

Declaration of Change in Process – AZ733/AZ733W series

13 July 2015

Dear Valued Customers,

Thank you for your support of our company and trust in our products. Due to difficulties in purchasing components for our dual part epoxy, we have decided to change to a single part epoxy to ensure our ability to supply in a consistent manner.

We have already tested the new single part epoxy and can guarantee that it will not affect performance of the relay. The series affected are the AZ733 / AZ733W series. Please check the relevant test report and evaluations attached.

Note this change will take effect on 30 July 2015. We will be accepting last-time buy orders for a few more days if you would like to create a buffer stock of old-process parts while testing the new-process parts.

Please do not hesitate to contact us if you have any questions or concerns about this change. We apologize for any inconvenience, and we thank you for your cooperation!

Best regards,



Todd La Londe
President
American Zettler, Inc.



VDE-TDAP LAB



UL-CTDP LAB



Testing
CNAS L2946

测试报告

Test Report

2015-A0522A-01-M1

产 品 类 别
Type of sample

功率继电器/Power Relay

样 品 型 号
Part number

AZ733/AZ733W series
HF140FF/005-2HSW

测 试 项 目
Test name

密封试验/Sealing

厦 门 宏 发 电 声 股 份 有 限 公 司 检 测 中 心

Testing Center of Xiamen Hongfa Electronic Acoustic Co., Ltd.

Edition: HFTC-TX-2014/4

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本检测报告仅对来样负责, 部分使用检测报告将被视作无效!

This test report is just valid for samples sent,and part citation will be considered to be invalid.

报告无“试验报告专用章”无效。报告无测试、复核、审批人签字无效!

Test report would only be considered to be valid with stamp of "Special stamp of test report "and with signature of person who perform, check and approve test.

测试报告

Test Report

2015-A0522A-01-M1

任务信息/Mission description

委托客户/Customer: 宁波金海电子有限公司/Ningbo Jinhai Electronics Co Ltd
 委托日期/Date: 2015-05-22
 来样形式/Sample provided by: 委托人送样/Sample from client
 依据标准/Test standard: IEC 61810-7:2006
 测试性质/Test property: 常规测试/Routine testing
 测试目的/Test purpose: 验证双组份胶水与单组份水氟油检漏是否满足要求/Verify the two-component glue and glue component simulation leak test meets the requirements of customers.

样品信息/Sample information

制造厂商/Manufacturer:	宁波金海/Jinhai	宁波金海/Jinhai
样品型号/Part number:	HF140FF/005-2HSW	HF140FF/005-2HSW
产品标准/Product standard:	Q/FVF 4135-2015	Q/FVF 4135-2015
样品数量/Sample quantity:	10	10
样品组别/Sample group:	A	B
样品编号/Sample code number:	E22A-A1 ~E22A-A10	E22A-B1 ~E22A-B10
其它信息/Additional details:	双组份A/B混合胶水 样品编号1-10 Double component A/B mixed glue ,sample number 1-10	单组份胶水5017-P9A+填料混合胶水 样品编号A-J Single component glue 5017-P9A+ filler mixed glue sample number A-J

测试条件/Test conditions

测试方法/Test method: IEC 60068-2-17的试验Qc 方法二/IEC 60068-2-17 Test QC Method 2
 环境条件/Ambient conditions: 环境条件: 氟油温度80℃, 浸入时间5min, 水深(水面到继电器底板)70mm~100mm/Ambient conditions: Fluorine oil temperature 80, immersion time 5min, water depth (surface to relay bottom) 70mm ~ 100mm
 安装方式/Mounting mode: 密封面向上(多个密封面需要单独每一面测试)/Sealed surface up multiple sealed surfaces need to be tested on each side of each side.
 失效判据/Final measurements: 试验任何时刻, 出现明显的连续气泡、两个以上的大气泡或者体积逐渐变大的附着气泡判为泄露, 密封不合格/Failure criteria:the observance at any time during the test of a definite stream of bubbles,of more than two large bubbles,or an attached bubble that grows in size.
 其它要求/Others: /
 测试日期/Test date: 2015-5-26 ~ 2015-5-26
 测试结论/Test conclusion: 合格/Passed
 报告签发日期/Report date: 2015-5-29

拟制 谢克强
 Reported Xie Keqiang
 签名 谢克强

复核 谢松武
 Checked Xie Songwu
 签名 谢松武

批准 谢松武
 Approved Xie Songwu
 签名 谢松武

测试结果

Test Result

2015-A0522A-01-M1

样品型号/Part number: HF140FF/005-2HSW;HF140FF/005-2HSW
 测试项目/Test item: 密封试验/Sealing

测试条件/Test conditions

测试方法/Test method: IEC 60068-2-17的试验Qc 方法二/IEC 60068-2-17 Test QC Method 2

环境条件/Ambient conditions: 环境条件: 氟油温度80℃, 浸入时间5min, 水深(水面到继电器底板)70mm~100mm/Ambient conditions: Fluorine oil temperature 80, immersion time 5min, water depth (surface to relay bottom) 70mm ~ 100mm

安装方式/Mounting mode: 密封面向上(多个密封面需要单独每一面测试)/Sealed surface up multiple sealed surfaces need to be tested on each side of each side.

失效判据/Final measurements: 试验任何时刻, 出现明显的连续气泡、两个以上的大气泡或者体积逐渐变大的附着气泡判为泄露, 密封不合格/Failure criteria:the observance at any time during the test of a definite stream of bubbles,of more than two large bubbles,or an attached bubble that grows in size.

其它要求/Others: /

测试结果/Test result :

样品编号	详细试验情况	备注
DUT No.	Details	Comments
E22A-A1	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A2	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A3	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A4	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A5	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A6	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A7	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A8	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A9	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A10	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)

测试结果

Test Result

2015-A0522A-01-M1

样品型号/Part number: HF140FF/005-2HSW;HF140FF/005-2HSW

测试项目/Test item: 密封试验/Sealing

样品编号 DUT No.	详细试验情况 Details	备注 Comments
E22A-B1	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B2	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B3	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B4	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B5	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B6	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B7	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B8	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B9	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B10	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)

测 试 设 备

Test Equipment

2015-A0522A-01-M1

主要测试设备/Main test equipment

序号/No.	设备名称/Name of equipment	编号/Serial number
1	LT-500检漏仪/Sealing test bath	TC-08817
2	PC-200电子秒表/Electronic stopwatch	EV-05226

说明:所有的仪器设备经认可机构实验室校准或检定合格, 其使用都在校准有效期内

Note: Apparatus and equipments of test are all ratified by approvable organization, these are within period of validity.

---结束/END---

测试报告

Test Report

2015-A0522A-01-MI

任务信息/Mission description


委托客户/Customer: 宁波金海电子有限公司/Ningbo Jinhai Electronics Co Ltd
 委托日期/Date : 2015-05-22
 来样形式/Sample provided by: 委托人送样/Sample from client
 依据标准/Test standard: IEC 61810-7:2006
 测试性质/Test property: 常规测试/Routine testing
 测试目的/Test purpose: 验证双组份胶水与单组份水氟油检漏是否满足要求/Verify the two-component glue and glue component simulation leak test meets the requirements of customers.

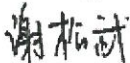
样品信息/Sample information

制造厂商/Manufacturer:	宁波金海/Jinhai	宁波金海/Jinhai
样品型号/Part number :	HF140FF/005-2HSW	HF140FF/005-2HSW
产品标准/Product standard:	Q/FVF 4135-2015	Q/FVF 4135-2015
样品数量/Sample quantity:	10	10
样品组别/Sample group:	A	B
样品编号/Sample code number:	E22A-A1 ~E22A-A10	E22A-B1 ~E22A-B10
其它信息/Additional details:	双组份A/B混合胶水 样品编号1-10 Double component A/B mixed glue ,sample number 1-10	单组份胶水5017-P9A+填料混合胶水 样品编号A-J Single component glue 5017-P9A+ filler mixed glue sample number A-J

测试条件/Test conditions

测试方法/Test method: IEC 60068-2-17的试验Qc 方法二/IEC 60068-2-17 Test QC Method 2
 环境条件/Ambient conditions: 环境条件: 氟油温度80℃, 浸入时间5min, 水深(水面到继电器底板)70mm~100mm/Ambient conditions: Fluorine oil temperature 80, immersion time 5min, water depth (surface to relay bottom) 70mm ~ 100mm
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 其它要求/Others: /
 测试日期/Test date: 2015-5-26 ~ 2015-5-26
 测试结论/Test conclusion: 合格/Passed
 报告签发日期/Report date: 2015-5-29

拟制 谢克强
 Reported Xie Keqiang
 签名 

复核 谢松武
 Checked Xie Songwu
 签名 

批准 谢松武
 Approved Xie Songwu
 签名 

测试结果

Test Result

2015-A0522A-01-M1

样品型号/Part number: HF140FF/005-2HSW;HF140FF/005-2HSW

测试项目/Test item: 密封试验/Sealing

测试条件/Test conditions

测试方法/Test method:	IEC 60068-2-17的试验Qc 方法二/IEC 60068-2-17 Test QC Method 2
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其它要求/Others:	/

测试结果/Test result :

样品编号	详细试验情况	备注
DUT No.	Details	Comments
E22A-A1	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A2	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A3	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A4	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A5	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A6	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A7	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A8	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A9	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-A10	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)

测试结果

Test Result

2015-A0522A-01-M1

样品型号/Part number: HF140FF/005-2HSW;HF140FF/005-2HSW

测试项目/Test item: 密封试验/Sealing

样品编号	详细试验情况	备注
DUT No.	Details	Comments
E22A-B1	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B2	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B3	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B4	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B5	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B6	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B7	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B8	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B9	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)
E22A-B10	测试过程中无气泡产生/No bubbles occur	(80℃, 氟油, 5min)/ (80℃,Fluorine oil,5min)

厦门宏发电声股份有限公司

Xiamen Hongfa Electroacoustic Co., Ltd.



测 试 设 备

Test Equipment

2015-A0522A-01-M1

主要测试设备/Main test equipment

序号/No.	设备名称/Name of equipment	编号/Serial number
1	LT-500检漏仪/Sealing test bath	TC-08817
2	PC-200电子秒表/Electronic stopwatch	EV-05226

说明:所有的仪器设备经认可机构实验室校准或检定合格, 其使用都在校准有效期内

Note: Apparatus and equipments of test are all ratified by approvable organization, these are within period of validity.

---结束/END---

140FF-012-2HSW(310) AZ733/

产品名称Product	140FF AZ733/733W	规格型号Product	140FF-012-2HSW(310) AZ733/733W
试验性质 Test	工艺摸底试验 Technology reliablity test: Leak test		
样品数量 Qty	100 pcs	抽样地点	140FF-Ali
试验日期 Date	1/23/2015		

试验目的：产品双组份改用单组份点胶塑封，验证密封性有无异常。Purpose:Due to the change f

试验内容及步骤（试验项目）Test Description and steps:

1、使用单组份胶水塑封，数量为100只： Use single component glue,qty is 100 pcs.
 (1) 塑封胶采用5017-P9A加云木粉单组份胶水。胶粘剂的固化温度以90℃为基准，控制在85~95℃ component glue which use 5017-P9A add with wood powder. The standard curing temperature
 2、点胶工序确保产品胶量饱满、胶水点到位，产品焙烘后检查胶水是否完全固化。2. Ensure that qualified. In addition, check the solidification of the glue after baking.
) 产品工艺执行，先使用自动真空检漏/再水检80s 3.The leakage is based on the technol then 80 seconds' water test.

二、试验情况记录：Record

三、试验参数记录：

100只单组份胶水塑封产品各工序不良记录见下表：

工序名称 Procedure	生产数量 Qty	不良数量 Unqualified	
底板点胶 Dispensing	100	无 None	单组份点胶（5017-
五大电气 Five Eletrical	100	无None	
真空检漏vacuum leak	100	无None	
水检（80s）80s' Water	100	无None	

试验结论Conclution：本批（310）工艺产品采用单组份点胶，生产过程各工序均无异常，产品密封

报告	周爱龙	日期	1/25/2015	备注
审核	刘三益	日期	1/27/2015	
批准	吴徐兵	日期	1/27/2015	

'733W series

报告编号: 制三2015-001 No. MIII2015-001

33/733W

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rom double component glue to single component glue, we

范围内, 固化时间70~80min。1. The sealing glue use single
is 90° C, the range is 85~95°C, the time is 70~80min.
every procedure in the dispensing is standard and
3、验证产品密封性按 (310
ogy of PN (310), use the automatic vacuum leak detection,

备注 Remark

P9A加云木粉) single component glue(5017-P9A with wood powder)

性按310工艺符合工艺要求, 可批量投产验证。This lot of products

AFFECTED MPNS
AZ733W-2AE-24DE
AZ733W-2A-12DE
AZ733-2C-5DE
AZ733-2C-48DE
AZ733W-2A-24DE
AZ733-2C-12DE
AZ733W-2A-9DE
AZ733-2C-24DE
AZ733W-2A-5DE
AZ733-2C-12DE(206)
AZ733W-2A-12DE-219
AZ733W-2A-6DE
AZ733W-2A-24DE(226)
AZ733-2C-12DE(206)
AZ733W-2A-5DE-214
AZ733-2A-9DE
AZ733-2C-60DE