

Specification for Approval

Date: [2026/01/26](#)

Customer: [鼎郵](#)

TAI-TECH P/N: [SWI0805UV-R68J-DC](#)

CUSTOMER P/N:

DESCRIPTION:

QUANTITY: [pcs](#)

REMARK:

Customer Approval Feedback

西北臺慶科技股份有限公司
TAI-TECH ADVANCED ELECTRONICS CO., LTD
Headquarter:
NO.1 YOUNG 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI,
TAO-YUAN HSIEH, TAIWAN, R.O.C.
TEL: +886-3-4641148 FAX: +886-3-4643565
<http://www.tai-tech.com.tw>
E-mail: sales@tai-tech.com.tw

Sales Dep.

APPROVED	CHECKED
黃農樺 Eddy Huang	黃農樺 Eddy Huang

臺慶精密電子(昆山)有限公司
TAI-TECH ADVANCED ELECTRONICS (KUNSHAN) CO., LTD
SHINWHA ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN,
JIANG-SU, CHINA

TEL: +86-512-57619396 FAX: +86-512-57619688

E-mail: sales@tai-tech.cn

慶邦電子元器件(泗洪)有限公司
TAIPAQ ELECTRONICS (SIHONG) CO., LTD
Sihong development zone Suqian City, Jiangsu, CHINA.
TEL: +86-527-88601191 FAX: +86-527-88601190
E-mail: sales@taipaq.cn

R&D Center

APPROVED	CHECKED	DRAWN
鍾百烜 James Chung	徐鋒強 Gemini Hsu	林靜婷 Michelle Lim

慶普科技(馬)有限公司
TECHWORLD ELECTRONICS (M) SDN. BHD
NO.8, JALAN DEWANI 1, KAWASAN PERINDUSTRIAN DEWANI, 81100
JOHOR BAHRU, JOHOR, MALAYSIA
TEL: +607-3350052 / +607-3384088
E-mail: sales@techworld.com.my

High Frequency Winding Type Chip Inductor SWI0805UV-R68J-DC

ECN HISTORY LIST

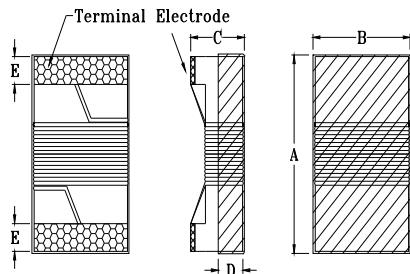
High Frequency Winding Type Chip Inductor SWI0805UV-R68J-DC

1. Features

1. Ceramic core wire wound construction.
2. No batch to batch variations in inductance.
3. High Reliability due to ceramic wire wound construction.
4. High frequency application.
5. Small footprint as well as low profile.
6. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
7. High reliability -Reliability tests comply with AEC-Q200.
8. Operating temperature-55~+125°C (Including self - temperature rise).



2. Dimensions



Size	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
SWI0805	2.29 max.	1.73 max.	1.52 max.	0.51 ref.	0.44±0.10

Unit: mm

3. Part Numbering

SWI **0805** **U** **V** - **R68** **J** - **DC**
 A B C D E F G

A: Series
 B: Dimension LxW
 C: Material
 D: Category Code V=Vehicle
 E: Inductance R68=680nH
 F: Inductance Tolerance J=±5%
 G: Control S/N

4. Specification

Part Number	Inductance (nH)	Tolerance	Test Frequency (Hz)	Q @ Test Freq. min.	Rated Current (mA) max.	DCR (Ω) max.	SRF (MHz) min.
SWI0805UV-R68J-DC	680	J	0.1V/25M	23/50	190	2.20	188

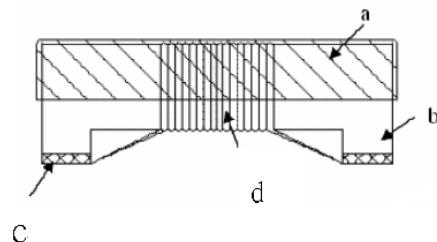
Note:

- All test data referenced to 25°C ambient.
- DC current at 25°C that causes the specified inductance drop from its value without current.
- Current that causes the specified temperature rise from 25°C ambient.

This information is for reference only and does not represent absolute maximum ratings.

5. Materials

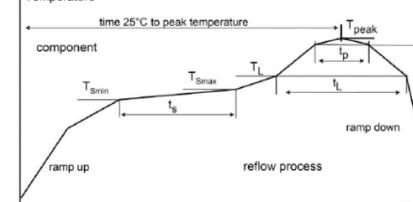
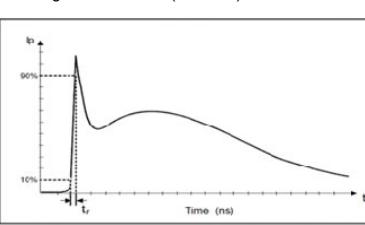
No.	Description	Specification
a.	Upper Plate	UV Glue
b.	Core	Ceramics Core
c	Termination	Ag/Ni/Sn
d	Wire	Enameled Copper Wire

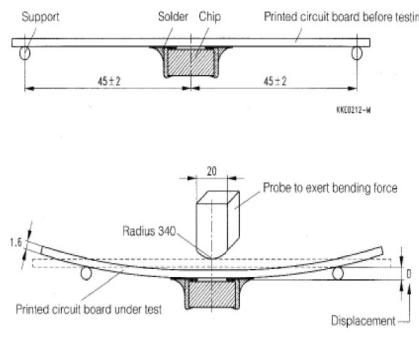
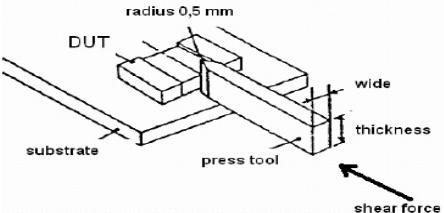


6. Reliability and Test Condition

Item	Performance	Test Condition
Operating temperature	-55~+125°C (Including self - temperature rise)	
Storage temperature	-55~+125°C (on board)	
Electrical Performance Test		
Inductance		Keysight E4991B, Keysight 4980AL
Q		Agilent-4287, Agilent-4285
SRF	Refer to standard electrical characteristic list	Keysight E4991B
DCR		Agilent-34420A Agilent-4338B

Reliability Test																													
High Temperature Exposure(Storage) AEC-Q200	<p>Preconditioning: Run through reflow for 3 times. (IPC/JEDECJ-STD-020F Classification Reflow Profiles)</p> <p>Unpowered</p> <p>Temperature : $125\pm2^\circ\text{C}$</p> <p>Upper Temperature: maximum specified operating temperature or maximum specified storage temperature (whichever is higher).</p> <p>Minimum test temperature shall be 85°C</p> <p>(For ferrite EMI suppressors/filters only)</p> <p>Duration : 1000hrs Min.</p> <p>Measured at room temperature after placing for 24 ± 4 hrs.</p>																												
Temperature Cycling AEC-Q200	<p>Appearance : No damage.</p> <p>Inductance : within$\pm10\%$ of initial value</p> <p>Q : Shall not exceed the specification value.</p> <p>DCR : within$\pm15\%$ of initial value and shall not exceed the specification value</p> <p>Preconditioning: Run through reflow for 3 times. (IPC/JEDECJ-STD-020F Classification Reflow Profiles)</p> <p>Unpowered</p> <p>Lower Temperature of the Chamber: -40°C (For Inductors/Transformers) -55°C (For ferrite EMI suppressors/filters)</p> <p>Upper Temperature of the Chamber: maximum specified operating temperature and shall not exceed 125°C</p> <p>Condition for 1 cycle</p> <p>Step1 : $-40\pm2^\circ\text{C}$ 30min Min.</p> <p>Step2 : $125\pm2^\circ\text{C}$ transition time 1min MAX.</p> <p>Step3 : $125\pm2^\circ\text{C}$ 30min Min.</p> <p>Step4 : Dwell Time (Soak Time) 15 minutes minimum, 30 minutes minimum if component weighs above 28g</p> <p>Transition Time: 1 minute maximum</p> <p>Number of cycles : 1000</p> <p>Measured at room temperature at least 24 hours after test conclusion.</p>																												
Humidity Bias (AEC-Q200)	<p>Preconditioning: Run through reflow for 3 times. (IPC/JEDEC J-STD-020F Classification Reflow Profiles)</p> <p>Unpowered(For Inductors/Transformers)</p> <p>Apply 10% of maximum rated power.</p> <p>(For ferrite EMI suppressors/filters)</p> <p>Humidity : $85\pm3\%$ R.H,</p> <p>Temperature : $85^\circ\text{C}\pm2^\circ\text{C}$</p> <p>Duration: 1000hrs Min.</p> <p>Measured at room temperature after placing for 24 ± 4 hrs.</p>																												
High Temperature Operating Life (AEC-Q200)	<p>Preconditioning: Run through reflow for 3 times. (IPC/JEDECJ-STD-020F Classification Reflow Profiles)</p> <p>Temperature : $125\pm2^\circ\text{C}$</p> <p>Upper Temperature of the Chamber: maximum specified operating temperature (not including heat rise) at maximum rated power and shall not exceed 125°C.(For Inductors/Transformers)</p> <p>Temperature of the Chamber: maximum specified operating temperature up to 150°C (For ferrite EMI suppressors/filters)</p> <p>Duration : 1000hrs Min. with 100% rated current.</p> <p>Measured at room temperature after placing for 24 ± 4 hrs.</p> <p>Rated IL applied.(For ferrite EMI suppressors/filters)</p>																												
External Visual	<p>Appearance : No damage.</p> <p>Inspect device construction, marking and workmanship. Pre and Post Electrical Test not required.</p>																												
Physical Dimension	<p>According to the product specification size measurement</p> <p>Verify physical dimensions to the applicable component detail specification. Pre and Post Electrical Test not required.</p>																												
Terminal Strength (for axial and radial THT components)	<p>Test THT component lead integrity only.</p> <p>Test Condition A (pull test)</p> <table border="1"> <thead> <tr> <th>Nominal cross- sectional area (mm^2)</th><th>Force (N)</th></tr> </thead> <tbody> <tr> <td>≤ 0.05</td><td>1</td></tr> <tr> <td>0.06 to 0.10</td><td>2.5</td></tr> <tr> <td>0.11 to 0.20</td><td>5</td></tr> <tr> <td>0.21 to 0.50</td><td>10</td></tr> <tr> <td>0.51 to 1.20</td><td>20</td></tr> <tr> <td>> 1.20</td><td>40</td></tr> </tbody> </table> <p>Test Condition C (wire-lead bend test):</p> <table border="1"> <thead> <tr> <th>Section Modulus (Z_x) (mm^3)</th><th>Force (N)</th></tr> </thead> <tbody> <tr> <td>$\leq 1.5 \times 10^{-3}$</td><td>0.5</td></tr> <tr> <td>1.6×10^{-3} to 4.2×10^{-3}</td><td>1.25</td></tr> <tr> <td>4.3×10^{-3} to 1.2×10^{-2}</td><td>2.5</td></tr> <tr> <td>1.3×10^{-2} to 0.5×10^{-1}</td><td>5</td></tr> <tr> <td>0.6×10^{-1} to 1.9×10^{-1}</td><td>10</td></tr> <tr> <td>$> 1.9 \times 10^{-1}$</td><td>20</td></tr> </tbody> </table> <p>For round terminations: $ZX = (\pi d^3)/32$ where d is the lead diameter.</p> <p>For strip terminations: $ZX = (ba^2)/6$ where a is the thickness of the rectangular strip perpendicular to the bending axis, b is the other dimension of the rectangular strip.</p>	Nominal cross- sectional area (mm^2)	Force (N)	≤ 0.05	1	0.06 to 0.10	2.5	0.11 to 0.20	5	0.21 to 0.50	10	0.51 to 1.20	20	> 1.20	40	Section Modulus (Z_x) (mm^3)	Force (N)	$\leq 1.5 \times 10^{-3}$	0.5	1.6×10^{-3} to 4.2×10^{-3}	1.25	4.3×10^{-3} to 1.2×10^{-2}	2.5	1.3×10^{-2} to 0.5×10^{-1}	5	0.6×10^{-1} to 1.9×10^{-1}	10	$> 1.9 \times 10^{-1}$	20
Nominal cross- sectional area (mm^2)	Force (N)																												
≤ 0.05	1																												
0.06 to 0.10	2.5																												
0.11 to 0.20	5																												
0.21 to 0.50	10																												
0.51 to 1.20	20																												
> 1.20	40																												
Section Modulus (Z_x) (mm^3)	Force (N)																												
$\leq 1.5 \times 10^{-3}$	0.5																												
1.6×10^{-3} to 4.2×10^{-3}	1.25																												
4.3×10^{-3} to 1.2×10^{-2}	2.5																												
1.3×10^{-2} to 0.5×10^{-1}	5																												
0.6×10^{-1} to 1.9×10^{-1}	10																												
$> 1.9 \times 10^{-1}$	20																												

Item	Performance	Test Condition																		
Resistance to Solvents		Add an Aqueous wash chemical and follow chemical manufacturer's recommended parameters (i.e. solution temperature and immersion time). Applicable to ink marked components and not laser marked components																		
Mechanical 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>100</td><td>6</td><td>Half-sine</td><td>12.3</td></tr> <tr> <td>THT</td><td>100</td><td>6</td><td>Half-sine</td><td>12.3</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	100	6	Half-sine	12.3	THT	100	6	Half-sine	12.3			
Type	Peak value (g's)	Normal duration (D) (ms)	Wave form	Velocity change (Vi)ft/sec																
SMD	100	6	Half-sine	12.3																
THT	100	6	Half-sine	12.3																
Vibration	<p>Appearance : No damage. Inductance : within$\pm 10\%$ of initial value Q : Shall not exceed the specification value. DCR : within$\pm 15\%$ of initial value and shall not exceed the specification value</p>	<p>Preconditioning: Run through reflow for 3 times. (IPC/JEDEC J-STD-020F Classification Reflow Profiles) Oscillation Frequency : 10Hz~2kHz~10Hz for 20 minutes Equipment : Vibration checker Total Amplitude : 5g Testing Time : 12 hours(20 minutes, 12 cycles each of 3 orientations)</p> <p>Test condition : THT: Conditions B or C</p> <table border="1"> <thead> <tr> <th>Solder technique simulation</th><th>Test condition</th><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>Dip</td><td>B</td><td>260 ± 5 (solder temp)</td><td>10± 1</td><td>25mm/s ± 6mm/s</td><td>1</td></tr> <tr> <td>Wave: Topside board-mount product</td><td>C</td><td>260 ± 5 (solder temp)</td><td>20± 1</td><td></td><td>1</td></tr> </tbody> </table> <p>Depth: completely cover the termination</p> <p>SMD: Condition K, time above 217°C, 60s-150s · Number of heat cycles:3</p> <p>Continental</p>  <p>Table 1: Minimum requirements for lead-free soldering</p> <p>*peak temperature is measured on the centre top of the component package</p> <p>**tp measured @ Tpeak-5°C</p>	Solder technique simulation	Test condition	Temperature (°C)	Time(s)	Temperature ramp/immersion and emersion rate	Number of heat cycles	Dip	B	260 ± 5 (solder temp)	10 ± 1	25mm/s ± 6 mm/s	1	Wave: Topside board-mount product	C	260 ± 5 (solder temp)	20 ± 1		1
Solder technique simulation	Test condition	Temperature (°C)	Time(s)	Temperature ramp/immersion and emersion rate	Number of heat cycles															
Dip	B	260 ± 5 (solder temp)	10 ± 1	25mm/s ± 6 mm/s	1															
Wave: Topside board-mount product	C	260 ± 5 (solder temp)	20 ± 1		1															
Resistance to Soldering Heat		 <p>Table 1: Minimum requirements for lead-free soldering</p> <p>*peak temperature is measured on the centre top of the component package</p> <p>**tp measured @ Tpeak-5°C</p>																		
ESD		<p>Direct Contact and Air Discharge PASSIVE COMPONENT HBM ESD</p> <p>Discharge Waveform to a Coaxial Target</p> <p>Test method: AEC-Q200-002</p> <p>Test mode : Contact Discharge</p> <p>Discharge level : 4 KV (Level: 2)</p> 																		

Item	Performance	Test Condition																																			
Solderability	More than 95% of the terminal electrode should be covered with solder	Through-hole Technology (THT: Method A1, Coating Durability Category 2) • SMD: - Method B1, Coating Durability Category 2 - Method D, Coating Durability Category 2 - Magnification 50x - Pre and Post Electrical Test not required. - Non-soldered type mounting/attach are not applicable.																																			
		<table border="1"> <thead> <tr> <th>参照</th><th>Method A1</th><th>Method B1</th><th>Method D</th></tr> </thead> <tbody> <tr> <td>焊接工藝</td><td>再流焊</td><td>其他器件的再流焊</td><td>無鉛焊接</td></tr> <tr> <td>焊接類型</td><td>錫銀銅焊料</td><td>錫銀銅焊料</td><td>錫銀銅焊料</td></tr> <tr> <td>浸入助焊劑時</td><td>5-10s</td><td>5-10s</td><td>5-10s</td></tr> <tr> <td>浸入錫爐角度</td><td>20° ~45°</td><td>20° ~45°</td><td>20° ~45°</td></tr> <tr> <td>焊料溫度</td><td>245±5°C</td><td>245±5°C</td><td>260±5°C</td></tr> <tr> <td>浸入焊料時間</td><td>5+0/-0.5s</td><td>5+0/-0.5s</td><td>30+5/-0s</td></tr> <tr> <td>浸入和提出速</td><td>25±6mm/s</td><td>25±6mm/s</td><td>25±6mm/s</td></tr> </tbody> </table>				参照	Method A1	Method B1	Method D	焊接工藝	再流焊	其他器件的再流焊	無鉛焊接	焊接類型	錫銀銅焊料	錫銀銅焊料	錫銀銅焊料	浸入助焊劑時	5-10s	5-10s	5-10s	浸入錫爐角度	20° ~45°	20° ~45°	20° ~45°	焊料溫度	245±5°C	245±5°C	260±5°C	浸入焊料時間	5+0/-0.5s	5+0/-0.5s	30+5/-0s	浸入和提出速	25±6mm/s	25±6mm/s	25±6mm/s
参照	Method A1	Method B1	Method D																																		
焊接工藝	再流焊	其他器件的再流焊	無鉛焊接																																		
焊接類型	錫銀銅焊料	錫銀銅焊料	錫銀銅焊料																																		
浸入助焊劑時	5-10s	5-10s	5-10s																																		
浸入錫爐角度	20° ~45°	20° ~45°	20° ~45°																																		
焊料溫度	245±5°C	245±5°C	260±5°C																																		
浸入焊料時間	5+0/-0.5s	5+0/-0.5s	30+5/-0s																																		
浸入和提出速	25±6mm/s	25±6mm/s	25±6mm/s																																		
Electrical Characterization	Refer Specification for Approval	Parametrically test per lot and sample size requirements, summary to show Min, Max, Mean and Standard deviation at room as well as Min and Max operating temperatures. Pre and Post Electrical Test not required																																			
Flammability	In accordance with Referenced Standards	UL-94 or IEC 60695-11-5																																			
Board Flex (SMD)	Appearance : No damage. Inductance : within ±10% of initial value Q : Shall not exceed the specification value. DCR : within ±15% of initial value and shall not exceed the specification value	Preconditioning: Run through reflow for 3 times. (IPC/JEDEC J-STD-020F Classification Reflow Profiles) Place the 100mm X 40mm board into a fixture similar to the one shown in below Figure with the component facing down. The apparatus shall consist of mechanical means to apply a force which will bend the board (D) x = 2 mm minimum. The duration of the applied forces shall be 60 (+ 5) sec. The force is to be applied only once to the board.																																			
Terminal Strength(SMD)		 Preconditioning: Run through reflow for 3 times. (IPC/JEDEC J-STD-020F Classification Reflow Profiles) With the component mounted on a PCB with the device to be tested, apply a 17.7 N (1.8 Kg) force 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.																																			
																																					

Note:

The main function of UV coating is for the pick and place of SMT machine.

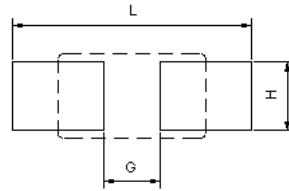
For UV coating on the top side. In rare cases, some very small cracks may appear on the coating surface after being exposed after many times of IR reflow, long times of high and low temperature, high humidity and temperature cycles.

Small cracks on UV coating will not affect functions of this product.

7. Soldering and Mounting

7-1. Recommended PC Board Pattern

Chip size							Land Patterns For Reflow Soldering		
Series	Type	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	L(mm)	G(mm)	H(mm)
SWI	0805	2.29max	1.73max	1.52max	0.51 ref	0.44±0.1	2.80	1.25	1.78



7-2. 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.

7-2-1 Soldering Reflow:

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

7-2-2 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 Soldering Reflow

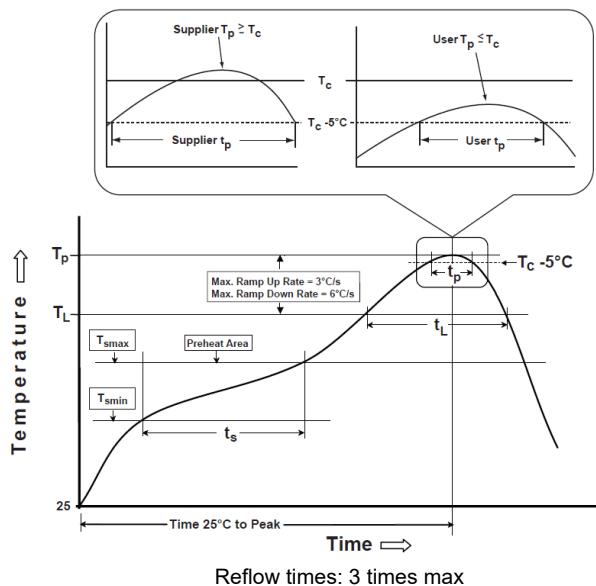


Fig.2 Iron soldering temperature profiles

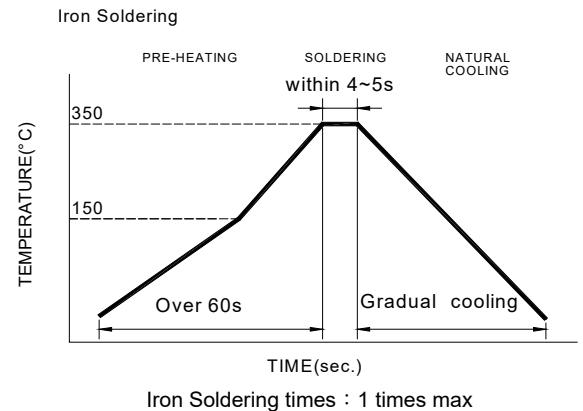


Table (1.1): Reflow Profiles

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 $T_c - 5^\circ C$ (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**.

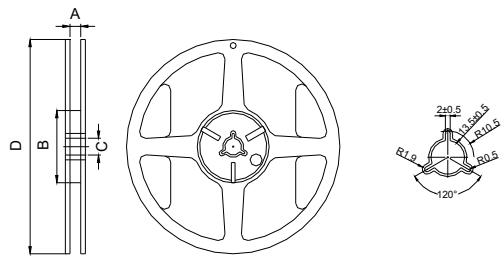
Table (1.2) Package Thickness/Volume and Classification Temperature (T_c)

	Package Thickness	Volume mm ³	Volume mm ³	Volume mm ³
		<350	350-2000	>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-020F

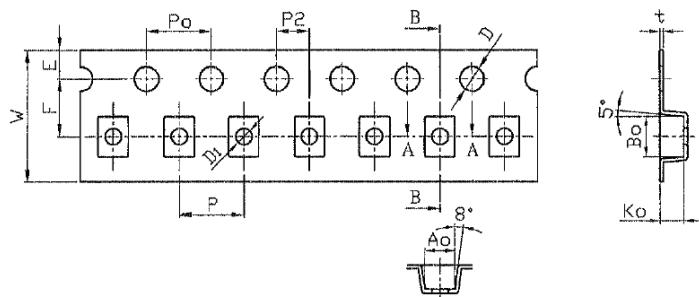
8. Packaging Information

8-1. Reel Dimension



Type	A(mm)	B(mm)	C(mm)	D(mm)
7"x8mm	8.4±0.5	60.0±2.0	13.5±0.5	178.0±2.0

8-2. Tape Dimension / 8mm



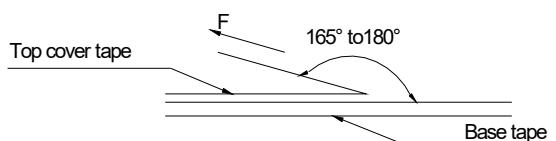
Series	W(mm)	P(mm)	E(mm)	F(mm)	P2(mm)	D(mm)	D1(mm)	P0(mm)	A0(mm)	B0(mm)	K0(mm)	t(mm)
SWI0805UF	8.00±0.10	4.00±0.10	1.75±0.10	3.50±0.05	2.00±0.05	1.50+0.10/-0.00	1.00±0.10	4.00±0.05	1.85±0.05	2.45±0.05	1.50±0.05	0.23±0.05

8-3. Packaging Quantity

Chip size	0805
Reel	2000
Reel Size	7"x8mm

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-020F 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.
5. Do not expose the products to magnets or magnetic fields.
6. Do not use products that have received any excessive mechanical shock such as by being dropped.
7. Do not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
8. Due to the application of mechanical stress after mounting and handling such as contact, disconnection may occur.
9. Carefully lay out the coil for the circuit board design of the non-magnetic shield type A malfunction may occur due to magnetic interference.
10. Self heating(temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
11. Soldering corrections after mounting should be within the range of the conditions determined in the specifications. If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
12. When embedding a printed circuit board where a chip is mounted to a set, be sure that residual stress is not given to the chip due to the overall distortion of the printed circuit board and partial distortion such as at screw tightening portions.

• Conformal coating:

1. The inductance value may change due to high cure-stress of resin to be used for coating/molding products.
2. An open circuit issue may occur by mechanical stress caused by the resin, amount/cured shape of resin, or operating condition etc. Please pay careful attention when selecting resin in case of coating/molding process. Prior to use the coating resin, please make sure no reliability issue is observed.

• 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.): ETR25303011

日期(Date): 21-Mar-2025

頁數(Page): 1 of 11

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.)

將大科技股份有限公司 (JDX TECHNOLOGY CO., LTD.)

桃園市楊梅區幼獅工業區幼四路1號 (NO. 1, YOUNG-LEO INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN)

江蘇省昆山市蓬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)

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)

臺北市信義區信義路5段5號3樓E06室 (ROOM E06, 3RD FLOOR, NO.5, SECTION 5, XINYI ROAD, XINYI DISTRICT, TAIPEI CITY, TAIWAN)

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 the applicant as) :

樣品名稱(Sample Name) : CERAMIC SERIES

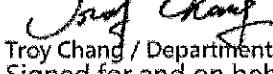
樣品型號(Style/Item No.) : SWI(SWC)、SWC_I SERIES

收件日(Sample Receiving Date) : 13-Mar-2025

測試期間(Testing Period) : 13-Mar-2025 to 21-Mar-2025

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 / Department Manager
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory - Taipei



PIN CODE: 68D7CB79

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. 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 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.

測試報告

Test Report

號碼(No.): ETR25303011

日期(Date): 21-Mar-2025

頁數(Page): 2 of 11

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.)

將大科技股份有限公司 (JDX TECHNOLOGY CO., LTD.)

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

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, JIANG-SU, 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 · SUQIANCITY · JIANGSU PROVINCE · P.R.CHIINA)

臺北市信義區信義路5段5號3樓E06室 (ROOM E06, 3RD FLOOR, NO.5, SECTION 5, XINYI ROAD, XINYI DISTRICT, TAIPEI CITY, TAIWAN)

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))	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))	參考IEC 62321-5: 2013, analysis was performed by ICP-OES.	mg/kg	2	n.d.
汞 (Hg) (Mercury (Hg))	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))	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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. 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 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.



測試報告

Test Report

號碼(No.): ETR25303011

日期(Date): 21-Mar-2025

頁數(Page): 3 of 11

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.)

將大科技股份有限公司 (JDX TECHNOLOGY CO., LTD.)

桃園市楊梅區幼獅工業區幼四路1號 (NO. 1, YOUNG MEI 4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAIWAN)

江蘇省昆山市遼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)

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, SUQUAN CITY, JIANGSU PROVINCE, P.R. CHINA)

臺北市信義區信義路5段5號3樓E06室 (ROOM E06, 3RD FLOOR, NO.5, SECTION 5, XINYI ROAD, XINYI DISTRICT, TAIPEI CITY, TAIWAN)

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)
				No.1
一溴聯苯醚 (Monobromodiphenyl 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.
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.
多溴聯苯醚總和 (Sum of PBDEs)		mg/kg	-	n.d.
鄰苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl phthalate (BBP))	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))		mg/kg	50	n.d.
鄰苯二甲酸二(2-乙基己基)酯 (DEHP) (Di-(2-ethylhexyl) phthalate (DEHP))		mg/kg	50	n.d.
鄰苯二甲酸二異丁酯 (DIBP) (Diisobutyl phthalate (DIBP))		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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. 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 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.

測試報告

Test Report

號碼(No.): ETR25303011

日期(Date): 21-Mar-2025

頁數(Page): 4 of 11

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.)

將大科技股份有限公司 (JDX TECHNOLOGY CO., LTD.)

桃園市楊梅區幼獅工業區幼四路1號 (NO. 1, YOUNG MEI INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN)

江蘇省昆山市蓬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)

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 · SUQIAN CITY · JIANGSU PROVINCE · P.R · CHINA)

臺北市信義區信義路5段5號3樓E06室 (ROOM E06, 3RD FLOOR, NO.5, SECTION 5, XINYI ROAD, XINYI DISTRICT, TAIPEI CITY, TAIWAN)

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)
				No.1
鄰苯二甲酸二異壬酯 (DINP) (Diisononyl phthalate (DINP)) (CAS No.: 28553-12-0, 68515-48-0)	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.
鄰苯二甲酸二正辛酯 (DNOP) (Di-n-octyl phthalate (DNOP)) (CAS No.: 117-84-0)	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.
鄰苯二甲酸二正戊酯 (DNPP) (Di-n-pentyl phthalate (DNPP)) (CAS No.: 131-18-0)	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.
鄰苯二甲酸二正己酯 (DNHP) (Di-n-hexyl phthalate (DNHP)) (CAS No.: 84-75-3)	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.
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 62321-9: 2021 · 以氣相層析儀/質譜儀分析。(With reference to IEC 62321-9: 2021, analysis was performed by GC/MS.)	mg/kg	20	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)	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.
溴 (Br) (Bromine (Br)) (CAS No.: 10097-32-2)	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.
碘 (I) (Iodine (I)) (CAS No.: 14362-44-8)	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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. 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 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.

測試報告

Test Report

號碼(No.): ETR25303011

日期(Date): 21-Mar-2025

頁數(Page): 5 of 11

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.)

將大科技股份有限公司 (JDX TECHNOLOGY CO., LTD.)

桃園市楊梅區幼獅工業區幼四路1號 (NO. 1, YOUNG MEI INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN)

江蘇省昆山市蓬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)

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, SUQIAN CITY, JIANGSU PROVINCE, P.R. CHINA)

臺北市信義區信義路5段5號3樓E06室 (ROOM E06, 3RD FLOOR, NO.5, SECTION 5, XINYI ROAD, XINYI DISTRICT, TAIPEI CITY, TAIWAN)

備註(Note) :

1. mg/kg = ppm ; 0.1wt% = 0.1% = 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. 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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is 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 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.

測試報告

Test Report

號碼(No.): ETR25303011

日期(Date): 21-Mar-2025

頁數(Page): 6 of 11

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.)

將大科技股份有限公司 (JDX TECHNOLOGY CO., LTD.)

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

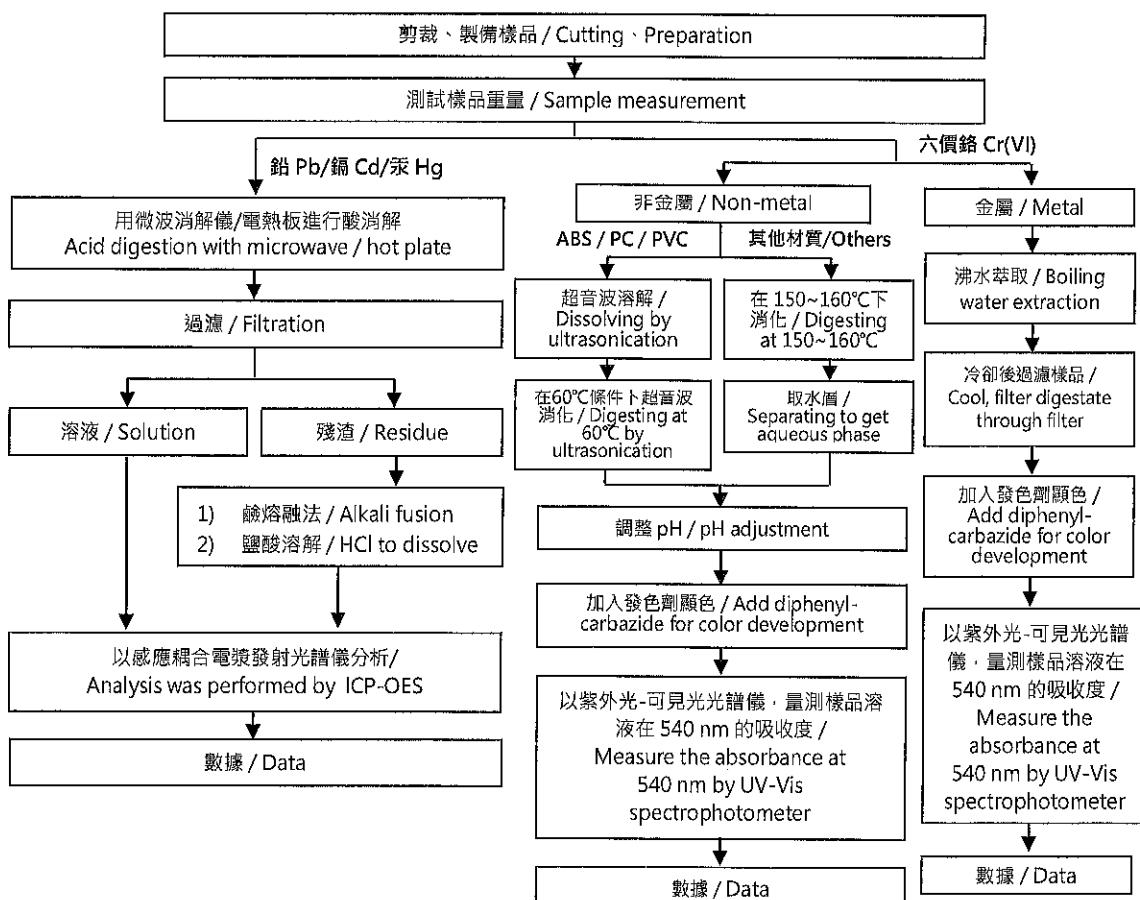
江蘇省昆山市遼朗昆嘉高科技工業區郭澤路 (GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA)

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)

臺北市信義區信義路5段5號3樓E06室 (ROOM E06, 3RD FLOOR, NO.5, SECTION 5, XINYI ROAD, XINYI DISTRICT, TAIPEI CITY, TAIWAN)

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)

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. 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 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.

測試報告

Test Report

號碼(No.): ETR25303011

日期(Date): 21-Mar-2025

頁數(Page): 7 of 11

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.)

將大科技股份有限公司 (JDX TECHNOLOGY CO., LTD.)

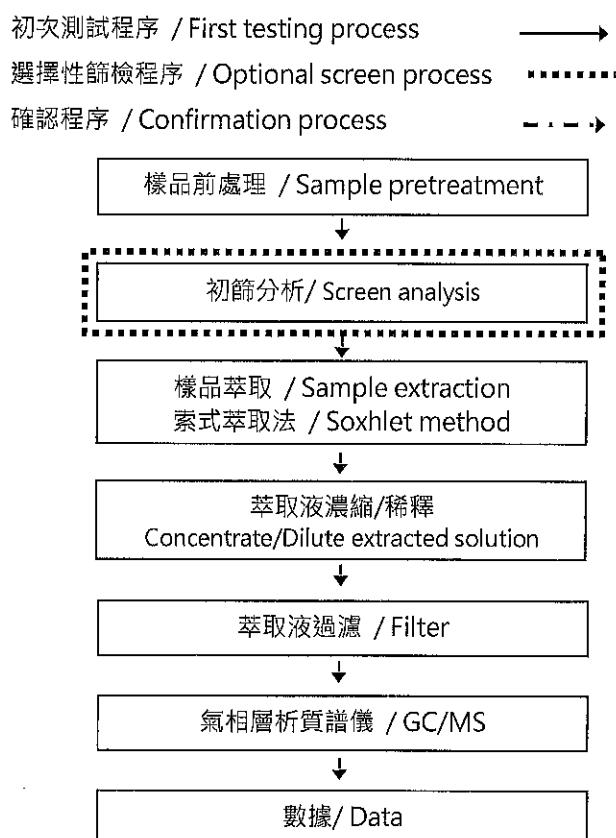
桃園市楊梅區幼獅工業區幼四路1號 (NO. 1, YOUNG-LEO INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN)

江蘇省昆山市蓬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)

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)

臺北市信義區信義路5段5號3樓E06室 (ROOM E06, 3RD FLOOR, NO.5, SECTION 5, XINYI ROAD, XINYI DISTRICT, TAIPEI CITY, TAIWAN)

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. 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 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.

測試報告

Test Report

號碼(No.): ETR25303011

日期(Date): 21-Mar-2025

頁數(Page): 8 of 11

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.)

將大科技股份有限公司 (JDX TECHNOLOGY CO., LTD.)

桃園市楊梅區幼獅工業區幼四路1號 (NO. 1, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN)

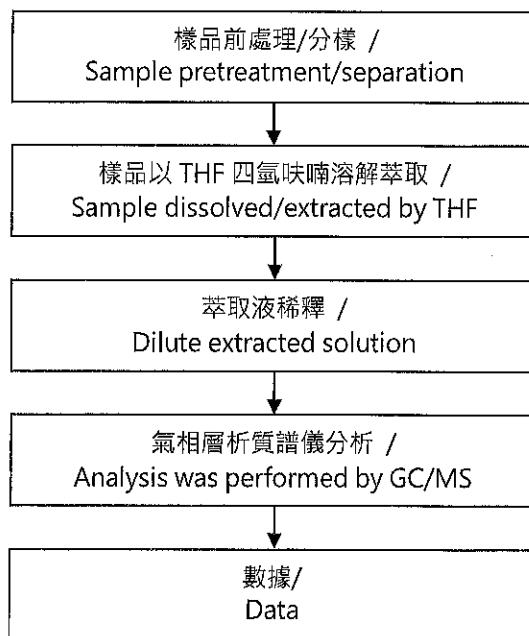
江蘇省昆山市蓬朗昆嘉高科技工業區郭澤路 (GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA)

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)

臺北市信義區信義路5段5號3樓E06室 (ROOM E06, 3RD FLOOR, NO.5, SECTION 5, XINYI ROAD, XINYI DISTRICT, TAIPEI CITY, TAIWAN)

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

【測試方法/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 <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. 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 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.

測試報告

Test Report

號碼(No.): ETR25303011

日期(Date): 21-Mar-2025

頁數(Page): 9 of 11

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.)

將大科技股份有限公司 (JDX TECHNOLOGY CO., LTD.)

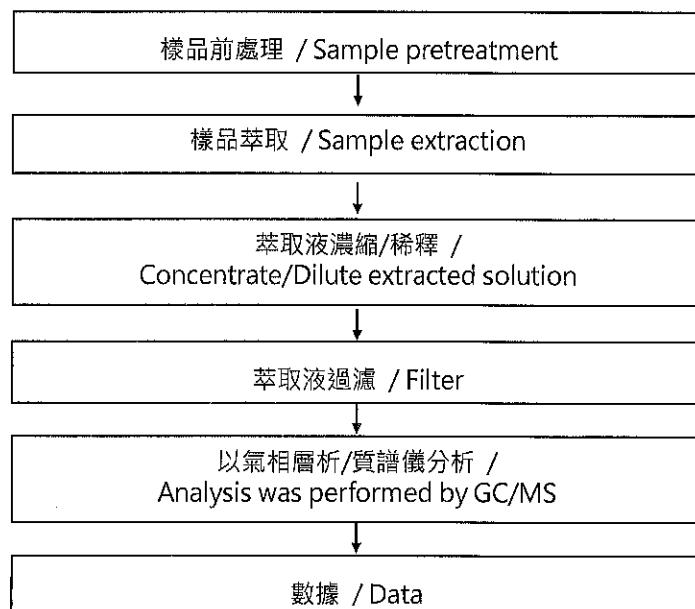
桃園市楊梅區幼獅工業區幼四路1號 (NO. 1, YOUNG-LEO INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN)

江蘇省昆山市蓬朗昆嘉高科工業區郭澤路 (GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, 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, SUQIAN CITY, JIANGSU PROVINCE, P.R. CHINA)

臺北市信義區信義路5段5號3樓E06室 (ROOM E06, 3RD FLOOR, NO.5, SECTION 5, XINYI ROAD, XINYI DISTRICT, TAIPEI CITY, TAIWAN)

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. 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 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.

測試報告

Test Report

號碼(No.): ETR25303011

日期(Date): 21-Mar-2025

頁數(Page): 10 of 11

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.)

將大科技股份有限公司 (JDX TECHNOLOGY CO., LTD.)

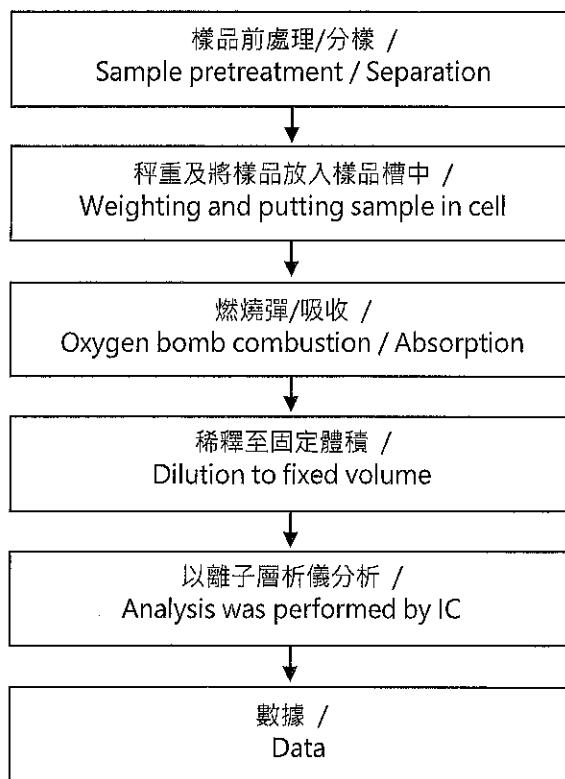
桃園市楊梅區幼獅工業區幼四路1號 (NO. 1, YOUNG-4TH ROAD, YOUTH INDUSTRIAL DISTRICT, YANG-MEI, TAO-YUAN CITY, TAIWAN)

江蘇省昆山市蓬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)

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)

臺北市信義區信義路5段5號3樓E06室 (ROOM E06, 3RD FLOOR, NO.5, SECTION 5, XINYI ROAD, XINYI DISTRICT, TAIPEI CITY, TAIWAN)

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. 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 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.

測試報告

Test Report

號碼(No.): ETR25303011

日期(Date): 21-Mar-2025

頁數(Page): 11 of 11

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.)

將大科技股份有限公司 (JDX TECHNOLOGY CO., LTD.)

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

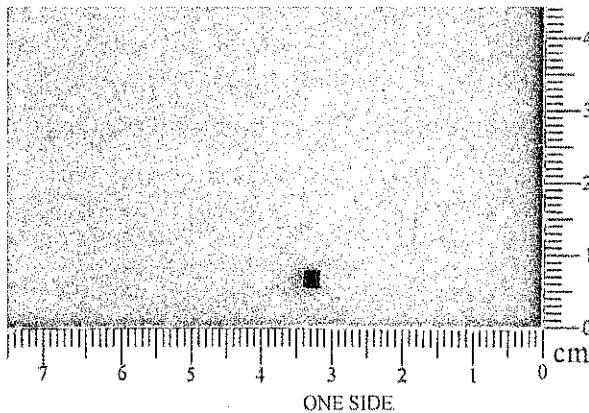
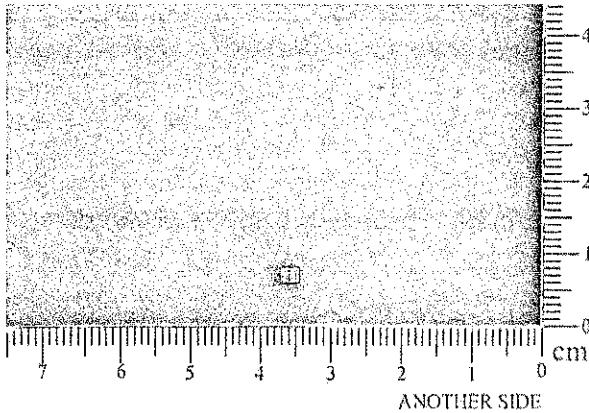
江蘇省昆山市蓬朗昆嘉高科技工業區郭澤路 (GUO-ZE ROAD, KUNJIA HI-TECH INDUSTRIAL PARK, KUN-SHAN, JIANG-SU, CHINA)

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)

臺北市信義區信義路5段5號3樓E06室 (ROOM E06, 3RD FLOOR, NO.5, SECTION 5, XINYI ROAD, XINYI DISTRICT, TAIPEI CITY, TAIWAN)

* 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.)

ETR25303011**ETR25303011**

** 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 <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. 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 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.