1. Scope 适用范围

This specification applies to the MEDICAL TREATMENT CONNECTOR XTY-5P-010 此规格适用于试纸连接器 XTY-5P-010

2. Outline and dimension 外型尺寸

As shown in the applicable drawing 见附图所示

3. Components and material 零件材料

As shown in the applicable drawing 见附图所示

4. Applicable plug 适用试纸插片

Applicable part 适用部件	Applicable plug 适用插头
MEDICAL TREATMENT CONNECTOR	标准试纸

5.Electrical performance 电气性能

No.序号	Item 项目	Condition 条件	Specs 规格	Remark 备注
5.1	Rating 额定规格	With resistive load 阻抗负荷	30V DC 1A	
5.2	Contact resistance 接触电阻	Measure according to Table-1 attached 按附表1-1 测量	50mΩ Max.	
5.3	Insulation resistance 绝缘电阻	Apply voltage in terms Of Table 1-2 attached 按照附表 1-2 测量	100MΩ Min.	
5.4	Dielectric strength 耐电压	AC 500V for 1min AC 500V 作用1 分钟	There are no abnormalities，No damage. 无异常，无损伤.	
		Apply voltage in terms of Table 1-3attached 按照附表1-3 测量		

6. Mechanical performance 机械性能

No.序号	Item 项目	Condition 条件	Specs 规格	Remark 备注
6.1	Insertion and 插入力	in terms of Table 1-4attached 按照附表1-4 测量	插入力：60-250gf	
6.2	Durability 耐插拔	in terms of Table 1-7attached 按照附表1-5	Mated and unmated 5000 cycles Contact 插拔5000 次	

7.Mislaneous test performance 试验性能

No.序号	Item 项目	Condition 条件	Specs 规格	Remark 备注
7.1	Life test 寿命测试	In terms of attached Table 1-6. 按照附表1-6。	Insertion force 、Withdrawal force In terms of Item6.1. But, contact resistance should be 100mΩ Max. 插入力按项目6.1 要求 但接触电阻应低于100 mΩ。	

No.序号	Item 项目	Condition 条件	Specs 规格	Remark 备注
7.2	Withstand Humidity 耐湿试验	In terms of attached Table 1-7. 按照附表1-7。	Item5 and Item6 should be met。 But, contact resistance should be 50mΩ Max. 应满足5 项和6 项的要求，但接触电阻应低于50 mΩ。	
7.3	Withstand Heat 耐热试验	In terms of attached Table 1-8. 按照附表1-8。	Item5 and Item6 should be met。 But, contact resistance should be 50mΩ Max. 应满足5 项和6 项的要求，但接触电阻应低于50 mΩ。	
7.4	Withstand cold 耐寒试验	In terms of attached Table 1-9. 按照附表1-9。	Item5 and Item6 should be met。 But, contact resistance should be 50mΩ Max. 应满足5 项和6 项的要求，但接触电阻应低于50 mΩ。	
7.5	Composite temperature/humidity cyclic test 高低温循环试验	In terms of attached Table 1-10. 按照附表1-10。	Item5 and Item6 should be met。 But, contact resistance should be 50mΩ Max. 应满足5 项和6 项的要求，但接触电阻应低于50 mΩ。	
7.6	Salt mist test 盐雾试验	In terms of attached Table 1-11. 按照附表1-11。	Item5 and Item6 should be met。 But, contact resistance should be 100mΩ Max. 应满足5 项和6 项的要求，但接触电阻应低于100 mΩ。	
7.7	Solder heat resistance test 耐焊接热试验	In terms of attached Table 1-12 按照附表1-12。	Item5 and Item6 should be met。No Obvious damage on appearance and Structure. But, contact resistance should be 50mΩ Max. 应满足5 项和6 项的要求。外观和结构无明显损坏。但接触电阻应低于50 mΩ。	
7.8	Solder-ability 可焊性试验	In terms of attached Table 1-13 按照附表1-13。	Min.90% of dipped portion of the terminal shall be covered with the solder. 浸渍部分90%以上应有焊锡	

8.Other

When the amendment of this specification comes into necessity, the amendment must be made consultation and agreement between manufacturer and customer.
当规格书需要修正时，需客户同厂方共同确认。

9.Test state 试验状态

Unless otherwise specified，measurement is undertaken under 除非另行指定，在5～35℃的温
the conditions of temperature （5～35℃），humidity（45-85%） 度及86-106Kpa 的大气压下进行
and atmospheric pressure（86-106Kpa），

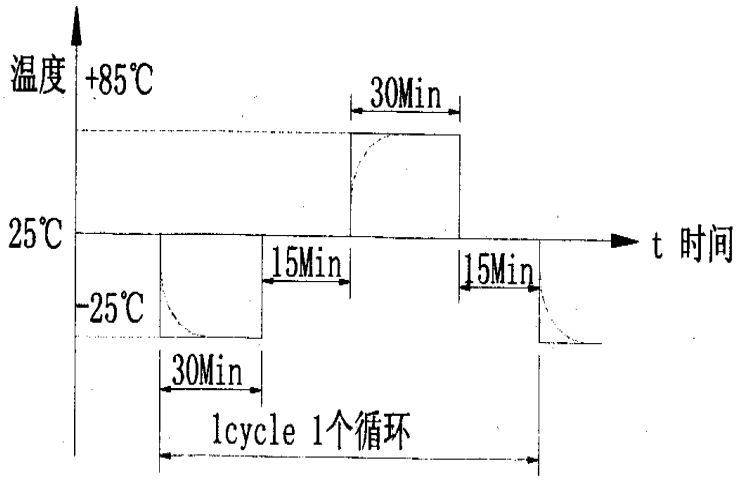
10.Applicable and storage temperature range 应用温度范围及保存温度范

Applicable temperature range：-25～85℃ 应用温度范围：-25～85℃
Storage temperature range：-40～85℃ 保存温度范围：-40～85℃

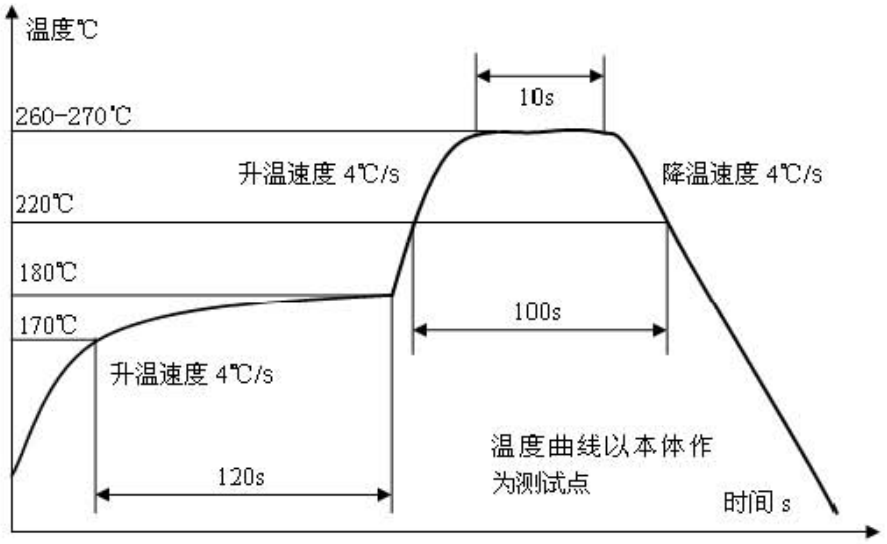
Attached Table 1　　附表1

Test conditions (Measurement conditions)　　测试方法

No.序号	Test item 试验项目	Conditions 条件
1-1	Contact resistance 接触电阻	Measure the contact resistance in terms of 30m V / 1m A.（When using one plug into it for measurement，the acid-treated coating of plug should be removed.）用30m V / 1m A 测量。（当用插头插入进行测量时，除去插头表面的酸化镀层）
1-2	Insulation resistance 绝缘电阻	Apply voltage to measure between each pair of conductors·DC 500V 在不接触的导体间，加电压DC 500V 进行测量。
1-3	Dielectric strength 耐电压	Apply AC 50 Hz or 60 Hz to measure between conductors. 在不接触的导体间用50Hz 或60Hz 的电压进行测量。
1-4	Insertion Force 插入力	Properly fix the plug into the Insertion & withdrawal Force work packs, Measure the insertion and withdrawal force through tenderly inserting and withdrawing the jack (socket). 适当的将试纸插片固定在插拔力工装上，轻轻的插拔插口（插座）来进行插拔力的测量。
1-5	Durability 耐插拔	Mated and unmated 5000 cycles，Contact resistance after test : 100mΩ(Max.)。 插拔5000次后，接触电阻应小于100mΩ。
1-6	Life test 寿命测试	Do the tests below at the speed of 30 cycles per minute. But test plug（made in steel or other material）will become heat due to friction，the movement section is added glues (equivalent to organic chemistryG40H)in order to prevent friction and wear. 以每分钟30次的速度做如下测试。但试验用插头(钢制或其他材料)会由于磨擦发热，在动作部分涂上胶水（相当于有机化学中的G40H）以防止磨损。 Pin jack ： 5000 cycles without load. 插口无负荷5000 次。
1-7	Withstand Humidity Test 耐湿试验	Keep it in the temperature and humidity ever-constant chamber of 40℃±2℃，95%RH for 96 hours，then take it out and remove the water drops，then，after placing it 1～2 hours on the atmospheric conditions，go to test. 在40℃±2℃， 95%RH 的恒温恒湿试验箱中放置96 小时，取出后去水滴，在常温常湿条件下放置1～2 小时后进行测量。

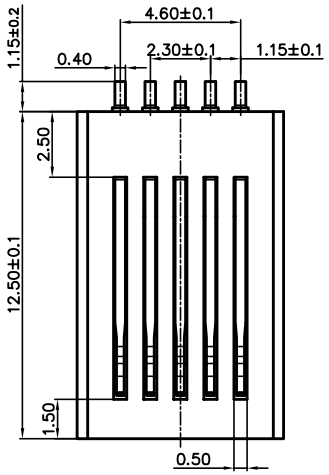
No.序号	Test item 试验项目	Conditions 条件
1-8	Withstand Heat Test 耐热试验	Keep it in the temperature and humidity ever-constant chamber of 85℃±3℃, for 96 hours, then take it out and remove the water drops, then after placing it 1～2 hours on the atmospheric conditions, go to test. 在85℃±3℃的恒温恒湿试验箱中放置96 小时，取出后去水滴，在常温常湿条件下放置1～2 小时后进行测量。
1-9	Withstand Cold Test 耐寒试验	Keep it in the temperature and humidity ever-constant chamber of -25℃±2℃, for 96 hours, then take it out and remove the water drops, then after placing it 1～2 hours on the atmospheric conditions, go to test. 在-25℃±2℃的恒温恒湿试验箱中放置96 小时，取出后去水滴，在常温常湿条件下放置1～2 小时后进行测量。
1-10	Composite temperature/humidity cyclic test 高低温循环试验	5 cycles of following test. 5个循环的下列试验。 Keep it in the temperature 85±2℃ 30 min， 在温度为85±2℃箱内保持30 分钟， Keep it in the temperature -25±2℃30 min， 在温度为-25±2℃箱内保持30 分钟 Conversion transition temperature 25℃、time 15 min. After connector be left alone for 24 hours under the conditions of normal temperature and humidity, measure it. 转换过渡温度25℃，时间15分钟。试验后，产品应单独置于室温下放置24小时进行测试。 
1-11	Salt spray test 盐雾试验	Salt density: 5% Temperature : 35±2℃盐水浓度：5% 温度：35±2℃ After keeping in above surrounding for 24 hours, take it out and keep it in the standard atmospheric condition, then remove the foreign matters adhered and measure. Request the metal have no oxidization and rust. 保持在上述环境中24 小时后，取出放在标准大气条件下，去掉粘附的东西，进行测量,所有金属件不得发生氧化、生锈.

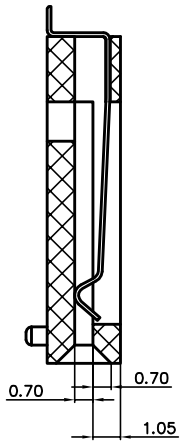
No.序号	Test item 试验项目	Conditions 条件
1-12	Soldering heat resistance 耐焊接热	Test step: Put the specimens′ body that distance from the solder surface 3～5mm, and the solder temperature is250±5℃.The samples must be cover by a box. We used a thermometer to measure the temperature that distance from the top of samples 2～3mm, the temperature must achieve 120±2℃ for 120±2 seconds; After per-heating, immediately immerse the specimen in the bath set at 250±5℃ from the terminal to the body 1.5～2.0mm,for a duration of 10±0.5 seconds. 测试步骤：将样品本体水平置于锡温为250±5℃的焊锡表面上方3～5mm 处，用箱体将样品罩住，使用温度计确认箱体内靠近样品本体上方约2～3mm 处环境温度达到120±2℃，维持120±2 秒；预热后，立即将样品的引脚距本体1.5～2.0mm 以下部分浸入锡温为250±5℃的锡炉中，维持10±0.5 秒； Judgments：After testing the sample, inspect the surface of samples and joint of pin with a 40× or more microscope, phenomena of crack is not allowed; The intensity of terminal must meet to specification; and plastic parts should show no any break, distortion, change colors, fragile etc. The paint of PCB or others Component have no change of colors, brush off, burn etc. 判定：测试过的样品，表面用40倍以上的放大镜观察零件的包封、引脚接合处，不得有出现破裂现象；引脚强度符合规格书定义要求；零件的塑胶部分不得发生破裂、变形、变色、变脆等现象；PCB 及其它零件的油漆部分不得发生变色、脱落、烧焦等现象。测试过的样品，电气参数变化必须符合规格书定义；
1-13	Solder-ability 可焊性	The samples, terminals should be immersed in the flux (recommend use:YONO-6810)for 2.5±0.5 seconds, the immersion depth of terminals below their body of 1.5～2.0mm.After that, the terminals should be immersed in the solder bath set at 235±5℃, for a duration of 2.5±0.5 seconds .Then, move them out of solder bath. Inspect all immersed terminals, if the wetted area is uniform and smooth, and newly wetted area compare immersed area is more than 90%; Now we can judge component, solder ability is OK. 将样品的引脚浸入助焊剂（推荐使用优诺-6810 型号）中维持2.5±0.5 秒，浸入焊锡的引脚长度为距本体1.5～2.0mm 以下部分。将样品引脚距本体1.5～2.0mm 以下部分浸入锡温为235±5℃的锡炉中，维持2.5±0.5秒后取出。引脚焊锡面均匀、光滑、沾锡面积≥90%， NOTE: Composition of solder:96.5%Sn+3.0%Ag+0.5%Cu 注： 可焊性测试用的焊锡成分：96.5%Sn+3.0%Ag+0.5%Cu

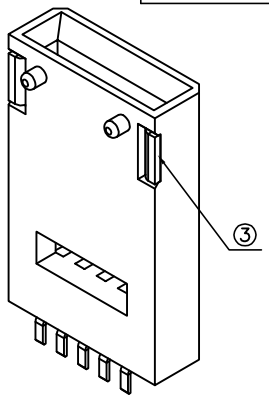
No.序号	Test item 试验项目	Conditions 条件
1-14	The temperature of the reflow soldering回流焊制程温度	

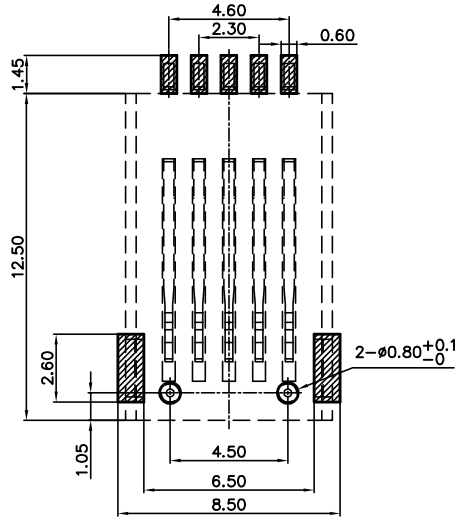
RoHS

ECN NO.	REV	DATE	DESCRIPTION	CHANGE	CHECK	APPRO

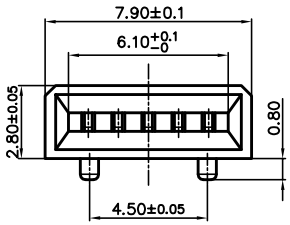


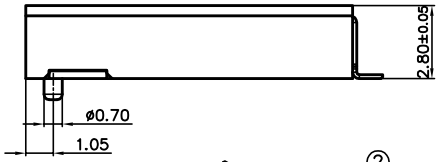


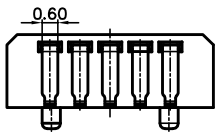


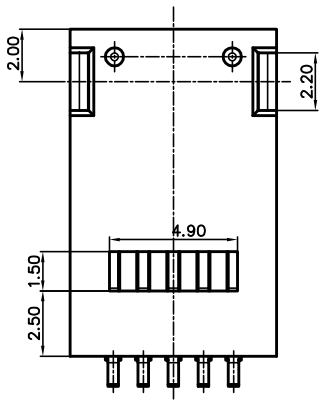


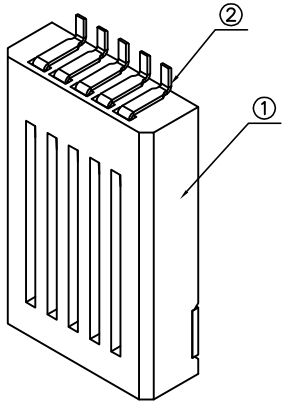
PCB Layout Diagram
Top View











1.接触针用北京磷铜 镀金
2.焊片用黄铜 镀镍锡
3.基座用PA9T

NO.	PART NAME	Q'TY	MATERIAL	PLATING & COLOR
③	HOOK	2	BRASS T=0.3	NiSn Plating
②	TERMINAL(+)	5	PHOSPHOR BRONZE,T=0.15mm	Au (1U") Plating
①	HOUSING	1	PA9T	BLACK

UNLESS OTHERWISE SPECIFIED TOLERANCES

DECIMALS: ANGLES:
X :±0.30 X :±1°
X.X :±0.25 X.X:±0.5°
X.XX :±0.20
X.XXX:±0.10

WEIGHT:

SHEET 1 OF 1

宏端电子（东莞）有限公司

DSND	LQ.HUANG	DATE	2019-09-24	TITLE: XTY JACK
CHKD		DATE		
APVD	XY.XUE	DATE	2019-09-24	PART NO.: XTY-5P-010
SCALE:	SIZE:A4	VIEW:		
UNIT:mm	REV.:A/0	OBJECT:MY		DRAW NO.:MY-CP-****