

## 承认书

Approval Sheet

客户 (Customer): /

客户料号 (Cus .P/N): /

华联威料号 (HLW P/N): JK1-123-C818

品名规格 (PronameSpec): DC Jack (9.6\*7.1\*11.5)

送样日期 (Delivery Date): 2022/08/04

承认日期 (Acknowledge Date): 2022/08/04

Approved No:		客 户 Customer	
采 购 部 Purchasing Dept	品 质 部 QC Dept	工 程 部 Engineering Dept	确 认 Approved By
深 圳 市 华 联 威 电 子 科 技 有 限 公 司 SHEN ZHEN SHI HUA LIAN WEI ELECTRONICS TECHNOLOGY CO; LTD.			
业 务 部 Sales Dept	品 管 部 QC Dept	工 程 部 Engineering Dept	核 准 Checked By
陈虹熹	欠必锋	杨桂锋	唐竹君

地址: 深圳市龙华区观澜街道桂香社区观澜桂花路 307 号

TEL: 0755-28888886 28888866

邮箱: hua@hlwconn.com

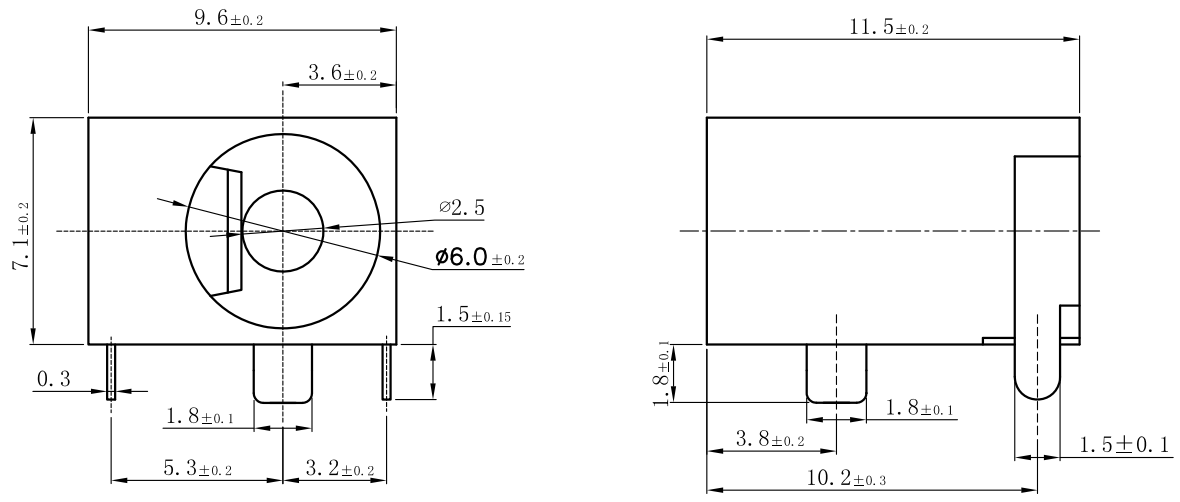
[Http://www.hlwconn.com](http://www.hlwconn.com)

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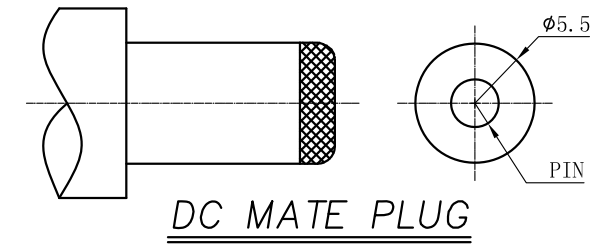
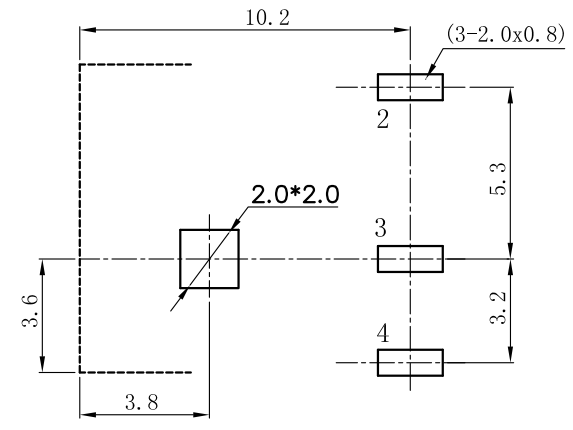
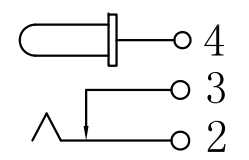
REV.	ECN.NO.	APPD.
A	/	Hexing



1. CURRENT RATING : 1.0 AMP. MAX.
2. DIELECTRIC WITHSTANDING : AC 500V/min R.M.S.
3. INSULATION RESISTANCE : 100MΩ min. AT 100V DC.
4. CONTACT RESISTANCE : 50mΩ MAX.
5. OPERATING TEMPERATURE : -25° C TO +85° C.
6. DURABILITY : 1500 CYCLES.
7. MATING FORCE : 3kgs MAX
8. UNMATING FORCE : 0.3~3.0kgs
9. MAX PROCESSING TEMPERATURE :  
60 SECONDS IN 230° C AND 10 SECONDS IN 260° C

P.C.B LAYOUT TOP VIEW

SCHEMATIC



PIN	φ 1.65	φ 2.0	φ 2.35	φ 2.5
APPD				✓

序号	名称	材料	数量	镀层/颜色	备注
1	2号脚	磷铜=0.3	1PCS	Ag	
2	3号脚	黄铜=0.3	1PCS	Ag	
3	4号脚	黄铜=0.3	1PCS	Ag	
4	PIN	黄铜=2.5	1PCS	TX	
5	塑料座	PA9T	1PCS		

TOLERANCE UNLESS OTHERWISE SPECIFIED		<b>HLW</b> 深圳市华联威电子科技有限公司				
.XXX ±0.10	.XX ±0.20	.X ±0.30	X' ±3'	.XX' ±2'	HUA LIAN WEI TECHNOLOGY ELECTRONICS CO;LTD.	
APPROVED		PART NAME:	DC Phone Jack (9.6*7.1*11.5), PA9T 黑色, 镀银, 中心轴2.5			
CHECKED		PART No:	JK1-123-C818		C	
DRAWN	leixianqiang	PROJECTION:	UNIT:	SCALE:	SHEET:	
DATE	2015.06.02		mm	1:1	10F1	
					REV. A	

TEST ITEM		REQUIREMENT	PROCEDURE
1	Examination of Product	Meets requirements of product drawing. No physical damage.	Visual inspection.
2	Operating Temperature	-25°C to 85 °C	
3	Storage Temperature	-25°C to 85 °C	
<b>ELECTRICAL REQUIREMENT</b>			
4	Rating Voltage	12VAC max	on any signal pin with respect to the shield
5	Rating Current	1.0 A per contact	55°C ,maximum ambient 85°C ,maximum temperature change (ANSI/EIA 364-70,TP-70)
6	Contact Resistance	[50] m Ohm Max	Subject mated contacts assembled in housing to 20mV Max open circuit at 100mA Max. EIA-364-23.
7	Dielectric withstanding Voltage	No flashover ,no creeping discharge, no breakdown	500 VAC for 1 minute between adjacent terminals. EIA 364-20
8	Insulation Resistance	[100 ] M Ohm Min.	Mated connector with a voltage of 500V DC for 1 minutes between adjacent terminals EIA 364-21
9	Temperature Rising	30°C Max. Under loaded rating current	Contact series-wired, apply test current of loaded rating current to the circuit, and measure the temperature rising by probing on soldered areas of contacts, after the temperature becomes stabilized deduct ambient temperature from the measured value.
<b>Mechanical Requirement</b>			
10	Connector Mating Force	<u>3.0 kgf Max</u>	Mating the connector with standard audio plug at a rate of 12.7 mm per minute EIA 364-13
11	Connector Unmating Force	<u>0.30~3.0 kgf</u>	Unmating the connector with standard audio plug at a rate of 12.7 mm per minute EIA 364-13

12	Durability	Visual Inspection-No physical damage LLCR-50 mΩ max per contact initial,100 mΩ after 1500 insertions.	Insertion and extraction with plug up to 1500 cycles at a maximum rate of 200 cycles per hour. EIA 364-09
13	Vibration	No discontinuity at 1 μs or longer(each contact) when continuity is tested per ANSI/EIA-364-46	ANSI/EIA-364-28,Condition III,Method 5A,15 minute/axis
14	Mechanical Shock	No discontinuity at 1 μs or longer(each contact) when continuity is tested per ANSI/EIA-364-46	ANSI/EIA-364-27 Condition A(specified pulse)
15	Solder ability	At least 95% of the immersed area shall be covered with new solder	1)Temperature of fused solder: 245+5°C. 2)Dipping time:5+0.5s EIA 364-52

### Environmental Requirements

16	Resistance to Solder Heat	Forming resin shall not be distorted, and terminations shall not be separated.	1) Depth of dipping termination: the distance between the mounting surface and solder surface shall be 1 mm to 2mm. 2)Temperature:245+5°C. 3) Dipping time:10+1s Socket EIA 364-56
17	Thermal Shock	No physical damage to the samples and LLCR-50 mΩ max per contact	Mated connectors exposed to 10 cycles between - 55°C to 85°C, 30 minutes duration at both temperature extremes EIA 364-32
18	Steady State Humidity	No physical damage to the samples and can pass the Dielectric Withstanding Voltage & Insulation Resistance	Expose mated connectors to a temperature of 40±2°C with relative humidity of 90-95% for 168 hours Min(seven complete cycles). Remove surface moisture and air dry for 24 hours. prior to measurement. EIA 364-31
19	Temperature Life (Heat Aging)	[100 ] M Ohm Min. (insulation resistance) 30 m ohms Max (contact resistance)	ANSI/EIA-364-17 Condition 4 105°C for 250 hours,Method A,mated
20	Salt Spray	Visual Inspection-No physical damageLLCR-50 m Ω max per contact	Mated connector expose to 5% salt concentration for 12 hours at temperature 35+2 °C.After the test specimens shall be washed with running water and dried naturally EIA 364-26
21	Colour	Colour Atla	284C(Blue) 577C(Green) 701C(Red)
22	Plating	Contact: <u>Cu:40u",Sn:40u",Ni:40u"</u> Shell: <u>Cu:40u",Ni:40u"</u> Ground: <u>Cu:40u",Ni:40u",Sn:40u"</u>	/

### Product Qualification and Requalification test

Test or Examination	Test Group									
	A	B	C	D	E	F	G	H	I	J
	Test Sequence ( a )									

Examination of Product	1, 7	1, 9	1, 6	1, 5	1, 5	1, 5	1, 5	1, 3	1, 3	1, 3
Contact Resistance		2, 8	2, 5	2, 4	2, 4	2, 4	2, 4			
Dielectric withstanding	3, 6									
Insulation Resistance	2, 5									
Temperature Rising								2		
Mating Force		3, 7								
Unmating Force		4, 6								
Durability		5								
Vibration			3							
Mechanical Shock			4							
Solderability										2
Resistance to Soldering									2	
Thermal Shock				3						
Humidity Temperature	4				3					
Temperature Life						3				
Salt Spray							3			
備注	無客戶指定增加測試項目外，依照此標準進行產品可靠性評估。									

核准：唐竹君

制作人：覃裕华



3	Cold test	Temperature: -25 ±3°C Duration:168H	PROGRAM CONTROLLED TEMP. & HUMIDTY CHAMBER	No physical damage	Pass	Pass	Pass	Pass	Pass	P	
4	Temperature cycling test	Temperature:85 ~-25°C Duration:5 cycle	PROGRAM CONTROLLED TEMP. & HUMIDTY CHAMBER	No physical damage	Pass	Pass	Pass	Pass	Pass	P	

**四.物理測試 PHYSICAL TEST**

序 號 NO.	測試項目 Testing Item	測試條件 Testing Conditions	測試設備 Testing Equipment	規格 SPEC	測試記錄 Testing Result					判定 Judge	
					1	2	3	4	5	Pass	Fail
1	Salt spray test	Temperature: 35±2°C Concentration:5±1 %Duration:12H	SALT SPRAY TESTER	No Oxidation	Pass	Pass	Pass	Pass	Pass	P	
2	Resistance to soldering heat test	Temperature: 260±5°C Duration:10±1sec	OVEN	No physical damage	Pass	Pass	Pass	Pass	Pass	P	
3	Solder ability test	Temperature: 260±5°C Duration:5±0.5 sec	CONTROLLED CONSTANT-TEMP SOLDER POT	Soldering area ≥95□	Pass	Pass	Pass	Pass	Pass	P	
判定 Result		<input checked="" type="checkbox"/> 合格 (ACCEPT) <input type="checkbox"/> 不合格 (REJECT)									

核准(Approver): 欠必峰

測試(Tester): 但芬



## 檢驗報告

首件檢驗 入庫檢驗 出貨檢驗 客退檢驗 退料檢驗 其他

2022年8月4日 版次:A1

料號	JK1-123-C818		制令單號	/		送檢單位	工程		首件製作者	裝配			
品名	DC Jack (9.6*7.1*11.5)		客戶代號	/		批 量	/		送檢時間	/			
						數 量	5PCS		確認時間	/			
抽樣標準			<input checked="" type="checkbox"/> 單次 <input type="checkbox"/> 雙次			抽樣數	AQL	CRI:0	MAJ:0.4	MIN:0.63			
MIL-STD-105E(II)			<input checked="" type="checkbox"/> 正常 <input type="checkbox"/> 加嚴 <input type="checkbox"/> 減量			( 5PCS )	ACC/REJ	0	/	/			
不良數:			CRI ( / )			MAJ ( / )			MIN ( / )			不良率(%)	/
NO.	檢驗項目 單位:MM/G	檢測 儀器	檢 驗 記 錄					品管判定		CRI	MAJ	MIN	備注
			1	2	3	4	5	AC	RE				
尺 寸 測 量	9.6±0.20	D	9.52	9.54	9.56	9.58	9.60	✓					
	3.6±0.20	D	3.53	3.55	3.57	3.59	3.61	✓					
	7.1±0.20	D	7.01	7.03	7.05	7.07	7.09	✓					
	2.5±0.30	D	2.44	2.46	2.48	2.50	2.52	✓					
	6.0±0.20	D	5.88	5.90	5.92	5.94	5.96	✓					
	1.8±0.10	D	1.77	1.79	1.81	1.83	1.85	✓					
	5.3±0.20	D	5.23	5.25	5.27	5.29	5.31	✓					
	3.2±0.20	D	3.16	3.18	3.20	3.22	3.24	✓					
	1.5±0.15	D	1.41	1.43	1.45	1.47	1.49	✓					
	0.3±0.30	D	0.26	0.27	0.28	0.29	0.30	✓					
	11.50±0.20	D	11.42	11.44	11.46	11.48	11.50	✓					
	3.8±0.20	D	3.75	3.77	3.79	3.81	3.83	✓					
	10.2±0.20	D	10.08	10.10	10.12	10.14	10.16	✓					
	1.5±0.10	D	1.45	1.46	1.47	1.48	1.49	✓					
檢驗依據: <input checked="" type="checkbox"/> 《工程圖紙》 <input type="checkbox"/> 《檢驗規範》 <input type="checkbox"/> 《承認書》 <input type="checkbox"/> 樣品 <input type="checkbox"/> 其它													
檢測儀器:A游標卡尺 B千分尺 C厚薄儀 D投影鏡 E放大鏡 F顯微鏡 G錫爐 H插拔力器 I間位尺 J其它													
品保判定:			<input checked="" type="checkbox"/> 合格Accept <input type="checkbox"/> 退貨Reject <input type="checkbox"/> 特采Waive <input type="checkbox"/> 挑選Sort										

核准: 欠必鋒

審核: 李娟

檢驗員: 但芬

## 电镀报告表

品名:DC Jack (9.6*7.1*11.5) (端子)		版次:A.0																																		
电镀规格:Ni40u", Sn40u", Ag4u"	日期:2022/8/3	页次:1/1																																		
厂商:同华																																				
测试设备:CMI X-射线膜厚测试仪																																				
1、底层电镀测试 (Ni)																																				
<table border="1"><thead><tr><th>数据</th><th>测试标准</th><th>实测值</th><th>判定</th><th>测试日期</th><th>测试时间</th></tr></thead><tbody><tr><td>1</td><td>40u"MIN</td><td>60.5u"</td><td>OK</td><td>2022/8/3</td><td>10:20:15</td></tr><tr><td>2</td><td>40u"MIN</td><td>58.3u"</td><td>OK</td><td>2022/8/3</td><td>10:20:17</td></tr><tr><td>3</td><td>40u"MIN</td><td>67.5u"</td><td>OK</td><td>2022/8/3</td><td>10:20:19</td></tr><tr><td>4</td><td>40u"MIN</td><td>62.4u"</td><td>OK</td><td>2022/8/3</td><td>10:20:21</td></tr></tbody></table>	数据	测试标准	实测值	判定	测试日期	测试时间	1	40u"MIN	60.5u"	OK	2022/8/3	10:20:15	2	40u"MIN	58.3u"	OK	2022/8/3	10:20:17	3	40u"MIN	67.5u"	OK	2022/8/3	10:20:19	4	40u"MIN	62.4u"	OK	2022/8/3	10:20:21						
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3、表层电镀测试 (Ag)																																				
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数据	测试标准	实测值	判定	测试日期	测试时间																															
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3	4u"MIN	4.5u"	OK	2022/8/3	10:30:36																															
4	4u"MIN	4.7u"	OK	2022/8/3	10:30:38																															

核准: 欠必锋

审核: 李娟

检验员: 但芬

## 盐水喷雾实验报告

试验方法	盐水喷雾腐蚀试验法	参考资料	MIL-STD-1216
METHOD	NEUTRL SALT SPRAY CORROSION TEST	REF	
客户	/	试验起始日期	2022年08月04日 08:00 时起
		DATE	2022年08月04日 20:00 时止
样品名称	DC Jack (9.6*7.1*11.5)	试验数量	5PCS
P/N	JK1-123-C818		

## 试验条件 (TEST CONDITION)

1、盐水溶解 (SALT SOLUTION: 浓度 $50 \pm 10\text{g/L}$ , PH值6.5-7.2).2、试验室温度 (TEMP. IT THE SPRAY DHAMBR):  $35 \pm 1^\circ\text{C}$ .3、盐水桶温度 (TEMP. OF SALE SOL' N TANK):  $35 \pm 1^\circ\text{C}$ .4、压力桶温度 (TEMP. OF SAR SUPPLIERY):  $47 \pm 1^\circ\text{C}$ .

5、试验室相对湿度 (R. H IN THE CHAMBER ) 85%.

6、压缩空气压力 (COMPRESSED AIR PRESSURE):  $1.00 \pm 0.01\text{Kg/cm}^2$ .7、样品放置位置 (SPECIMEN SUPPORTED ANGLE ): 尼龙绳吊挂 $70^\circ - 90^\circ$ .8、喷雾收集量 (COLLECT RATE OF SALT SOL' N)  $1-2\text{mL}/(8 \text{ cm}^2\text{hr})$ .

9、盐雾测试时间: 12小时 (H)

## 判定方法 (ADFUSGD METHOD )

试验后以20倍放大镜观察、无蓝、绿色腐蚀物之现象 (不包含折弯处), 即判定合格. (Inspext the ecimen at 20 xmagnification no blue or green corrosion products are acceptable)

样品序号	试验后现象	判定
	PHENOMENON AFTER TEST	COMMENT
1	无蓝、绿色腐蚀物之现象	OK
2	无蓝、绿色腐蚀物之现象	OK
3	无蓝、绿色腐蚀物之现象	OK
4	无蓝、绿色腐蚀物之现象	OK
5	无蓝、绿色腐蚀物之现象	OK

核准: 欠必锋

审核: 李娟

试验员: 但芬

# 鉅鼎銅材廠檢驗報告單

公司名稱 Customer	鉅鼎銅材廠檢驗報告單				重量 Weight(kg)	1078	出貨日期 Date	2021/11/23		
品名 Article	標準 Standard No				尺寸 Dimension		狀態 Tenper	銅卷編號 Coil No		
C2680	JISH3100:2017				0.18*400		EH	1021-C-08		
化學成分Chemical Compositions(%)										
元素 Element	Cu %	Zn%	Pb%	Fe%	\	\	\	\	化學成分	雜質
規範 Spec	64.0-68.0	餘量	<0.05	<0.05	\	\	\	\	合格	合格
實測 Actual	64.32	餘量	0.0036	0.0136	\	\	\	\	合格	合格
機械性質Mechanical Properties										
項目 Item	結晶粒度 Grain Size Mm	硬度 Hardness Hv	抗拉強度 TensionStrength Mpa	伸長度 Elongation %	導電率 Electrical Conduc %IACS	彎曲試驗 Bending Test 180	表面粗度 Surface Roughness Ra(u m)	彎曲度 Camber mm/n		
規範MAX Spec	\	170-190	490-610	\	\	\	\	\		
實測 Actual	\	178	574	5	\	\	\	\		

品質部

