

检测报告 Test Report



报告编号 A2200186258101E

第 1 页 共 25 页

Report No. A2200186258101E

Page 1 of 25

报告抬头公司名称 宁波速普电子有限公司

Company Name
Shown on Report NINGBO SUPU ELECTRONICS CO.,LTD.

地 址 浙江省慈溪市坎墩街道兴镇街 625 号

Address NO.625,XINGZHEN STREET,KANDUN,CIXI CITY,ZHEJING,CHINA

以下测试之样品及样品信息由申请者提供并确认

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

样品名称	插拔式接线端子
Sample Name	Pluggable terminal block
样品接收状态	正常
Sample Receiving State	Normal
样品接收日期	2020.06.16
Sample Received Date	Jun. 16, 2020
样品检测日期	2020.06.16-2020.06.24
Testing Period	Jun. 16, 2020-Jun. 24, 2020

批 准
Approved by 朱海朋

日 期
Date 2020.06.24
Jun. 24, 2020



No. RA925B5718
杭州市滨江区楚天路 266 号中晟工业园 5
号楼 1 楼
Ground Floor, Building 5, No. 266, Chutian
Road, Zhongsheng Industrial Park, Binjiang
District, Hangzhou City, Zhejiang Province.

检测报告

Test Report

报告编号 A2200186258101E

第 2 页 共 25 页

Report No. A2200186258101E

Page 2 of 25

检测要求

Test Requested

序号 No.	测试项目 Test Item
1	长使用寿命振动测试 Long life vibration test
2	冲击测试 Shock test
3	功能振动测试 Functional vibration test

检测结果: 请参见后续页面。

Test Result(s): Please see the following pages.

检测报告 Test Report

报告编号 A2200186258101E

第 3 页 共 25 页

Report No. A2200186258101E

Page 3 of 25

测试样品

Tested Sample(s)

样品编号 Sample No.	样品名称 Sample Name	样品数量 Quantity
A2200186258101001	插拔式接线端子 Pluggable terminal block	1pc

客户声明：参考型号与测试样品型号外观结构等均一致，本次测试在测试样品型号上进行。
具体型号如下：

(1) 测试样品型号：

MC-RJ2.5H**P、MC-PA2.5V**、MC-RN5.08V**P、MC-RB5.08H**C、MC-RJ5.08H**P、
MC-PA5.08V**、MC-RF3.50H**P、MC-RF3.81H**P、MC-RJ3.81H**P、MC-RJ3.81H**P-K、
MC-PA3.5V**、MC-PA3.81V**、MC-PA3.81V**-F (**代表位数，位数 2-24PIN)；
MC-DRT3.5H**P-A、MC-DPT3.5V**-BK-2000、MC-DPA3.81H**、MC-DPA3.81H**-F、
MC-RA3.81H**C (**代表位数，位数 4-48PIN)；

注：其中 MC-PA3.81V**、MC-PA5.08V**是共用件。

(2) 参考型号：

MC-PA2.5H**、MC-RN5.08V**P-K、MC-RN5.08V**P-I、MC-RB5.08H**C-K、
MC-RB5.08H**C-I、MC-RJ5.08H**P-K、MC-RJ5.08H**P-I、MC-PA5.08H**、
MC-PA5.08H**-F、MC-PA5.08H**-I、MC-PA5.08V**-F、MC-PA5.08V**-I、
MC-RF3.50H**P-K、MC-RF3.50H**P-I、MC-RF3.50H**P-D、MC-RF3.81H**P-K、
MC-RF3.81H**P-I、MC-RF3.81H**P-D、MC-RJ3.81H**P-I、MC-PA3.5H**、MC-PA3.5H**-F、
MC-PA3.5H**-I、MC-PA3.5H**-D、MC-PA3.5V**-F、MC-PA3.5V**-I、MC-PA3.5V**-D、
MC-PA3.81H**、MC-PA3.81H**-F、MC-PA3.81H**-I、MC-PA3.81H**-D、MC-PA3.81V**-I、
MC-PA3.81V**-D (**代表位数，位数 2-24PIN)；
MC-DRT3.5H**P-K、MC-DRT3.5H**P-I、MC-DPT3.5H**-BK-2000、
MC-DPT3.5H**-F-BK-2000、MC-DPT3.5H**-I-BK-2000、MC-DPT3.5V**-F-BK-2000、
MC-DPT3.5V**-I-BK-2000、MC-DPA3.81V**、MC-DPA3.81V**-F、MC-RA3.81H**C-K、
MC-RA3.81H**C-I (**代表位数，位数 4-48PIN)；

检测报告

Test Report

报告编号 A2200186258101E

第 4 页 共 25 页

Report No. A2200186258101E

Page 4 of 25

Customer statement: the reference model is consistent with the appearance and structure of the test sample model. This test is conducted on the test sample model.

Model:

(1) Test sample model:

MC-RJ2.5H**P, MC-PA2.5V**, MC-RN5.08V**P, MC-RB5.08H**C, MC-RJ5.08H**P,
MC-PA5.08V**, MC-RF3.50H**P, MC-RF3.81H**P, MC-RJ3.81H**P, MC-RJ3.81H**P-K,
MC-PA3.5V**, MC-PA3.81V**, MC-PA3.81V**-F (** for digits, digits 2-24pin);
MC-DRT3.5H**P-A, MC-DPT3.5V**-BK-2000, MC-DPA3.81H**, MC-DPA3.81H**-F,
MC-RA3.81H**C (** for digits, digits 4-48pin);

Note: MC-PA3.81V**, MC-PA5.08V** are common parts.

(2) Reference model:

MC-PA2.5H**, MC-RN5.08V**P-K, MC-RN5.08V**P-I, MC-RB5.08H**C-K,
MC-RB5.08H**C-I, MC-RJ5.08H**P-K, MC-RJ5.08H**P-I, MC-PA5.08H**,
MC-PA5.08H**-F, MC-PA5.08H**-I, MC-PA5.08V**-F, MC-PA5.08V**-I,
MC-RF3.50H**P-K, MC-RF3.50H**P-I, MC-RF3.50H**P-D, MC-RF3.81H**P-K,
MC-RF3.81H**P-I, MC-RF3.81H**P-D, MC-RJ3.81H**P-I, MC-PA3.5H**, MC-PA3.5H**-F,
MC-PA3.5H**-I, MC-PA3.5H**-D, MC-PA3.5V**-F, MC-PA3.5V**-I, MC-PA3.5V**-D,
MC-PA3.81H**, MC-PA3.81H**-F, MC-PA3.81H**-I, MC-PA3.81H**-D, MC-PA3.81V**-I,
MC-PA3.81V**-D (** for digits, digits 2-24pin);
MC-DRT3.5H**P-K, MC-DRT3.5H**P-I, MC-DPT3.5H**-BK-2000,
MC-DPT3.5H**-F-BK-2000, MC-DPT3.5H**-I-BK-2000, MC-DPT3.5V**-F-BK-2000,
MC-DPT3.5V**-I-BK-2000, MC-DPA3.81V**, MC-DPA3.81V**-F, MC-RA3.81H**C-K,
MC-RA3.81H**C-I(** for digits, digits 4-48pin);

检测报告 Test Report

报告编号 A2200186258101E

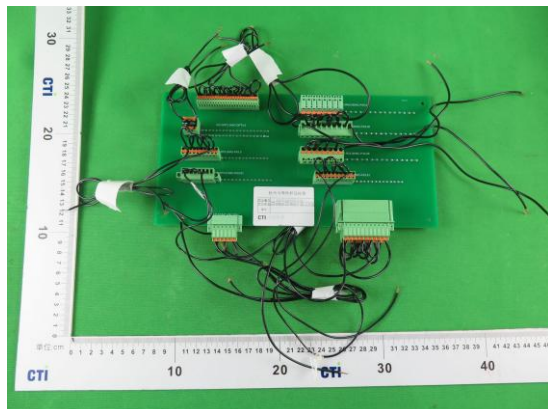
第 5 页 共 25 页

Report No. A2200186258101E

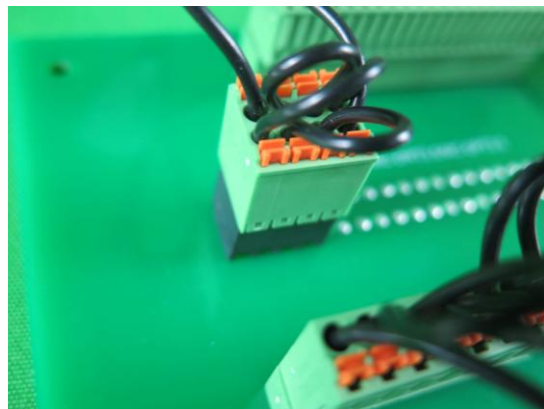
Page 5 of 25

样品图片

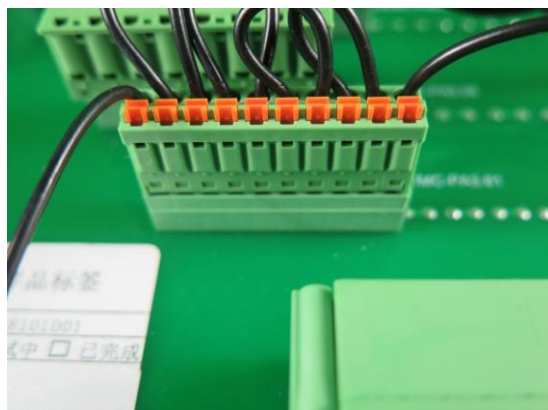
Sample Photo(s)



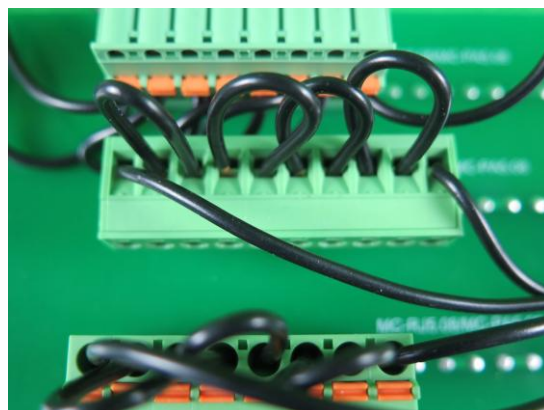
A2200186580101001



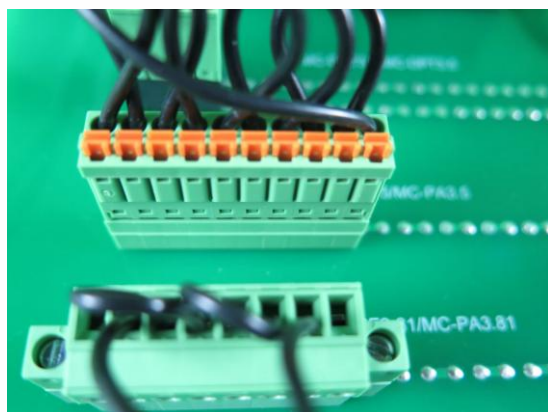
MC-DRT3.5/MC-DPT3.5



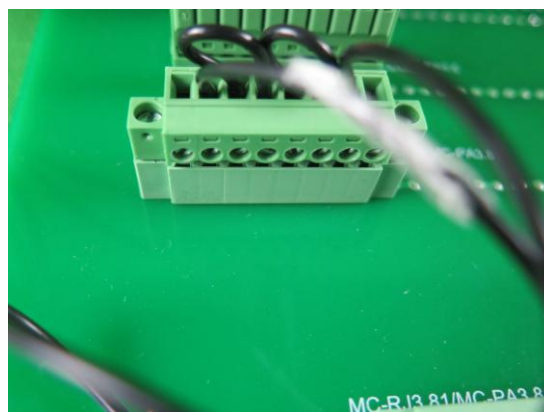
MC-RF3.81/MC-PA3.81



MC-RB5.08/MC-PA5.08



MC-RF3.5/MC-PA3.5



MC-RA3.81/MC-PA3.81

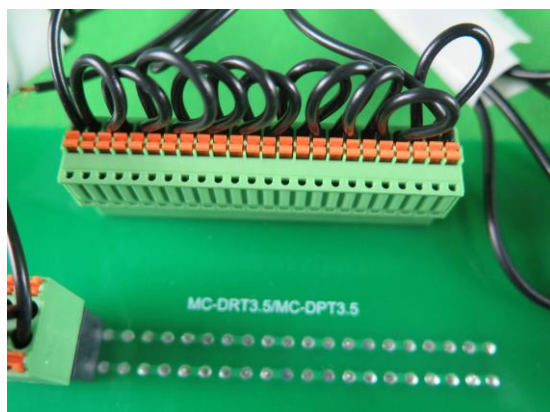
检测报告 Test Report

报告编号 A2200186258101E

第 6 页 共 25 页

Report No. A2200186258101E

Page 6 of 25



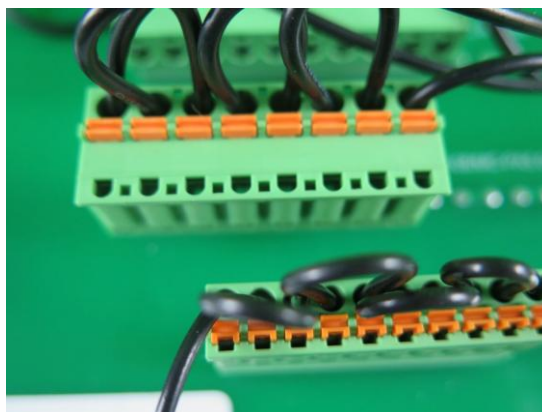
MC-RJ2.5HXXP/MC-PA2.5VXX



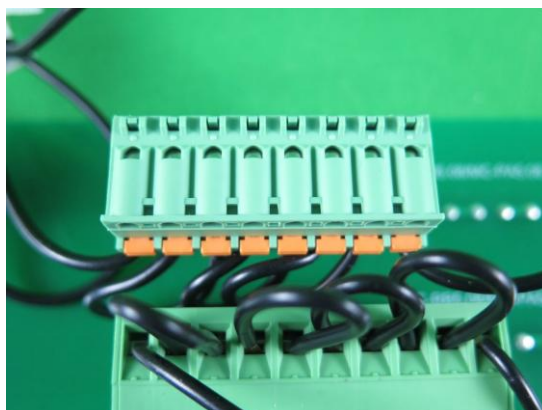
MC-RJ3.81/MC-DPA3.81H



MC-RJ3.81/MC-PA3.81H



MC-RJ5.08/MC-PA5.08



MC-RN5.08/MC-PA5.08

检测报告

Test Report

报告编号 A2200186258101E

第 7 页 共 25 页

Report No. A2200186258101E

Page 7 of 25

测试项目 1: 长使用寿命振动测试

Test Item1: Long life vibration test

1. 测试设备 Test Equipment

设备名称 Equipment Name	型 号 Model
振动试验机 3T Vibration Machine 3T	ES-30-370

2. 环境条件 Environmental Conditions

温度: 25.0℃; 湿度: 58%RH

Temperature: 25.0℃; Humidity: 58%RH

3. 测试标准 Test Standard: IEC 61373-2010, Category 1-Class B

4. 测试条件 Test Condition

频率 Frequency (Hz)	加速度功率谱密度 ASD (m/s ²) ² / Hz	斜率 Slope (db/Oct)	测试方向 Test direction	测试时间 Test time
5-20	0.964	/	垂向 Vertical	5h
20-150	/	-6		
5-20	0.192	/	横向 Horizontal	5h
20-150	/	-6		
5-20	0.461	/	纵向 Portrait	5h
20-150	/	-6		

5. 测试结果 Test Result(s)

样品编号 Sample No.	判定依据 Criterion	测试结果 Test Result(s)	结论 Conclusion
A220018625 8101001	试验后产品无机械损坏, 端子导通正常。 After the test, the product has no mechanical damage and the terminal conduction is normal.	测试后, 目视检查样品外观无机械损伤, 端子导通正常。 After the test, there was no visible mechanical damage on the sample by visual inspection and the terminal conduction is normal.	合格 Pass
备注: 判定依据由客户提供。Remark: Criterion is supplied by client.			

检测报告 Test Report

报告编号 A2200186258101E

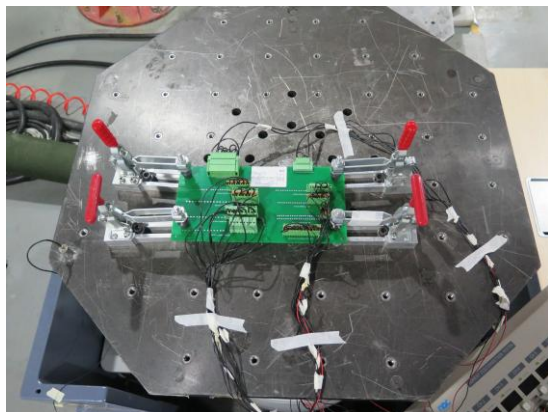
第 8 页 共 25 页

Report No. A2200186258101E

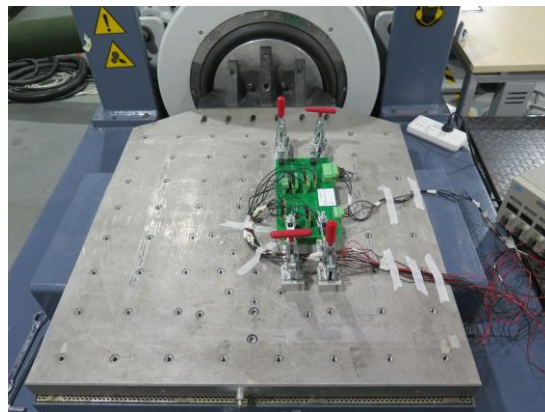
Page 8 of 25

测试图片

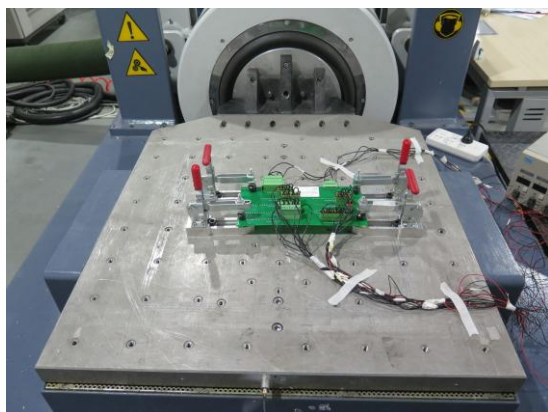
Test Photo(s)



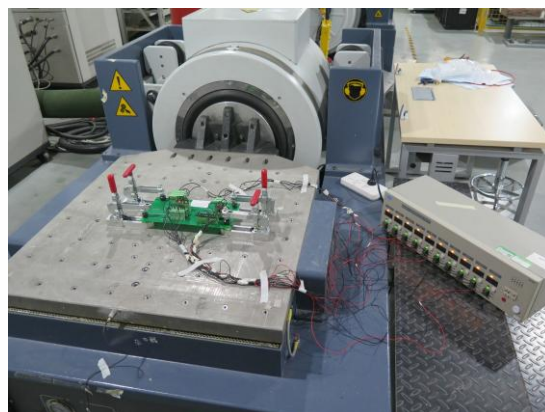
垂向 Vertical



横向 Horizontal



纵向 Portrait



导通正常 Normal conduction

检测报告 Test Report

报告编号 A2200186258101E

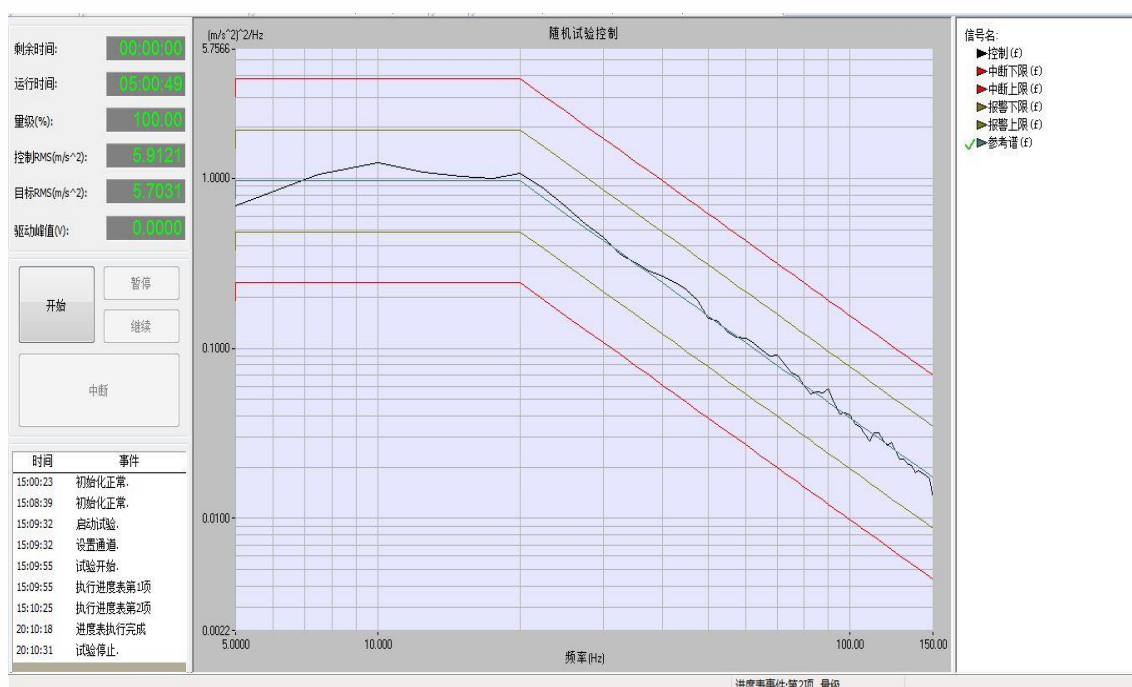
第 9 页 共 25 页

Report No. A2200186258101E

Page 9 of 25

测试曲线

Test Curve



垂向 Vertical

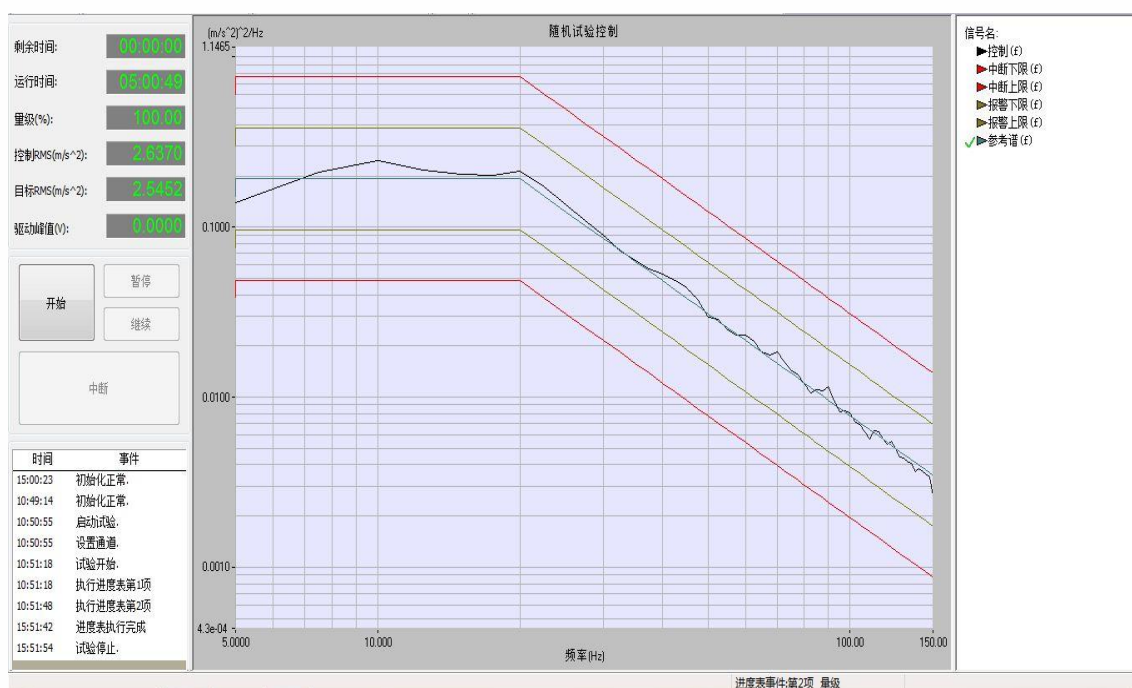
检测报告 Test Report

报告编号 A2200186258101E

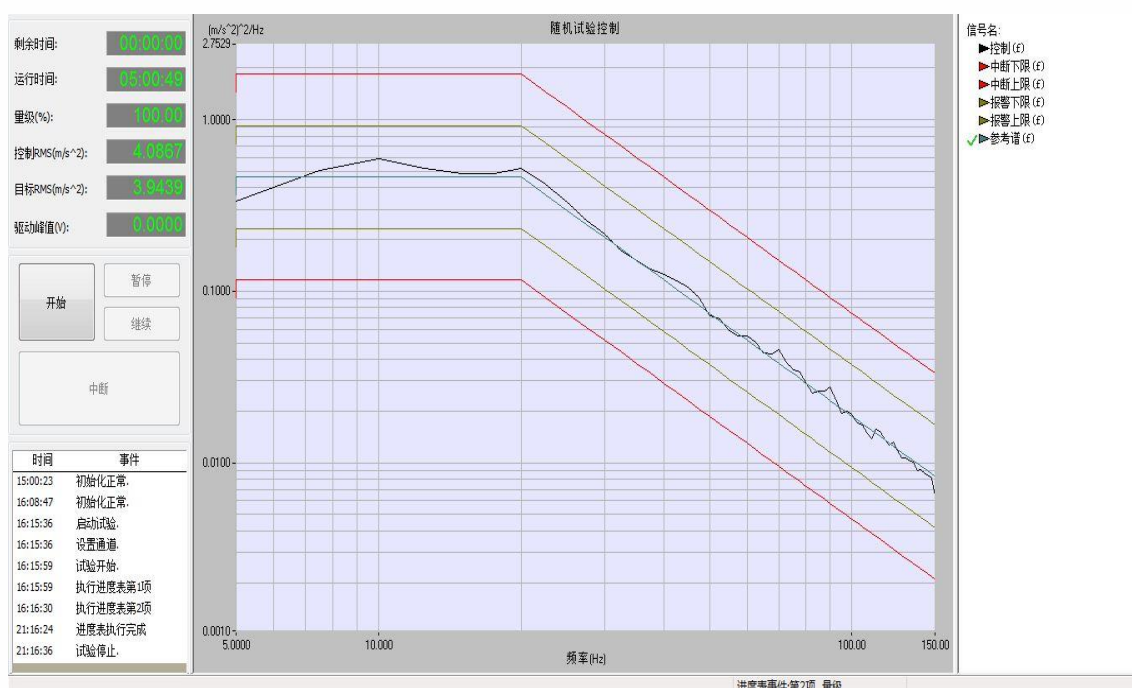
第 10 页 共 25 页

Report No. A2200186258101E

Page 10 of 25



横向 Horizontal



纵向 Vertical

检测报告 Test Report

报告编号 A2200186258101E

第 11 页 共 25 页

Report No. A2200186258101E

Page 11 of 25

测试项目 2: 冲击测试

Test Item2: Shock test

1. 测试设备 Test Equipment

设备名称 Equipment Name	型 号 Model
振动试验机 3T Vibration Machine 3T	ES-30-370

2. 环境条件 Environmental Conditions

温度: 25.2°C; 湿度: 57%RH

Temperature: 25.2°C; Humidity: 57%RH

3. 测试标准 Test Standard: IEC 61373-2010, Category 1-Class B

4. 测试条件 Test Condition

冲击波形: 半正弦

Shock waveform: half sine

峰值加速度: 30m/s²(垂向、横向), 50 m/s²(纵向)

Peak acceleration: 30m/s² (vertical and horizontal), 50 m/s² (vertical)

脉冲时间: 30ms

Pulse time: 30ms

测试方向: 垂向、横向、纵向

Test direction: vertical, horizontal, vertical

冲击次数: 3 次/向, 共 18 次

Shock times: 3times/direction, 18 times in total

检测报告 Test Report

报告编号 A2200186258101E

第 12 页 共 25 页

Report No. A2200186258101E

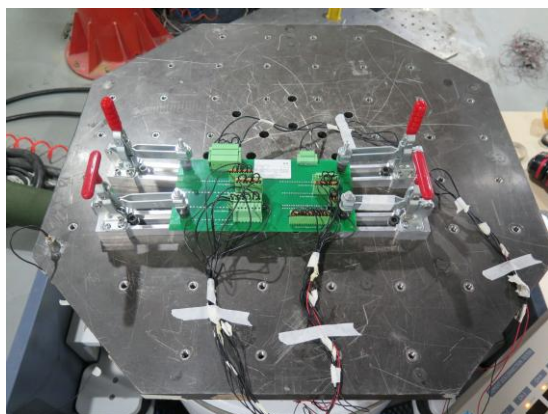
Page 12 of 25

5. 测试结果 Test Result(s)

样品编号 Sample No.	判定依据 Criterion	测试结果 Test Result(s)	结论 Conclusion
A220018625 8101001	试验后产品无机械损坏，试验过程中不能出现大于 $1\mu s$ 电流中断现象。 After the test, the product has no mechanical damage, and no current interruption of more than $1\mu s$ during the test.	测试后，目视检查样品外观无机械损伤。测试中未出现大于 $1\mu s$ 电流中断现象。 After the test, there was no visible mechanical damage on the sample by visual inspection. There was no current interruption of more than $1\mu s$ during the test.	合格 Pass
备注：判定依据由客户提供。 Remark: Criterion is supplied by client.			

测试图片

Test Photo(s)



垂向 Vertical

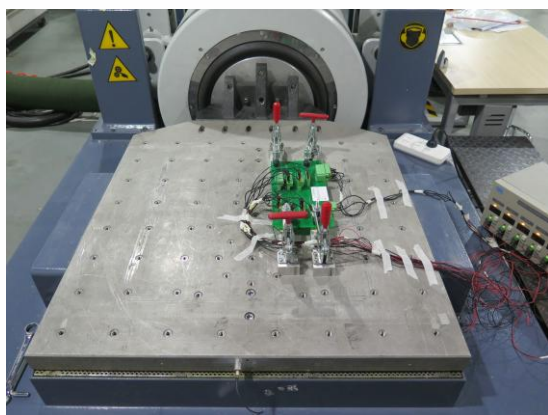
检测报告 Test Report

报告编号 A2200186258101E

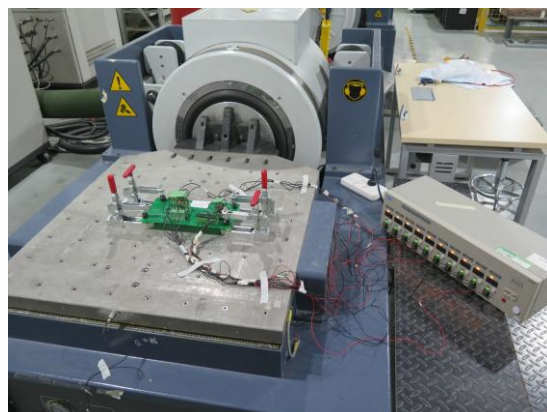
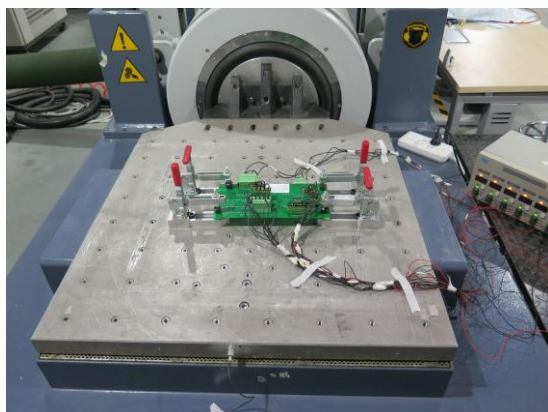
第 13 页 共 25 页

Report No. A2200186258101E

Page 13 of 25



横向 Horizontal



纵向 Vertical

检测报告 Test Report

报告编号 A2200186258101E

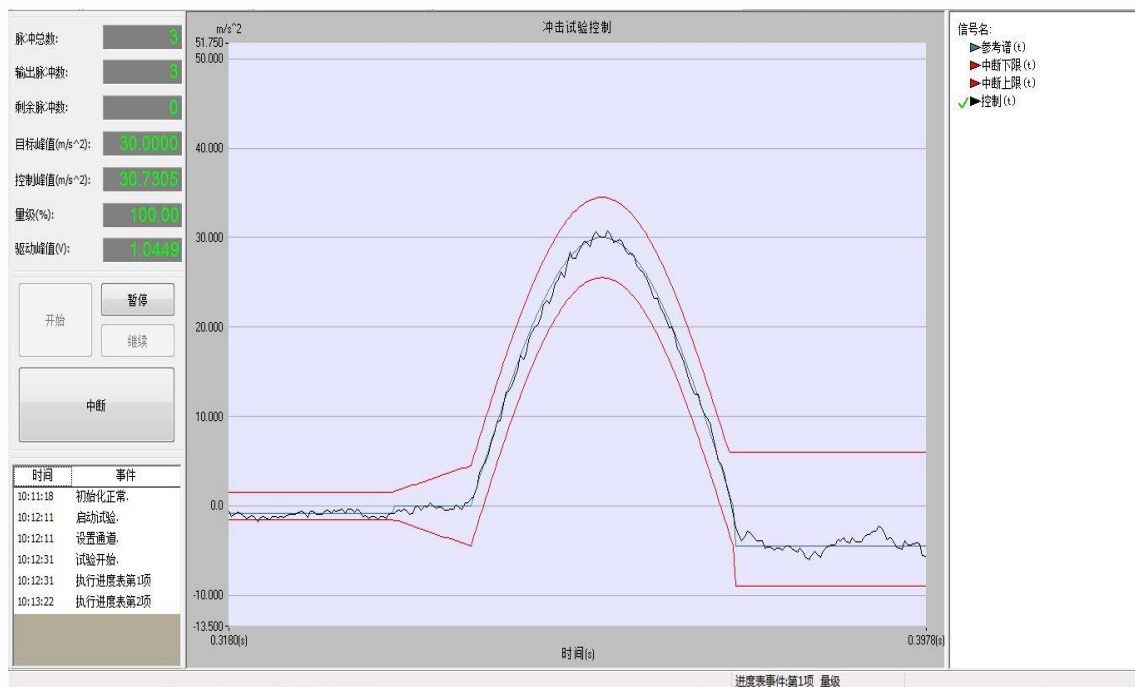
第 14 页 共 25 页

Report No. A2200186258101E

Page 14 of 25

测试曲线

Test Curve



垂向 Vertical) +

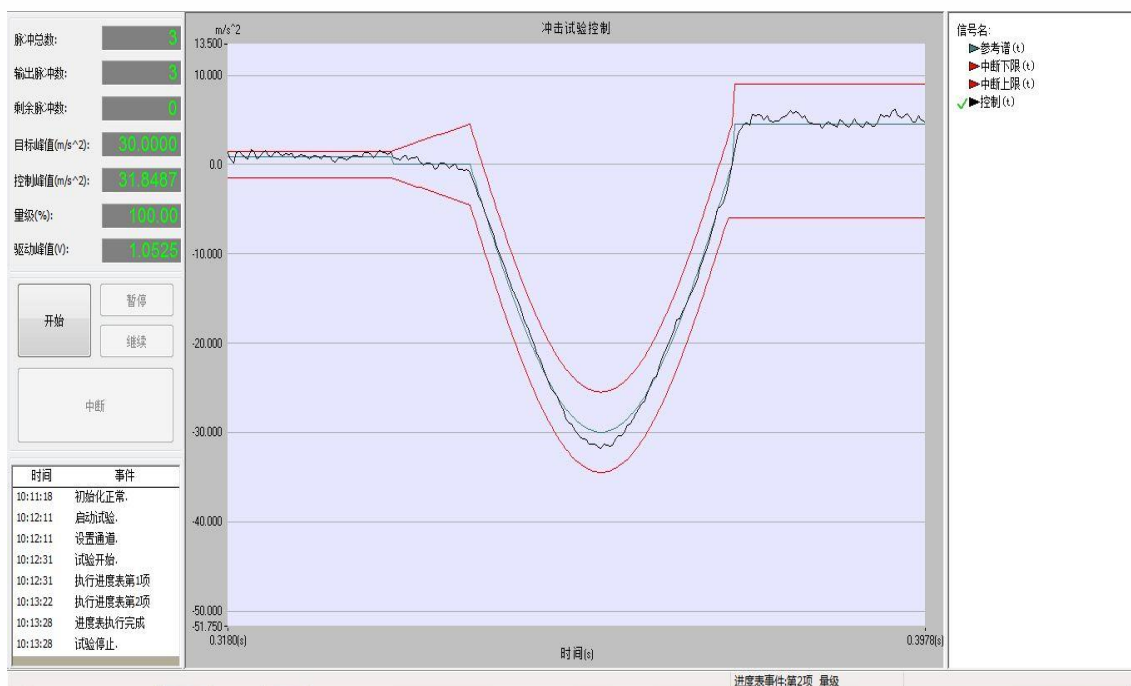
检测报告 Test Report

报告编号 A2200186258101E

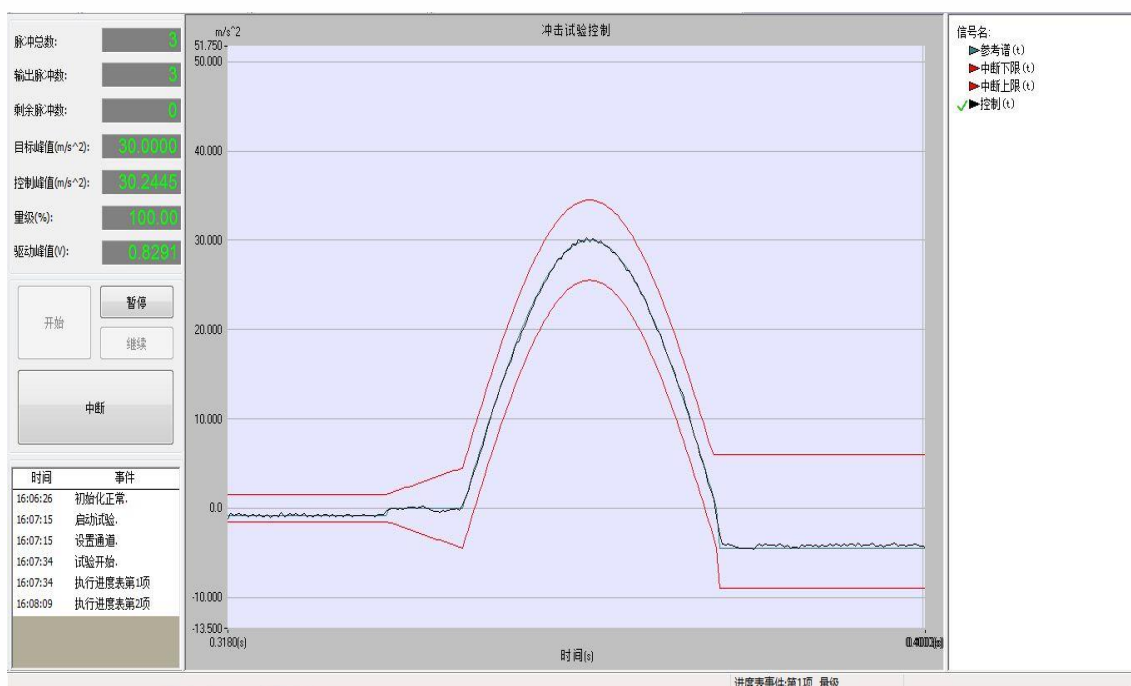
第 15 页 共 25 页

Report No. A2200186258101E

Page 15 of 25



垂直向 Vertical) -



横向 Horizontal) +

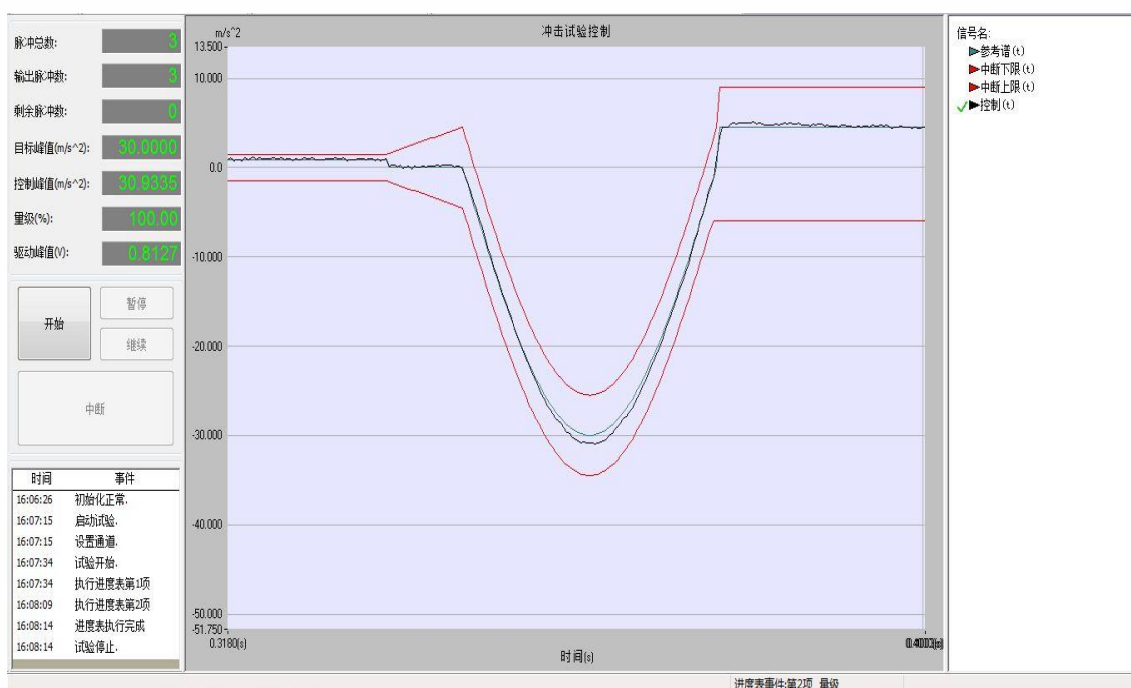
检测报告 Test Report

报告编号 A2200186258101E

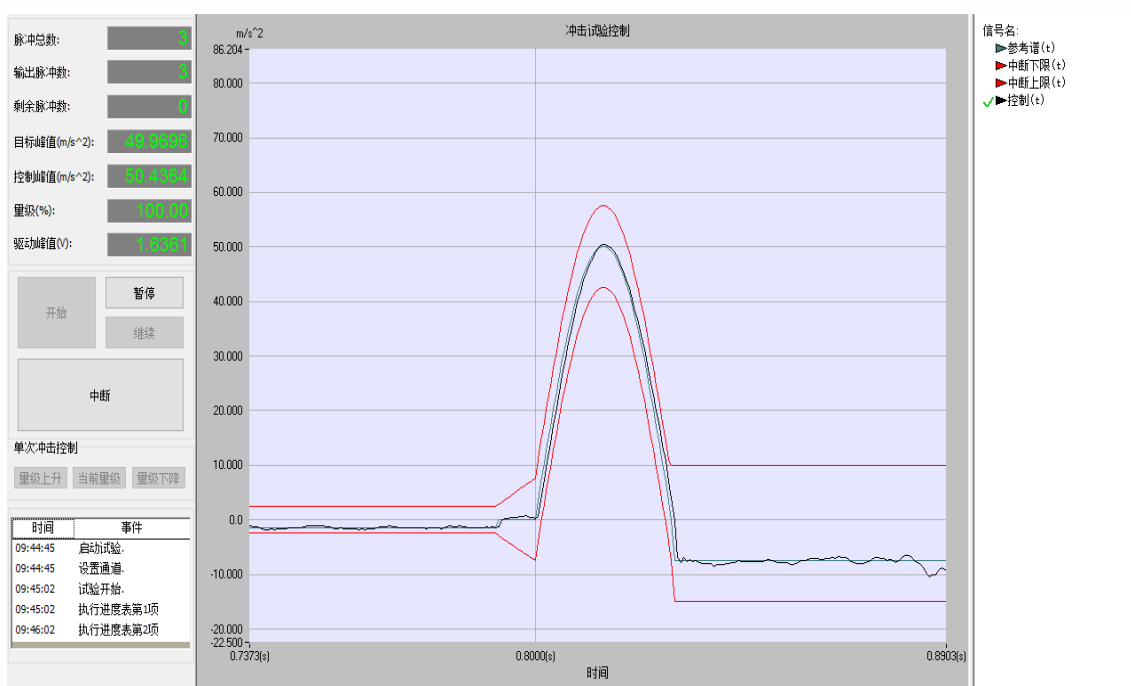
第 16 页 共 25 页

Report No. A2200186258101E

Page 16 of 25



横向 Horizontal) -



纵向 Vertical) +

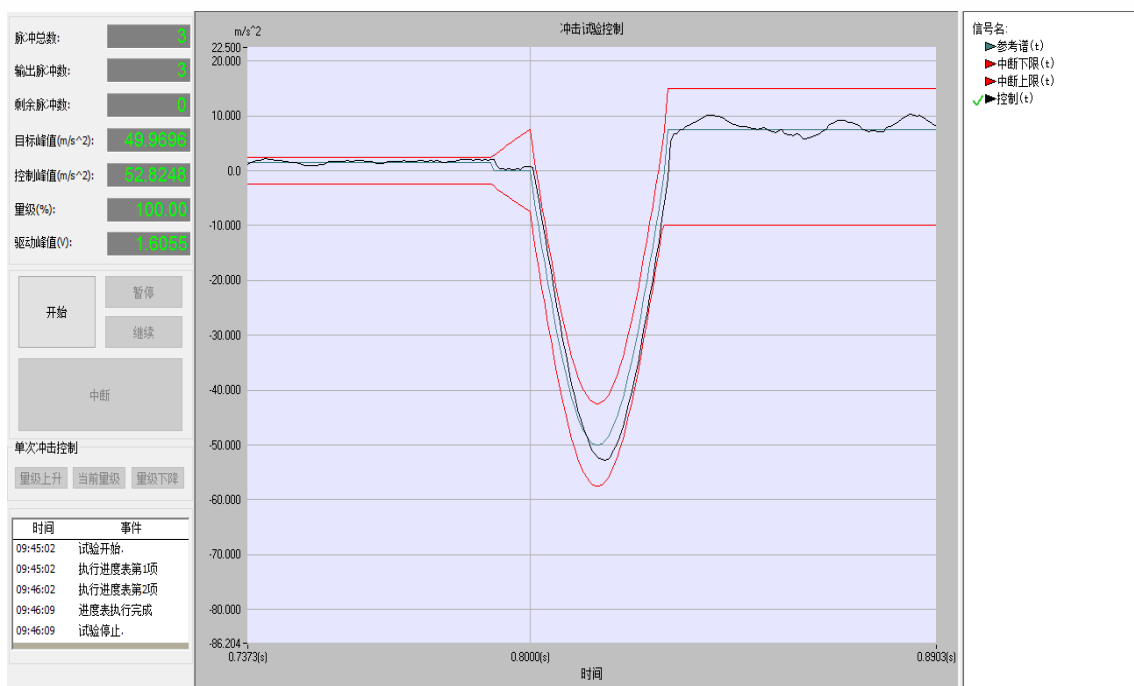
检测报告 Test Report

报告编号 A2200186258101E

第 17 页 共 25 页

Report No. A2200186258101E

Page 17 of 25



检测报告 Test Report

报告编号 A2200186258101E

第 18 页 共 25 页

Report No. A2200186258101E

Page 18 of 25

测试项目 3: 功能振动测试

Test Item3: Functional vibration test

1. 测试设备 Test Equipment

设备名称 Equipment Name	型 号 Model
振动试验机 3T Vibration Machine 3T	ES-30-370

2. 环境条件 Environmental Conditions

温度: 25.0℃; 湿度: 58%RH

Temperature: 25.0℃; Humidity: 58%RH

3. 测试标准 Test Standard: IEC 61373-2010, Category 1-Class B

4. 测试条件 Test Condition

频率 Frequency (Hz)	加速度功率谱密度 ASD (m/s ²) ² / Hz	斜率 Slope (db/Oct)	测试方向 Test direction	测试时间 Test time
5-20	0.0301	/	垂向 Vertical	10min
20-150	/	-6		
5-20	0.0060	/	横向 Horizontal	10min
20-150	/	-6		
5-20	0.0144	/	纵向 Portrait	10min
20-150	/	-6		

检测报告 Test Report

报告编号 A2200186258101E

第 19 页 共 25 页

Report No. A2200186258101E

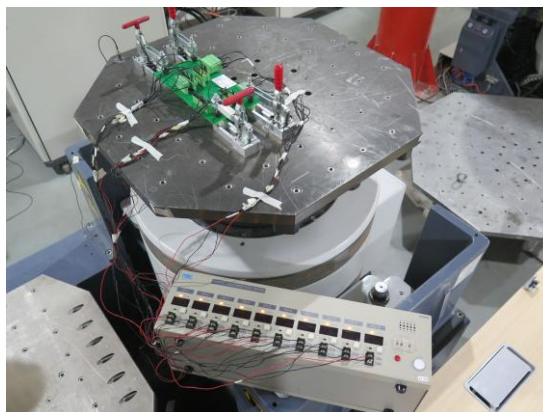
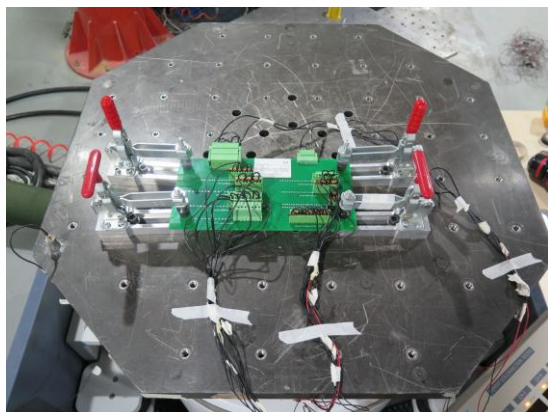
Page 19 of 25

5. 测试结果 Test Result(s)

样品编号 Sample No.	判定依据 Criterion	测试结果 Test Result(s)	结论 Conclusion
A220018625 8101001	试验后产品无机械损坏，试验过程中不能出现大于 $1\mu s$ 电流中断现象。 After the test, the product has no mechanical damage, and no current interruption of more than $1\mu s$ during the test.	测试后，目视检查样品外观无机械损伤。测试中未出现大于 $1\mu s$ 电流中断现象。 After the test, there was no visible mechanical damage on the sample by visual inspection. There was no current interruption of more than $1\mu s$ during the test.	合格 Pass
备注：判定依据由客户提供。Remark: Criterion is supplied by client.			

测试图片

Test Photo(s)



垂向 Vertical

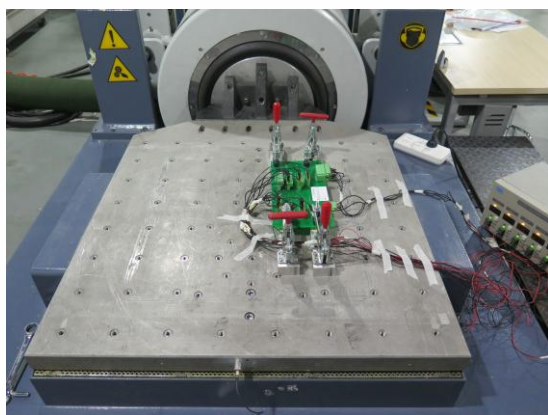
检测报告 Test Report

报告编号 A2200186258101E

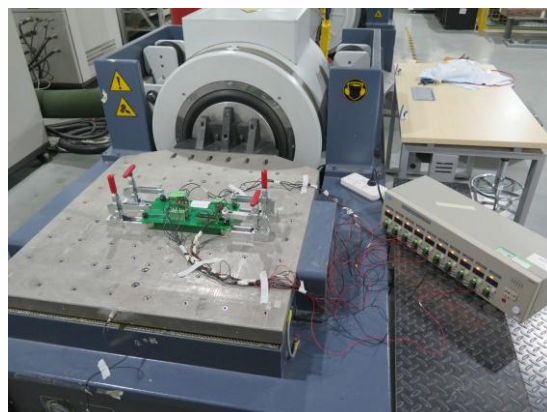
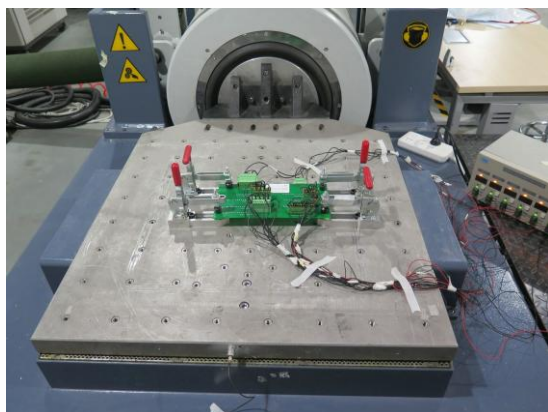
第 20 页 共 25 页

Report No. A2200186258101E

Page 20 of 25



横向 Horizontal



纵向 Vertical

检测报告 Test Report

报告编号 A2200186258101E

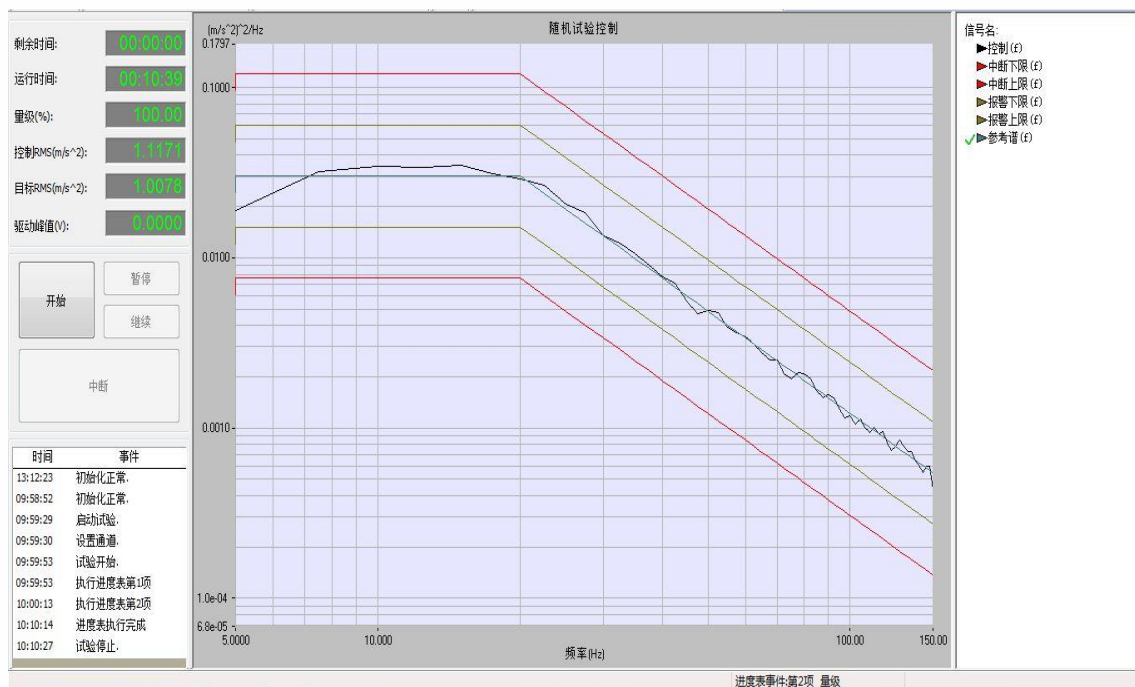
第 21 页 共 25 页

Report No. A2200186258101E

Page 21 of 25

测试曲线

Test Curve



垂向 Vertical

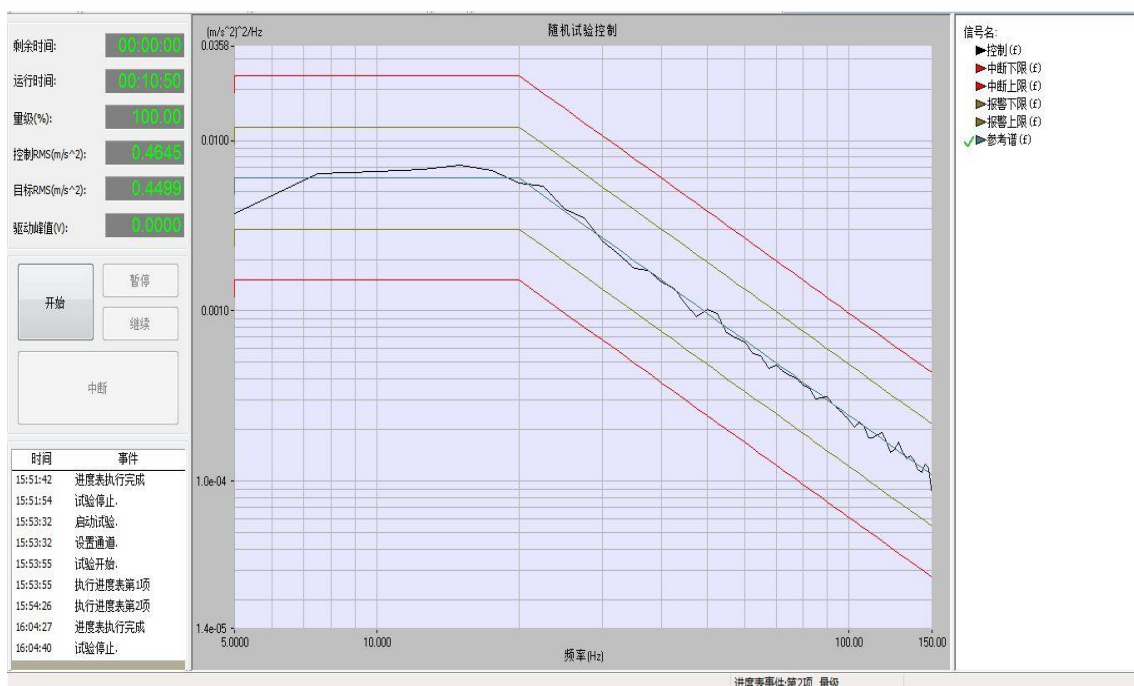
检测报告 Test Report

报告编号 A2200186258101E

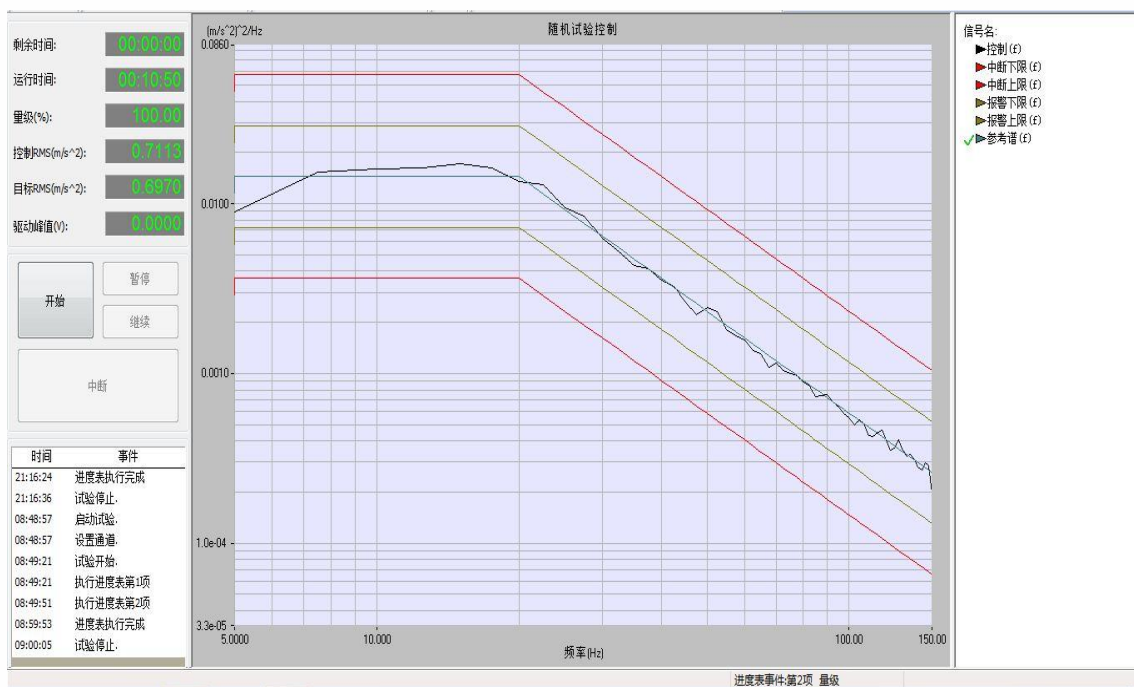
第 22 页 共 25 页

Report No. A2200186258101E

Page 22 of 25



横向 Horizontal



纵向 Vertical

检测报告 Test Report

报告编号 A2200186258101E

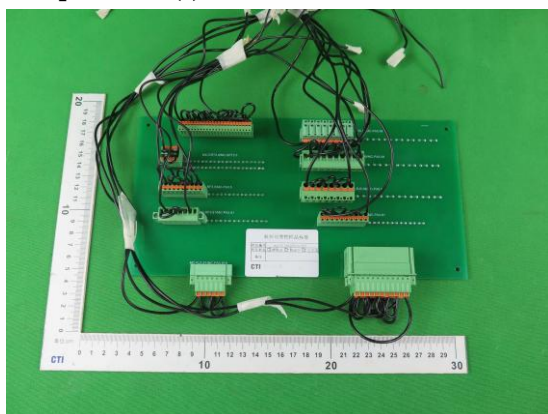
第 23 页 共 25 页

Report No. A2200186258101E

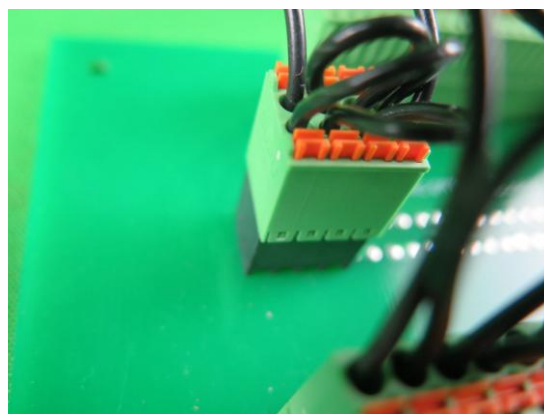
Page 23 of 25

测试后样品图片

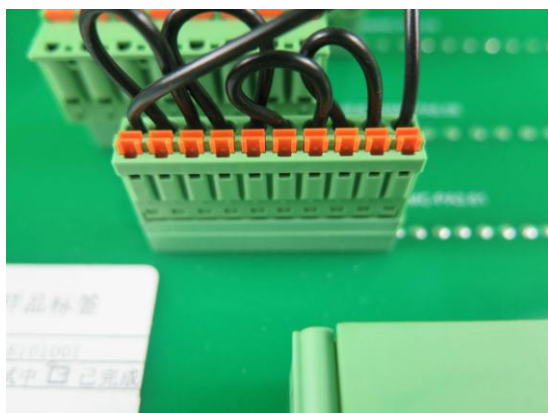
Sample Photo(s) after the test



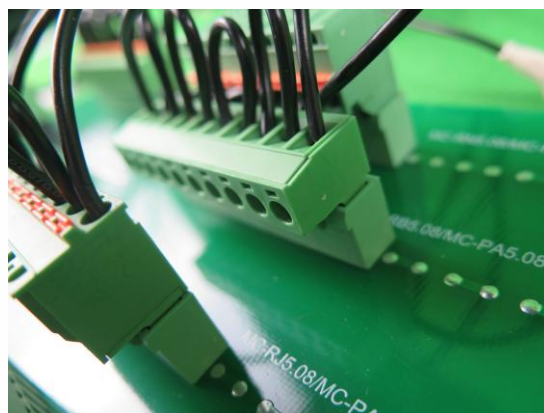
A2200186258101001



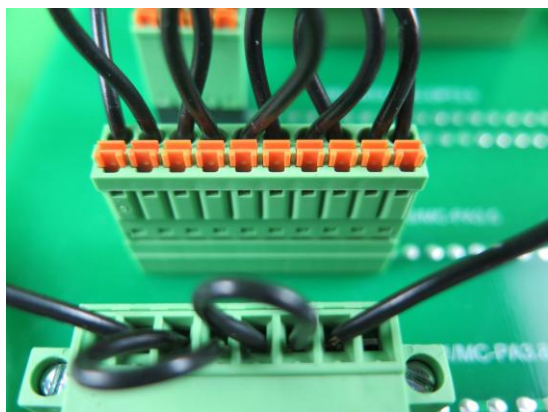
MC-DRT3.5/MC-DPT3.5



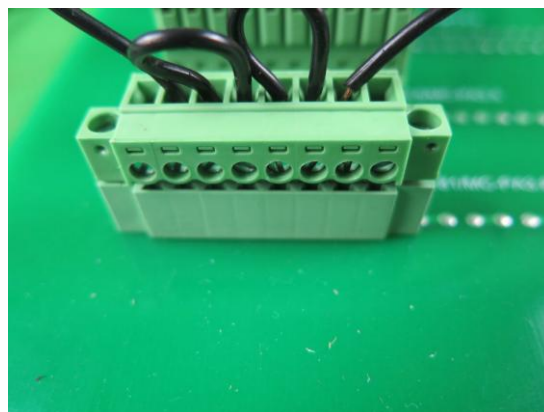
MC-RF3.81/MC-PA3.81



MC-RB5.08/MC-PA5.08



MC-RF3.5/MC-PA3.5



MC-RA3.81/MC-PA3.81

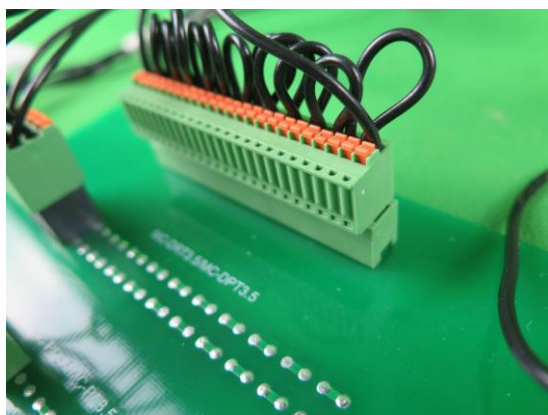
检测报告 Test Report

报告编号 A2200186258101E

第 24 页 共 25 页

Report No. A2200186258101E

Page 24 of 25



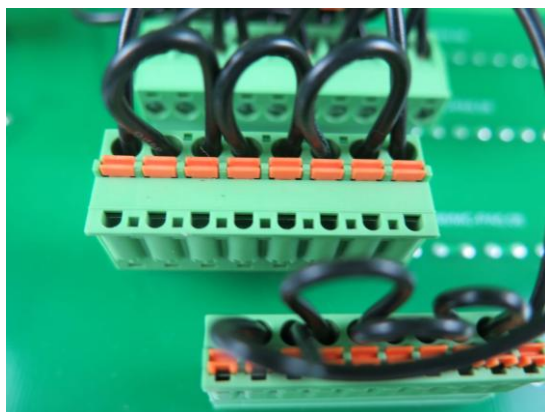
MC-RJ2.5HXXP/MC-PA2.5VXX



MC-RJ3.81/MC-DPA3.81H



MC-RJ3.81/MC-PA3.81H



MC-RJ5.08/MC-PA5.08



MC-RN5.08/MC-PA5.08

检测报告 Test Report

报告编号 A2200186258101E

第 25 页 共 25 页

Report No. A2200186258101E

Page 25 of 25

备注：本报告中的数据结果供科研、教学、企业内部质量控制、企业产品研发等目的用。

Remark: The testing data and result(s) in this report is(are) just for scientific research, education, internal quality control and product development etc.

*** 报告结束 ***

*** End of Report ***

声明：

Statement:

1.检测报告无批准人签字、“专用章”及报告骑缝章无效；

This report is considered invalid without approved signature, special seal and the seal on the perforation;

2.报告抬头公司名称及地址、样品及样品信息由申请者提供，申请者应对其真实性负责，CTI 未核实其真实性；

Company Name and Address shown on Report, 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.本报告检测结果仅对受测样品负责；

The result(s) shown in this report refer(s) only to the sample(s) tested;

4.未经 CTI 书面同意，不得部分复制本报告。

Without written approval of CTI, this report can't be reproduced except in full;

5.如检测报告中的英文内容与中文内容有差异，以中文为准。

In case of any discrepancy between the English version and Chinese version of the testing reports(if generated), the Chinese version shall prevail.