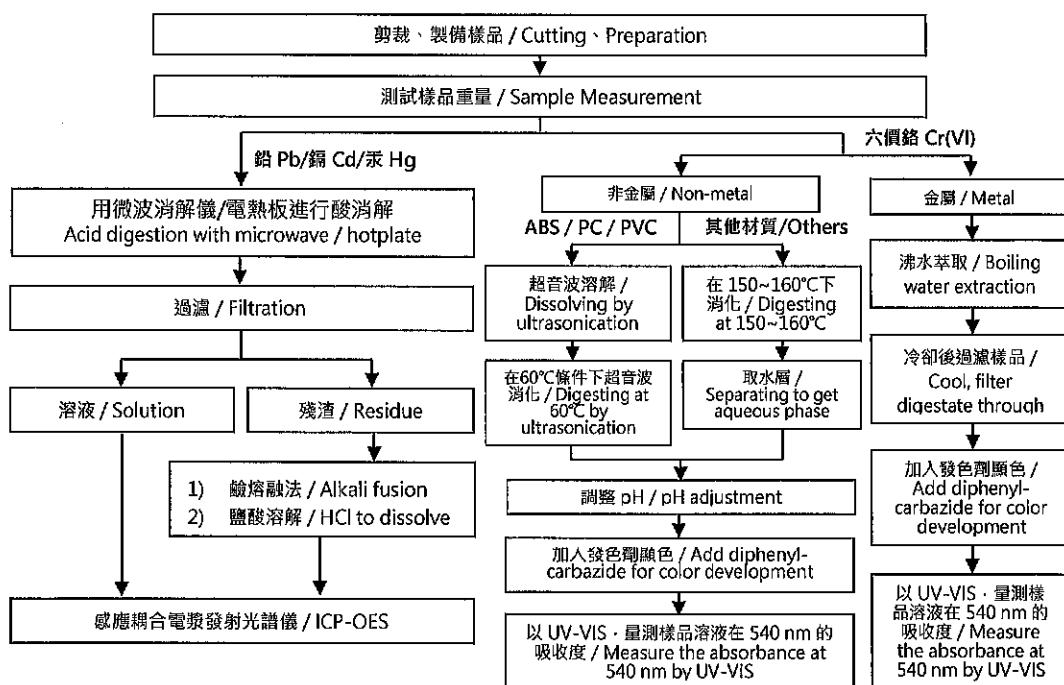
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重金屬流程圖 / Analytical flow chart of Heavy Metal

根據以下的流程圖之條件，樣品已完全溶解。(六價鉻測試方法除外)

These samples were dissolved totally by pre-conditioning method according to below flow chart.

(Cr⁶⁺ test method excluded)

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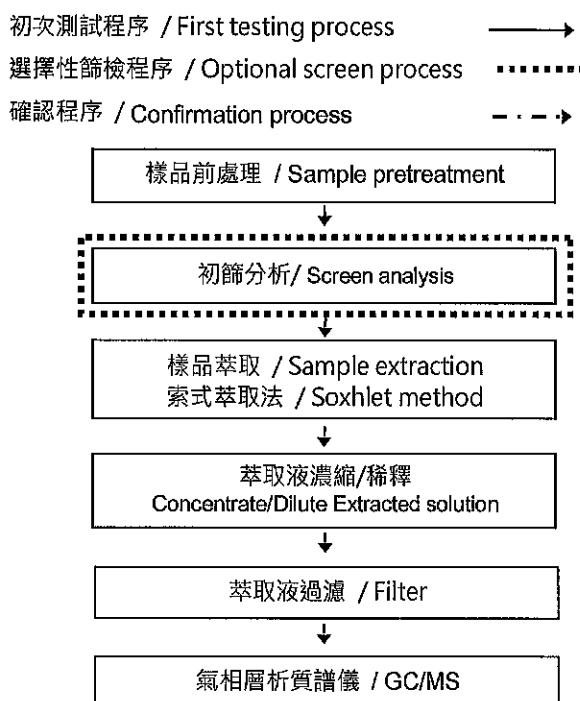
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多溴聯苯/多溴聯苯醚分析流程圖 / Analytical flow chart - PBBs/PBDEs



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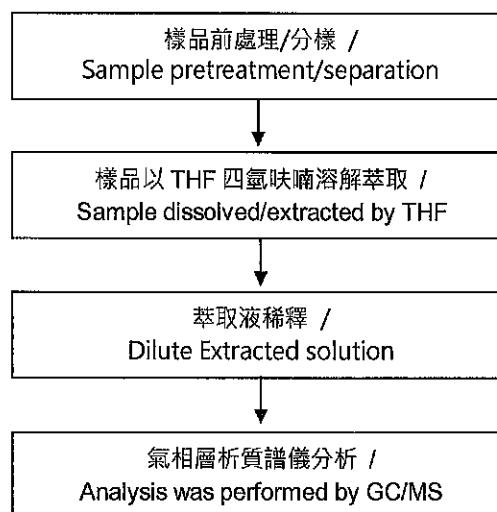
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可塑劑分析流程圖 / Analytical flow chart- Phthalate

【測試方法/Test method: IEC 62321-8】



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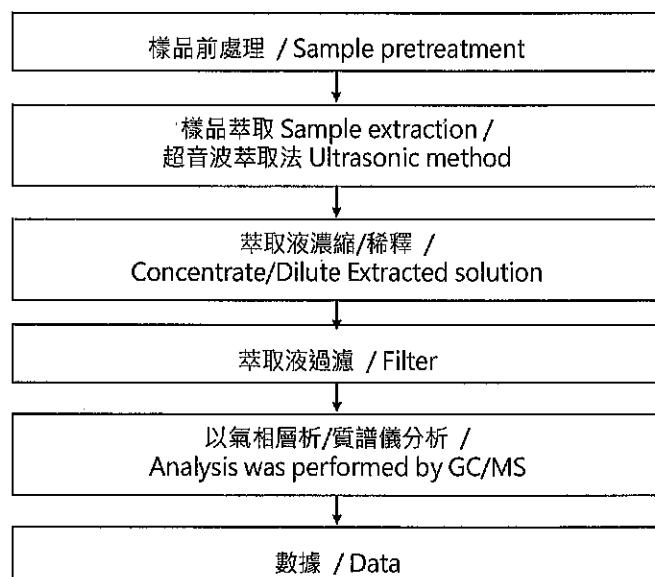
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六溴環十二烷分析流程圖 / Analytical flow chart - HBCDD



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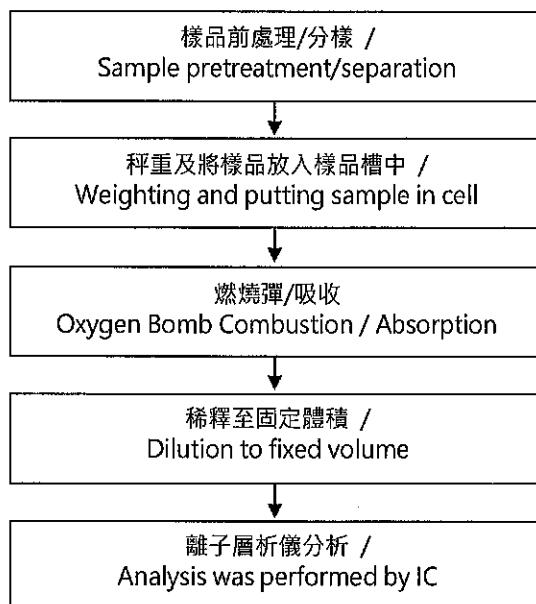
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鹵素分析流程圖 / Analytical flow chart - Halogen



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測試報告

Test Report

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

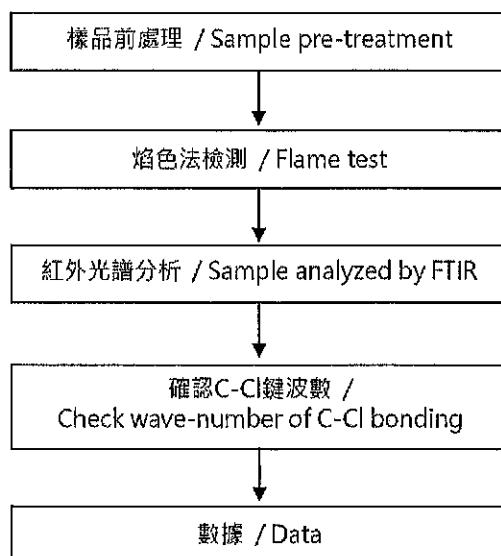
慶邦電子元器件(泗洪)有限公司 (TAIPAQ ELECTRONICS (SI-HONG) CO., LTD.)

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



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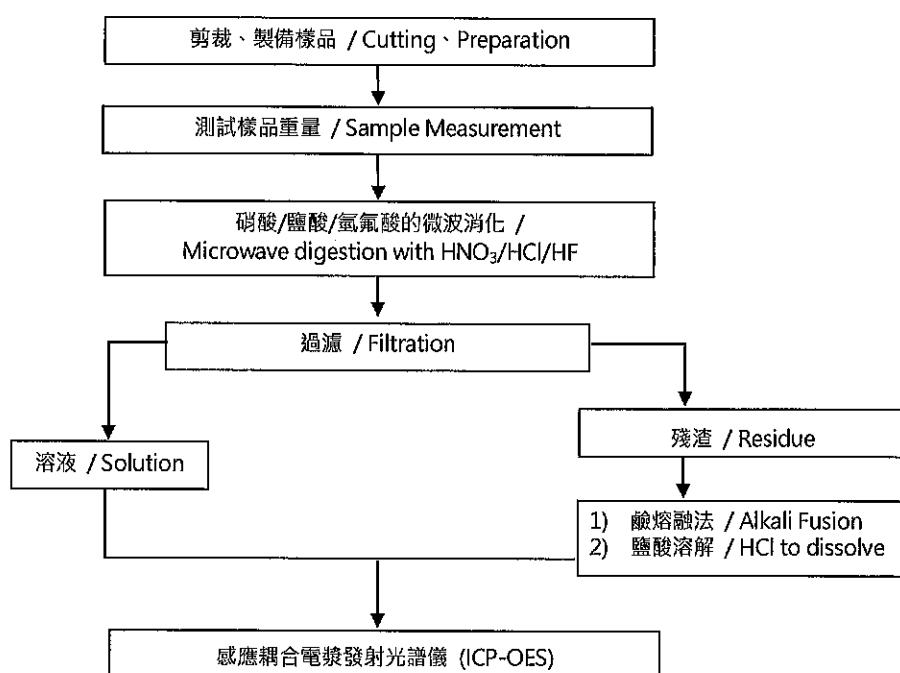
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重金屬流程圖 / Analytical flow chart of Heavy Metal

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.

【參考方法/Reference method : US EPA 3051A、US EPA 3052】



* US EPA 3051A 方法未添加氫氟酸 / US EPA 3051A method does not add HF.

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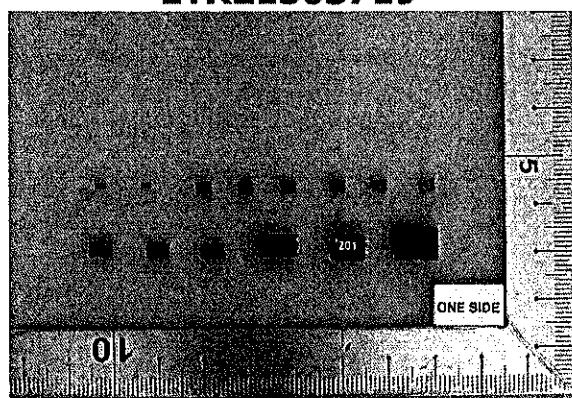
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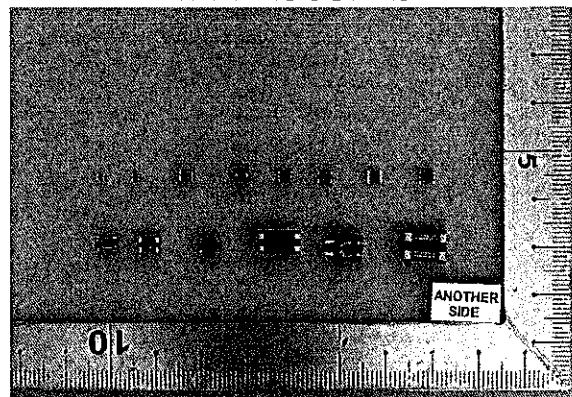
* 照片中如有箭頭標示，則表示為實際檢測之樣品/部位。*

(The tested sample / part is marked by an arrow if it's shown on the photo.)

ETR21303719



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** 報告結尾 (End of Report) **

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