Test Report

Company Name shown on Report	JANGSU MICRO COMMERCIAL COMPONENTS CO.,LTD
Address	NO.6 HEYE WEST ROAD,HANJANG DISTRICT, YANGZHOU, CHINA

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

Sample Name	Module
Sample Received Date	Mar. 21, 2025
Testing Period	Mar. 21, 2025 to Apr. 25, 2025

Test Requested	As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP) in the submitted sample(s).
Test Method/Test Result(s)	Please refer to the following page(s).

Approved by Chen kaimin Date Apr. 27, 2025

Chen kaimin
Lab Manager

Test Report

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Conclusion

Tested Sample	According to standard/directive	Result
Submitted Sample	RoHS Directive 2011/65/EU with amendment (EU) 2015/863	PASS

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Pass means that the results shown on the report comply with the limits set by RoHS Directive 2011/65/EU with amendment (EU) 2015/863.

Test Report

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

CTI Sample ID	Reference Report No. - CTI Sample ID.
6.1	A2250176591102-3.1
6.2	A2250176591102-3.2
9.1	A2250176591102-3.1
9.2	A2250176591102-3.2

Remark:

The samples with the reference information in the table above are non-tested in this report. According to the applicant’s statement, the material of the samples in the column "Reference Report No. - CTI Sample ID " in the table above are the same as the " CTI Sample ID ".

Test Report

Test Method

Tested Item(s)	Test Method	Measured Equipment(s)
Lead (Pb)	IEC 62321-5:2013	ICP-OES
	Refer to IEC 62321-5:2013	
Cadmium (Cd)	IEC 62321-5:2013	ICP-OES
	Refer to IEC 62321-5:2013	
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-OES
	Refer to IEC 62321-4:2013+AMD1:2017 CSV	
Hexavalent Chromium (Cr(VI))	IEC 62321-7-1:2015	UV-Vis
	IEC 62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013	UV-Vis/ICP-OES
Polybrominated Biphenyls(PBBs)	IEC 62321-12:2023	GC-MS
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-12:2023	GC-MS
Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-12:2023	GC-MS

Test Result(s)

Tested Item(s)	**Result**			**MDL**	**Limit**
	1	**2**	**3.1**		
Lead (Pb)	10 mg/kg	N.D.	N.D.	2 mg/kg	1000 mg/kg
Cadmium (Cd)	N.D.	N.D.	N.D.	2 mg/kg	100 mg/kg
Mercury (Hg)	N.D.	N.D.	N.D.	2 mg/kg	1000 mg/kg
Hexavalent Chromium (Cr(VI))	--	--	N.D.▼	0.10 μg/cm² (LOQ)	1000 mg/kg
	N.D.	N.D.	--	8 mg/kg	1000 mg/kg

Tested Item(s)	**Result**			**MDL**	**Limit**
	3.2	**4.1**	**4.2**		
Lead (Pb)	N.D.	14 mg/kg	N.D.	2 mg/kg	1000 mg/kg
Cadmium (Cd)	N.D.	N.D.	N.D.	2 mg/kg	100 mg/kg
Mercury (Hg)	N.D.	N.D.	N.D.	2 mg/kg	1000 mg/kg
Hexavalent Chromium (Cr(VI))	N.D.▼	N.D.▼	N.D.▼	0.10 μg/cm² (LOQ)	1000 mg/kg
	--	--	--	8 mg/kg	1000 mg/kg

Test Report

Tested Item(s)	Result			MDL	Limit
	5.1	5.2	7		
Lead (Pb)	N.D.	36103 mg/kg*	50994 mg/kg*[1]	2 mg/kg	1000 mg/kg
Cadmium (Cd)	N.D.	N.D.	N.D.	2 mg/kg	100 mg/kg
Mercury (Hg)	N.D.	N.D.	N.D.	2 mg/kg	1000 mg/kg
Hexavalent Chromium (Cr(VI))	N.D.▼	N.D.▼	--	0.10 μg/cm² (LOQ)	1000 mg/kg
	--	--	N.D.	8 mg/kg	1000 mg/kg

Tested Item(s)	Result			MDL	Limit
	8	10	11		
Lead (Pb)	66 mg/kg	N.D.	914708 mg/kg*[2]	2 mg/kg	1000 mg/kg
Cadmium (Cd)	N.D.	N.D.	N.D.	2 mg/kg	100 mg/kg
Mercury (Hg)	N.D.	N.D.	N.D.	2 mg/kg	1000 mg/kg
Hexavalent Chromium (Cr(VI))	N.D.▼	--	N.D.▼	0.10 μg/cm² (LOQ)	1000 mg/kg
	--	N.D.	--	8 mg/kg	1000 mg/kg

Tested Item(s)	Result			MDL	Limit
	1	2	7		
Polybrominated Biphenyls(PBBs)					
Monobromobiphenyl	N.D.	N.D.	N.D.	25 mg/kg	1000 mg/kg
Dibromobiphenyl	N.D.	N.D.	N.D.	25 mg/kg	
Tribromobiphenyl	N.D.	N.D.	N.D.	25 mg/kg	
Tetrabromobiphenyl	N.D.	N.D.	N.D.	25 mg/kg	
Pentabromobiphenyl	N.D.	N.D.	N.D.	25 mg/kg	
Hexabromobiphenyl	N.D.	N.D.	N.D.	25 mg/kg	
Heptabromobiphenyl	N.D.	N.D.	N.D.	25 mg/kg	
Octabromobiphenyl	N.D.	N.D.	N.D.	25 mg/kg	
Nonabromobiphenyl	N.D.	N.D.	N.D.	25 mg/kg	
Decabromobiphenyl	N.D.	N.D.	N.D.	25 mg/kg	

Test Report

Tested Item(s)	Result	MDL	Limit
	10		
Polybrominated Biphenyls(PBBs)			
Monobromobiphenyl	N.D.	25 mg/kg	1000 mg/kg
Dibromobiphenyl	N.D.	25 mg/kg	
Tribromobiphenyl	N.D.	25 mg/kg	
Tetrabromobiphenyl	N.D.	25 mg/kg	
Pentabromobiphenyl	N.D.	25 mg/kg	
Hexabromobiphenyl	N.D.	25 mg/kg	
Heptabromobiphenyl	N.D.	25 mg/kg	
Octabromobiphenyl	N.D.	25 mg/kg	
Nonabromobiphenyl	N.D.	25 mg/kg	
Decabromobiphenyl	N.D.	25 mg/kg	

Tested Item(s)	Result			MDL	Limit
	1	2	7		
Polybrominated Diphenyl Ethers (PBDEs)					
Monobromodiphenyl ether	N.D.	N.D.	N.D.	25 mg/kg	1000 mg/kg
Dibromodiphenyl ether	N.D.	N.D.	N.D.	25 mg/kg	
Tribromodiphenyl ether	N.D.	N.D.	N.D.	25 mg/kg	
Tetrabromodiphenyl ether	N.D.	N.D.	N.D.	25 mg/kg	
Pentabromodiphenyl ether	N.D.	N.D.	N.D.	25 mg/kg	
Hexabromodiphenyl ether	N.D.	N.D.	N.D.	25 mg/kg	
Heptabromodiphenyl ether	N.D.	N.D.	N.D.	25 mg/kg	
Octabromodiphenyl ether	N.D.	N.D.	N.D.	25 mg/kg	
Nonabromodiphenyl ether	N.D.	N.D.	N.D.	25 mg/kg	
Decabromodiphenyl ether	N.D.	N.D.	N.D.	25 mg/kg	

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Tested Item(s)	Result	MDL	Limit
	10		
Polybrominated Diphenyl Ethers (PBDEs)			
Monobromodiphenyl ether	N.D.	25 mg/kg	1000 mg/kg
Dibromodiphenyl ether	N.D.	25 mg/kg	
Tribromodiphenyl ether	N.D.	25 mg/kg	
Tetrabromodiphenyl ether	N.D.	25 mg/kg	
Pentabromodiphenyl ether	N.D.	25 mg/kg	
Hexabromodiphenyl ether	N.D.	25 mg/kg	
Heptabromodiphenyl ether	N.D.	25 mg/kg	
Octabromodiphenyl ether	N.D.	25 mg/kg	
Nonabromodiphenyl ether	N.D.	25 mg/kg	
Decabromodiphenyl ether	N.D.	25 mg/kg	

Tested Item(s)	Result			MDL	Limit
	1	2	7		
Phthalates (DBP, BBP, DEHP, DIBP)					
Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	N.D.	N.D.	50 mg/kg	1000 mg/kg
Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	N.D.	N.D.	50 mg/kg	1000 mg/kg
Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	N.D.	N.D.	50 mg/kg	1000 mg/kg
Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	N.D.	N.D.	50 mg/kg	1000 mg/kg

Tested Item(s)	Result	MDL	Limit
	10		
Phthalates (DBP, BBP, DEHP, DIBP)			
Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	50 mg/kg	1000 mg/kg
Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	50 mg/kg	1000 mg/kg
Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	50 mg/kg	1000 mg/kg
Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	50 mg/kg	1000 mg/kg

Test Report

Sample/Part Description

No.	CTI Sample ID	Description
1	1	White plastic with black printing
2	2	Colorless transparent adhesive
3	3.1	Silvery plating
4	3.2	Metal base
5	4.1	Light blue plating
6	4.2	Metal base
7	5.1	Silvery plating
8	5.2	Metal base
9	7	PCB(Tested as a whole)
10	8	Silvery soldering tin
11	10	Silvery electronic component（Tested as a whole）
12	11	Silvery soldering tin

Remark: **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.**

-MDL = Method Detection Limit

-N.D. = Not Detected (<MDL or LOQ)

-mg/kg = ppm = parts per million

-1000 mg/kg = 0.1%

-LOQ = Limit of Quantification, The LOQ of Hexavalent chromium is 0.10 μg/cm^2

-▼The sample is negative for Cr(VI) − The Cr(VI) concentration is below 0.10 μg/cm^2. The coating is considered a non-Cr(VI) based coating. Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

*=According to the client's statement, the material of the sample(s) fall into exemption items 6(c) according to EU Directive 2011/65/EU: Copper alloy containing up to 4 % lead by weight.

*[1]=According to the client's statement, lead mainly comes from the high melting temperature type solders.Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead) is exempted from the restriction, with reference to EU Directive 2011/65/EU annex III Exemption Applications 7(a).

-*[2]=According to the client's statement, the material of the sample(s) fall into exemption items 7(a) according to EU Directive 2011/65/EU :Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead).

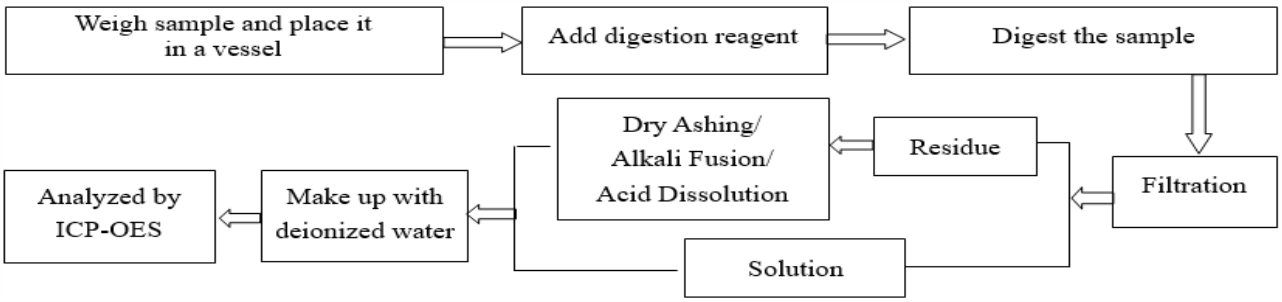
-The sample(s) was tested as a whole, because it's impossible to disassemble or separate it by current equipment and technology.The result(s) shown on this report may be different from the content of any homogeneous material.

According to the client's statement, the Company Name shown on Report in this report and the Company Name shown on Report in the report A2250176591102 are the Group-subsidiary relations,the test result(s) of this report is/are presented in reference to the result(s) that reported in A2250176591102.

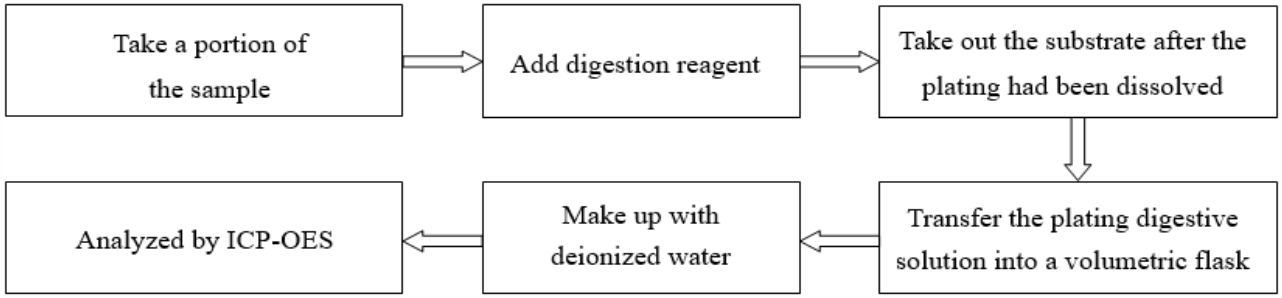
Test Process

1. Lead (Pb), Cadmium (Cd), Chromium(Cr)

(1) IEC 62321-5:2013

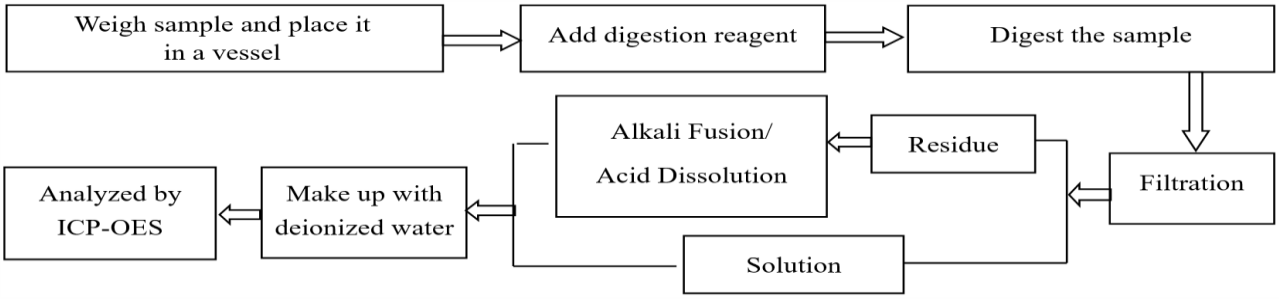


(2) Refer to IEC 62321-5:2013

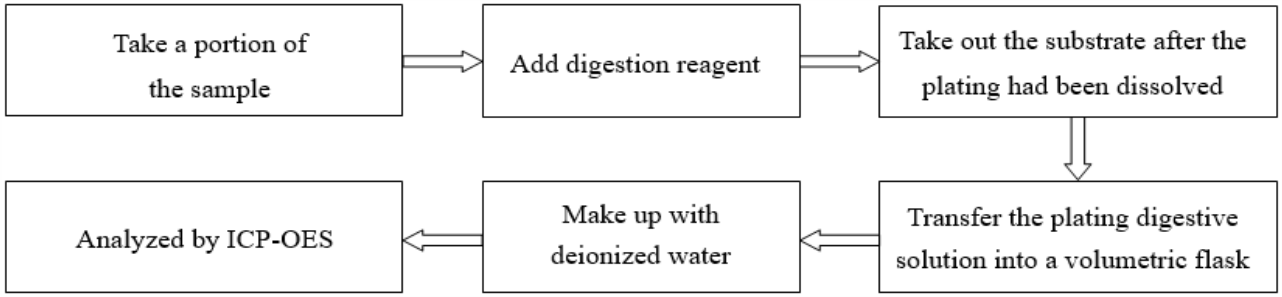


2. Mercury (Hg)

(1) IEC 62321-4:2013+AMD1:2017 CSV

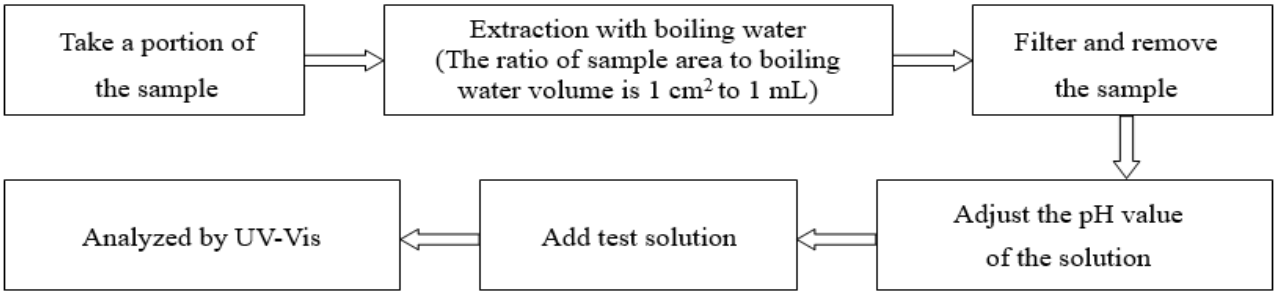


(2) Refer to IEC 62321-4:2013+AMD1:2017 CSV

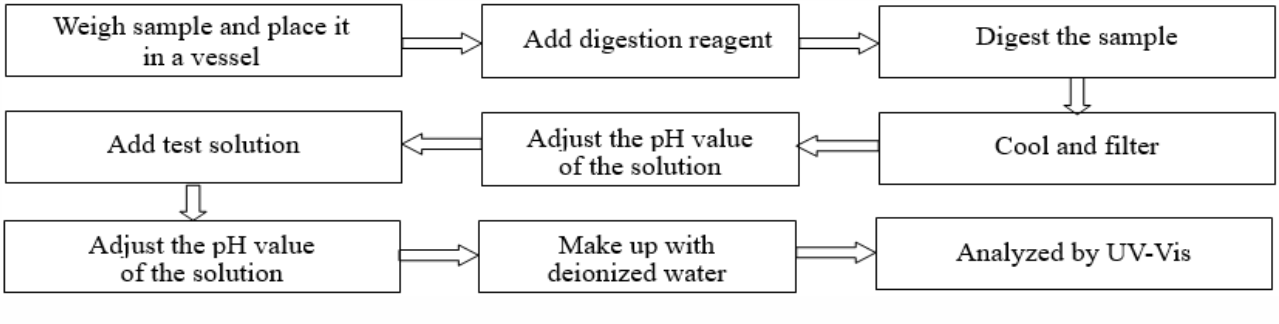


3. Hexavalent Chromium (Cr(VI))

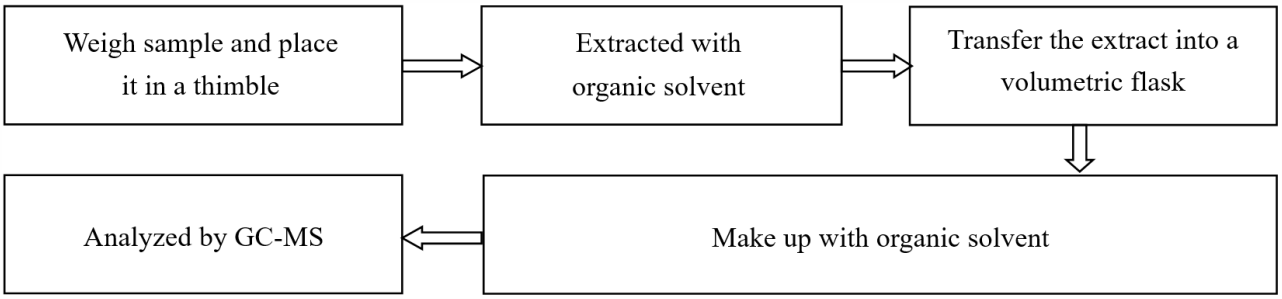
(1) IEC 62321-7-1:2015



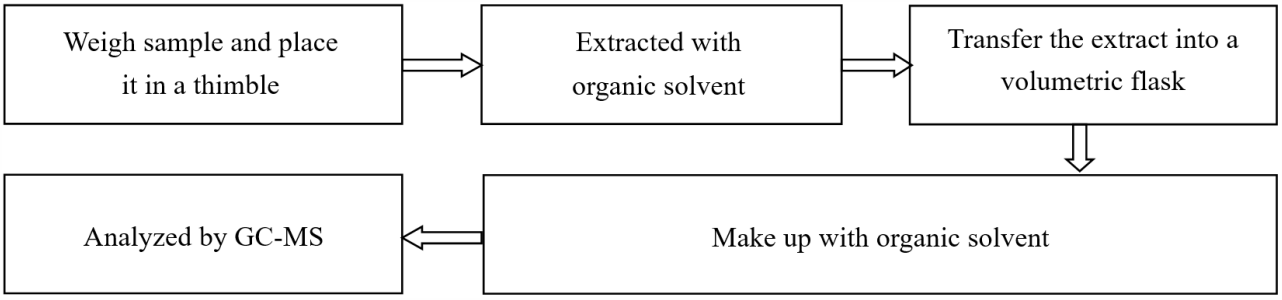
(2) IEC 62321-7-2:2017



4. Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers (PBDEs)



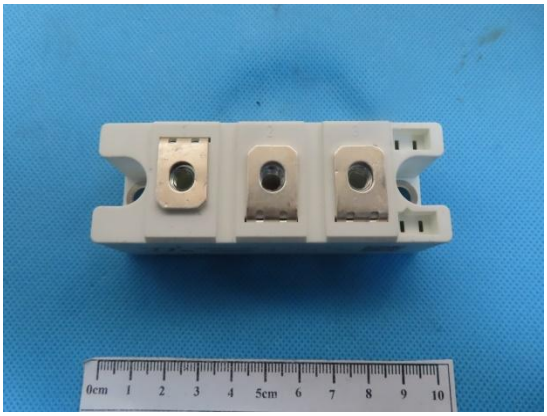
5. Phthalates (DBP, BBP, DEHP, DIBP)



Test Report

Photo(s) of the sample(s)

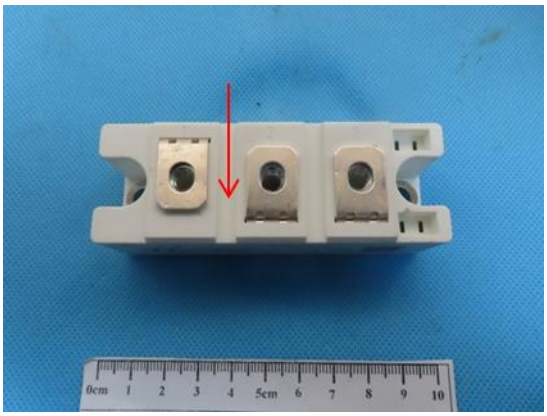
Final Product



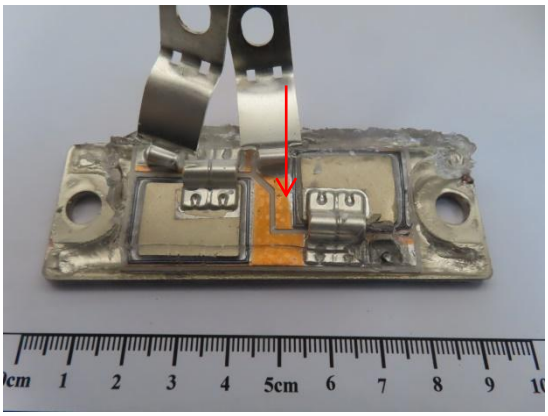
1

Final Product

2

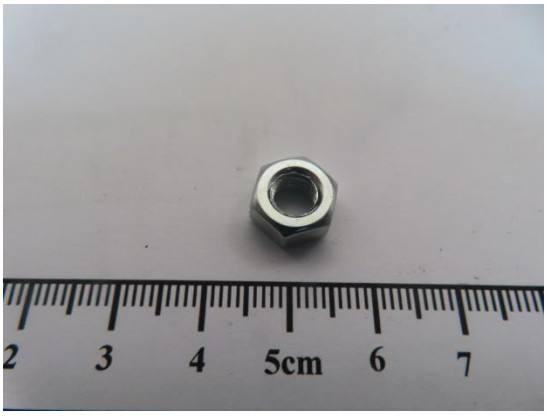


3.1

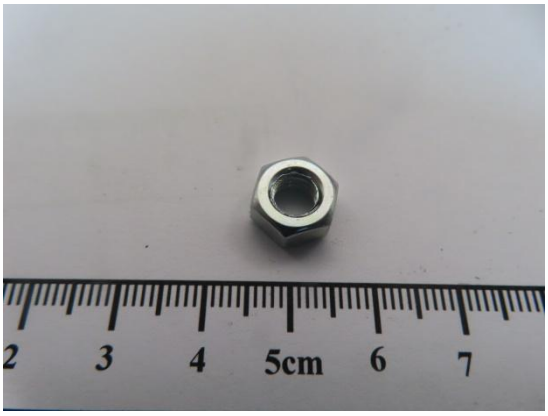


3.2

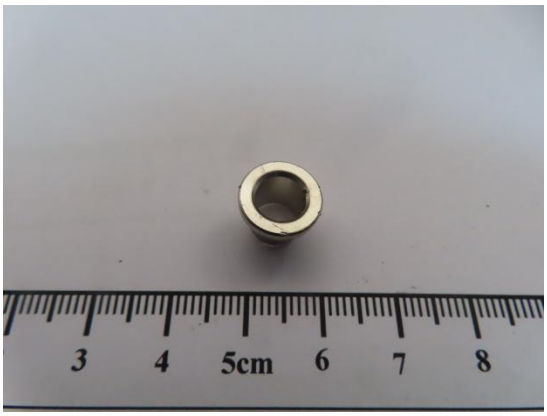
4.1



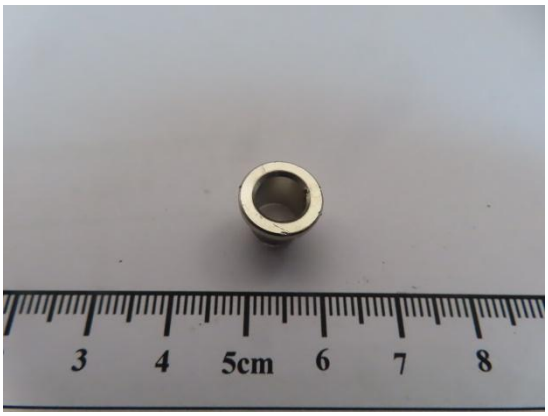
4.2



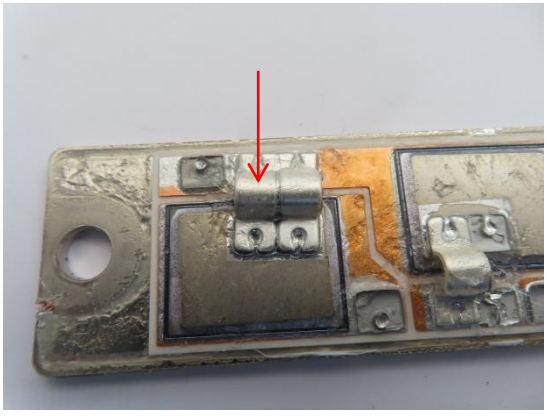
5.1



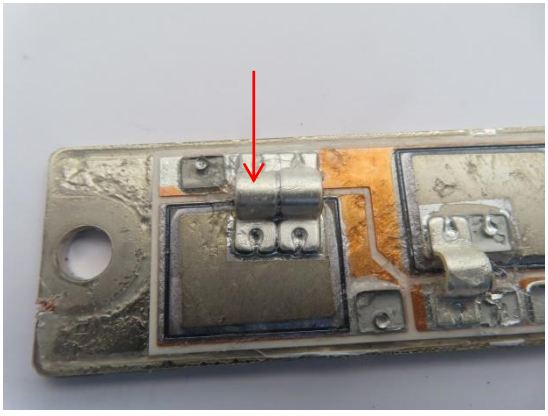
5.2



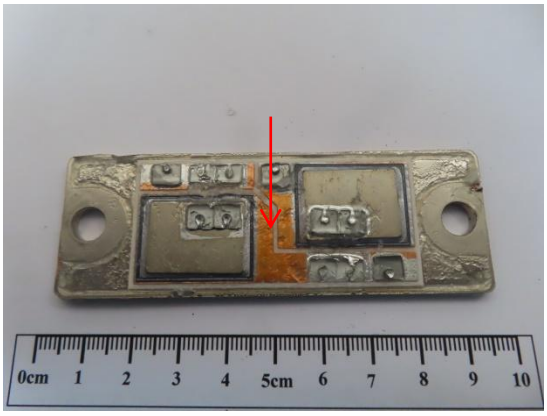
6.1(Client Reference Photo(Non-tested sample))



6.2(Client Reference Photo(Non-tested sample))

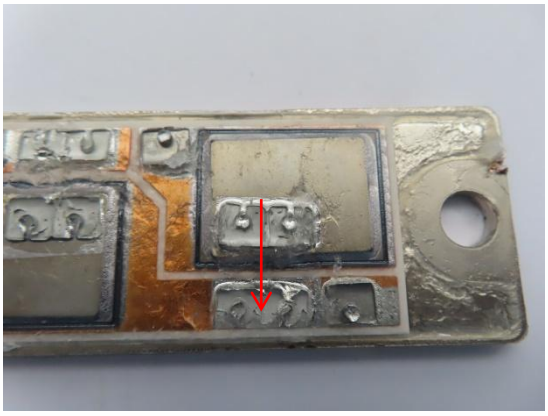


7



9.1(Client Reference Photo(Non-tested sample))

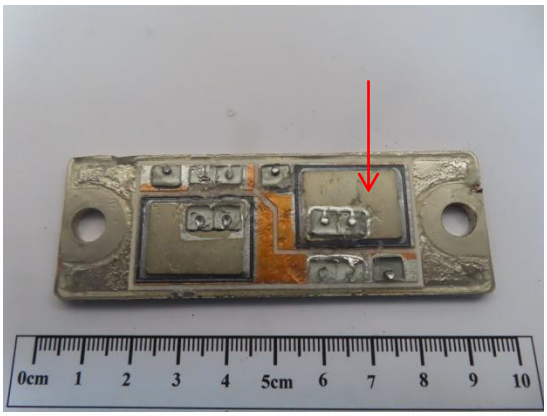
8

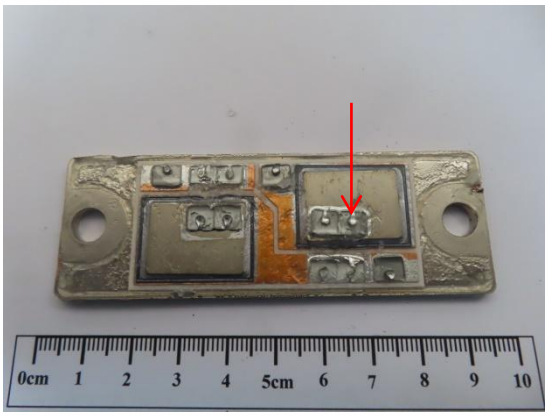


9.2(Client Reference Photo(Non-tested sample))

10

11





Test Report

Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019 / CNAS-GL015:2022;
5. Without written approval of CTI, this report can't be reproduced except in full;
6. In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.

*** End of Report ***

Appendix

Client Reference Information

D1,D2,DA,C2,L1,L2,T1,D1,NMT,GJ,F1,F2,F2N,FS,P1,P2,P3,E1,E1A,E2,E2A,T1A,T1D,F1N,T2A,C21,C3,E3, P4,T2,M1,M2,M3,M4,M5,M6,M7,M8,M9,C1,NM2,NM3,F3,F4N,F5,F6

Statement:

1. The Appendix Information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.
2. The Appendix Information is/are the supplement(s) for the Report A225017659110203.