



浙江珠城科技股份有限公司

ZHEJIANG ZUCH TECHNOLOGY CO., LTD

产品系列
Product Series

刺破端子

文件名称
Document name

产品规格书
Product specification

页码 page

1-6

刺破端子 (MAG-MATE terminal Series)

目录 Index

1. 范围 Scope
2. 产品描述 Product Description
3. 参数范围 Parameter Ratings
4. 产品性能 Performance Specification

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页码 page

2-6

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1、范围 Scope

本规格书规定本公司刺破端子系列产品。

This specification covers the MAG-MATE terminal Series.

2、产品描述 Product Description

产品名称 Product name	规格型号 Part No.	材质 Material	表面处理 Surface
3PIN 刺破 IDC 端子	TP18798H-2/0.28	黄铜 (Brass)	雾锡 (Matte tin)
3PIN 刺破 IDC 端子	TP18798H-2/0.38	黄铜 (Brass)	雾锡 (Matte tin)

3、参数范围 Parameter Ratings

额定电压 Voltage Rating	依据相应的绕组 According to applied winding
额定电流 Current Rating	依据所用的导线尺寸 According to applied wire size
温度范围 Temperature Rating	-40℃ ~ +125℃

4、产品性能 Performance Specification

产品应满足电气, 机械和环境性能要求

根据 EIA-364, 所有试验应在环境条件下进行, 除非另有规定。

The product should meet the electrical, mechanical and environmental performance requirements

As shown in the table All tests shall be performed at ambient environmental conditions per EIA-364 unless otherwise specified



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页码 page

3-6

文件名称
Document name

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4.1 测试项目及条件 Test Content and Conditions

序号 COD	项目 Test project	测试方法及条件 Test methods and conditions	标准规格 standard
4.1.1	外观 appearance	目测 Checking by eye 视力: 1.0 以上 Eyesight: >1.0 照明: (200-300) lx Lamp: (200-300) lx 目测距离: 0.3-0.5m Space: 0.3-0.5m	金属件应无锈蚀氧化、无明显的机械损伤及电镀层脱落等。 Metal parts should no rust and oxidation, no obvious mechanical damage and plating off.
电气特性 Electrical Requirements			
4.1.2	接触电阻 Low Level Contact Resistance	EIA-364-23 将试样置于最大100毫安和最大20毫伏的开路电压下, 见图1 Subject specimens to 100 milliamperes maximum and 20 millivolts maximum open circuit voltage, see figure 1	接触电阻: 5mΩ Max. Contact resistance: 5mΩ Max.
4.1.3	电流循环 Current Cycling	EIA-364-55 在规定电流下, 对试样进行480次15分钟开启和15分钟关闭的循环 Subject specimens to 480 cycles of 15 minutes ON and 15 minutes OFF. Read initially and after final cycles.	外观: 无损伤 Appearance: No Damage
环境特性 Environmental Requirements			
4.1.4	热冲击 Thermal Shock	EIA-364-32 Test Condition III 在-40℃和+125℃之间对试样进行25次循环, 每个极端温度下30分钟, 转换过渡时间小于1分钟 Subject specimens to 25 cycles between -40 and 125° C with 30 minute dwells at temperature extremes and less than 1 minute transition time between temperatures. Measure LLCR initially and after testing	外观: 无损伤 Appearance: No Damage 接触电阻: 10mΩ Max. Contact resistance: 10mΩ Max.



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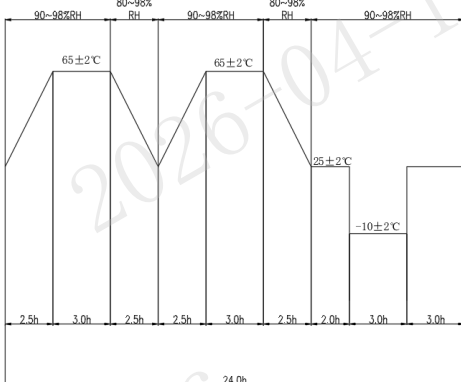
刺破端子

文件名称
Document name

产品规格书
Product specification

页码 page

4-6

4.1.5	温湿度循环 Humidity/temperature cycling.	<p>EIA-364-31 Method III 在80%至100%相对湿度条件下，温度在25℃至65℃，进行10次循环（10天） Subject specimens to 10 cycles (10 days) between 25 and 65° C at 80 to 100% RH. Measure LLCR initially and after testing.</p> 	<p>外观：无损伤 Appearance: No Damage</p> <p>接触电阻：10mΩ Max. Contact resistance:10mΩ Max.</p>
4.1.6	温度寿命 Temperature Life	<p>EIA-364-17 Method A 118℃下33天 Subject specimens to 118° C for 33 days. Measure LLCR initially and after testing</p>	<p>外观：无损伤 Appearance: No Damage</p> <p>接触电阻：10mΩ Max. Contact resistance:10mΩ Max.</p>

备注：应符合外观要求，无物理损伤，并满足附加要求，测试顺序符合 4.2

NOTE: Shall meet visual requirements, show no physical damage, and meet requirements of additional, Test Sequence shown in 4.2



文件名称

Document name

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4.2 测试分组 Test Sequences

NO.	项目 Item	测试顺序 TEST SEQUENCE		
		A	B	C
1	产品初检 Initial Examination of Product	1	1	1
2	接触电阻 Low Level Contact Resistance	2, 4, 6		2, 4
3	电流循环 Current Cycling		2	
4	热冲击 Thermal Shock	5		
5	温湿度循环 Humidity/Temperature Cycling	3		
6	温度寿命 Temperature Life			3

4.3 测试条件 Test Conditions

除非另有规定，否则所有组合实验应在下列条件下进行。

Unless otherwise specified, all the tests shall be performed in any combination of the following test

室温 Temperature	15°C- 35°C
相对湿度 Relative Humidity	45%-75%
大气压 Atmospheric Pressure	86.6-106.6 kPa

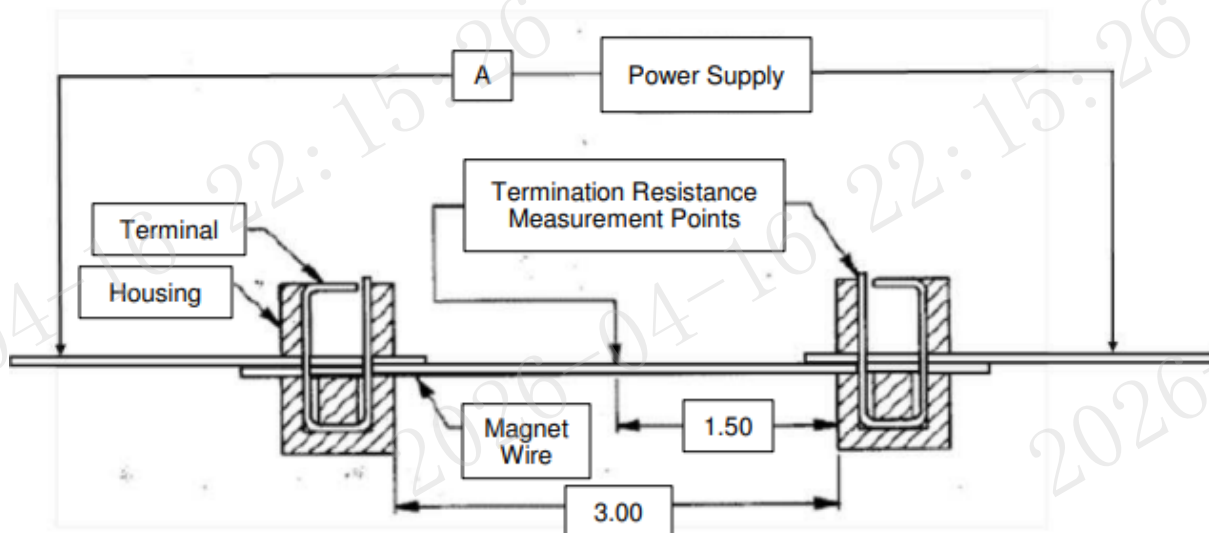
4.4 样品准备 Sample preparation

每个试验组至少应包括 5 个试样

Each test group shall consist of a minimum of 5 specimens.



双线模式(图 1)



电流、电阻要求 (图 2)

Current, Resistance (Figure2)

Wire Size (AWG [mm])†	Current Cycling				Temperature Life Humidity/Temperature Thermal Shock	
	Copper		Aluminum		Copper	Aluminum
	Resistance (milliohms max)	Test Current (amperes) See Note	Resistance (milliohms max)	Test Current (amperes) See Note	Resistance (milliohms max)	
17 [1.15]	1.4	22.0	2.9	15.0	1.1	2.2
18 [1.02]	1.8	20.0	3.6	13.5	1.4	2.8
19 [0.91]	2.2	18.0	4.4	12.0	1.7	3.4
20 [0.81]	2.7	16.0	5.5	11.0	2.1	4.2
21 [0.72]	3.5	14.0	7.0	9.5	2.7	5.4
22 [0.64]	4.3	12.5	8.6	8.5	3.3	6.6
23 [0.57]	4.6	11.0	9.1	7.5	3.5	7.0
24 [0.51]	5.7	9.5	11.4	6.5	4.4	8.8
25 [0.45]	7.2	8.0	15.9	5.5	5.5	12.2
26 [0.40]	9.1	7.5	18.2	5.0	7.0	14.0
27 [0.36]	11.4	6.0	22.8	4.0	8.8	17.6
28 [0.32]	14.4	5.0	28.9	3.5	11.1	22.2
29 [0.29]	18.0	4.5	36.0	3.0	13.8	27.7
30 [0.25]	23.0	3.5	46.0	2.3	17.7	35.4
31 [0.23]	29.1	2.0	58.2	1.3	22.4	44.7
32 [0.20]	36.0	1.5	72.0	1.0	27.6	55.4
33 [0.18]	45.7	1.0	91.5	0.7	35.2	70.4
34 [0.16]	58.0	0.5	116.0	0.35	44.4	88.9