

样品承认书

客户 (customer) : _____

产品描述 (escription) : _____ 防水24P四脚插板双排SMT 8.65L 舌头外露

机种型号 (our model no) : _____ TYPE-C-DS24PF865

客户料号 (customer model) : _____

日期 (date) : _____ 2023-6-7

客户确认 approval signature:

核准 approved by:	审核 checked by:	检测 tested by:

制造商 manufacturer:

业务 sales:	核准 approved by:	设计 designed by:
杨凌峰	陈丽梅	李文魁



东莞市宏煜盛实业有限公司

工厂地址: 东莞市石碣镇刘屋刘沙南路1号

办公地址: 广东省东莞市大朗镇洋坑塘景富西路 211 号

ADD: 211 Jingfu West Road, yangkengtang, Dalang Town,

Dongguan City, Guangdong Province

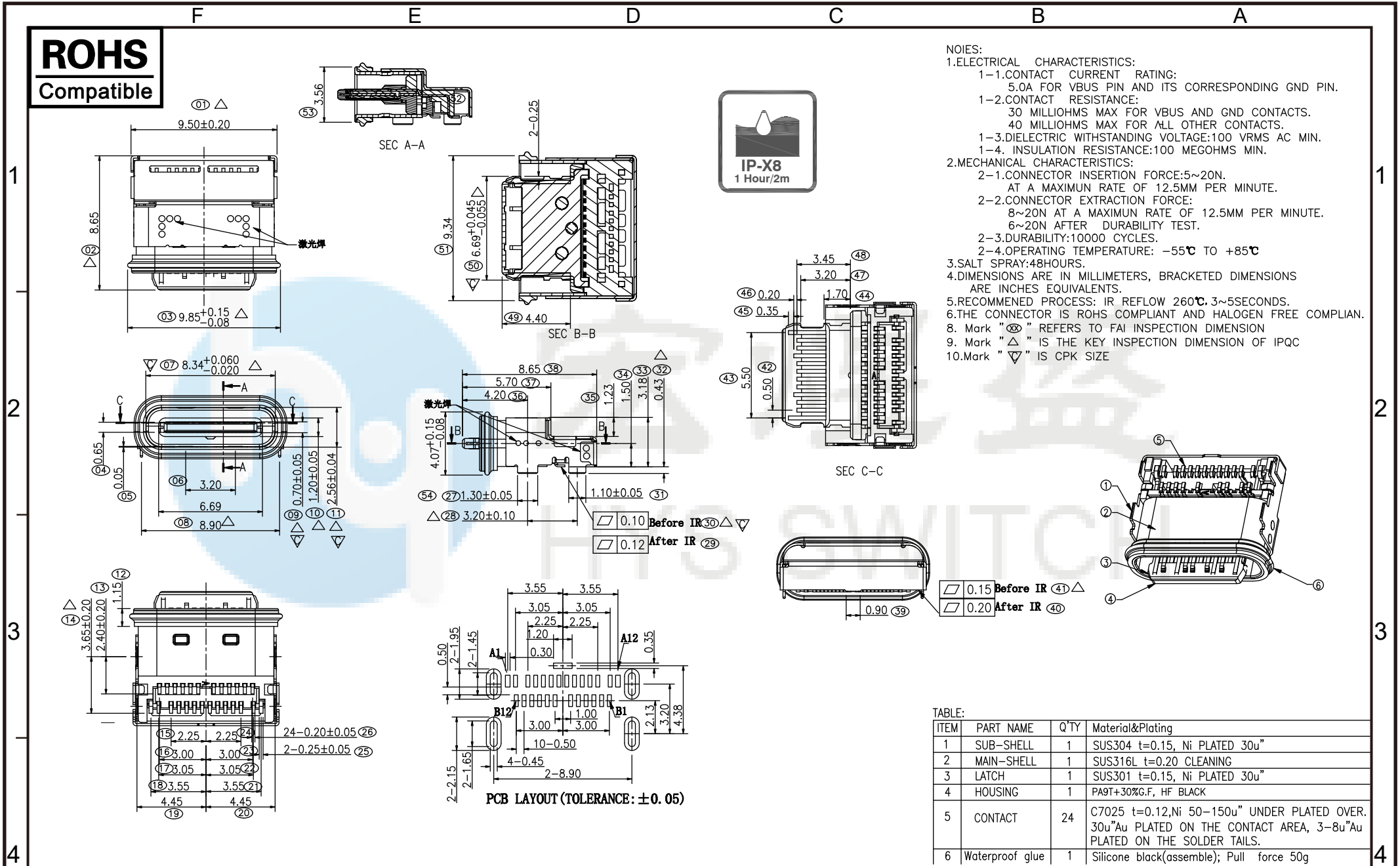
电话: 0769-81230179 传真: 0769-81230169

网站: www.hystypec.com 邮箱: hys@hystypec.com

RoHS

ROHS
Compatible

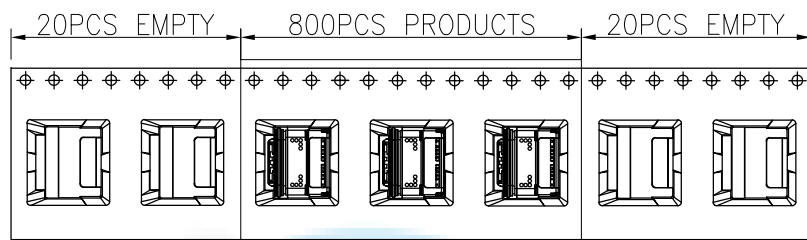
- NOIES:
- ELECTRICAL CHARACTERISTICS:
 - CONTACT CURRENT RATING:
5.0A FOR VBUS PIN AND ITS CORRESPONDING GND PIN.
 - CONTACT RESISTANCE:
30 MILLIOHMS MAX FOR VBUS AND GND CONTACTS.
40 MILLIOHMS MAX FOR ALL OTHER CONTACTS.
 - DIELECTRIC WITHSTANDING VOLTAGE:100 VRMS AC MIN.
 - INSULATION RESISTANCE:100 MEGOHMS MIN.
 - MECHANICAL CHARACTERISTICS:
 - CONNECTOR INSERTION FORCE:5~20N.
AT A MAXIMUN RATE OF 12.5MM PER MINUTE.
 - CONNECTOR EXTRACTION FORCE:
8~20N AT A MAXIMUM RATE OF 12.5MM PER MINUTE.
6~20N AFTER DURABILITY TEST.
 - DURABILITY:10000 CYCLES.
 - OPERATING TEMPERATURE: -55℃ TO +85℃
 - SALT SPRAY:48HOURS.
 - DIMENSIONS ARE IN MILLIMETERS, BRACKETED DIMENSIONS ARE INCHES EQUIVALENTS.
 - RECOMMENED PROCESS: IR REFLOW 260℃.3~5SECONDS.
 - THE CONNECTOR IS ROHS COMPLIANT AND HALOGEN FREE COMPLIAN.
 - Mark "⊗" REFERS TO FAI INSPECTION DIMENSION
 - Mark "△" IS THE KEY INSPECTION DIMENSION OF IPQC
 - Mark "▽" IS CPK SIZE



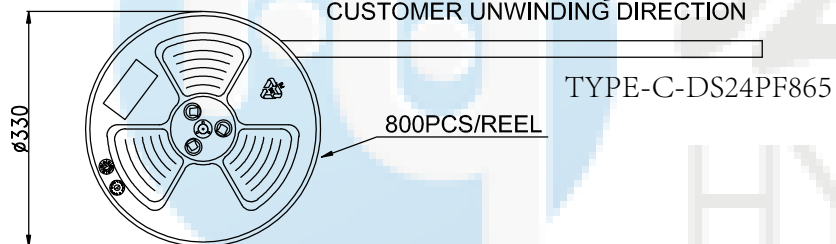
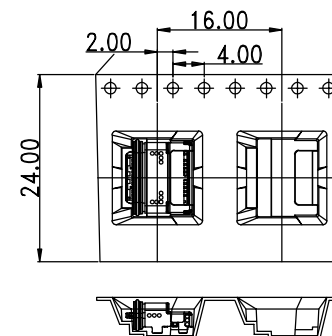
DESIGN	Li Jinwei	SCALL			DRAWG NO.	TYPE-C-DS24PF865
DRAWING	Wu Qifa	UNIT	mm		TITLE:	防水24P四脚插板双排SMT 8.65L 舌头外露 IPX8
CHECK	Zheng Jinxian	SIZE	A4: 210 * 297			
APPROVAL	Liu Xiaohong	DATE	2020-06-10			

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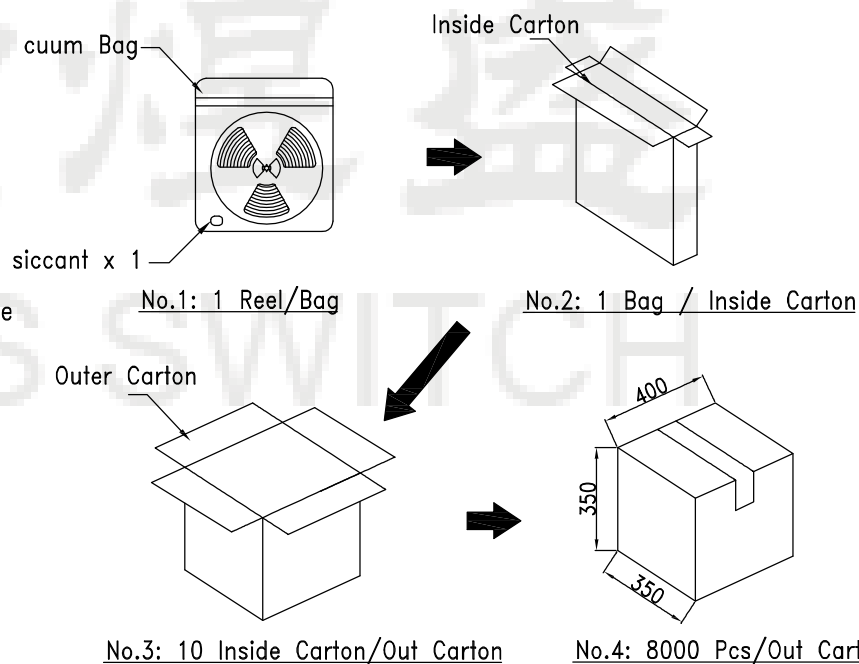
ROHS
Compatible



REEL OFF DIRECTION



CUSTOMER UNWINDING DIRECTION



包装说明:

1. 将产品放入REEL卷中，然后贴上透明PE上带800PCS/卷；
2. 然后尾部用胶纸粘贴，在REEL卷盘上贴上数量标签；
3. 将包装好的产品放入指定的外箱中，一箱装10盘，8000 PCS/箱；
4. 出货标签要严格按照要求进行填写；
5. 纸箱封盖后以封箱胶封箱，贴上出货标签；
6. 外箱若客户另有贴标签要求，则按其订单注明之要求贴；
7. 纸箱尺寸及印刷见包材图面；
8. 未满足之零数箱需以缓冲材料填满，并贴上零数标签，写明具体数量；
9. 本包装适装产品：USB TYPE C母座24P 双排SMT 防水型；
10. ROHS+HF.

DESIGN	Li Jinwei	SCALL		 TOLERANCE X.X ±0.30 X.°±2° .XX ±0.20 .X° ±1° .XXX ±0.10 .XX°±0.5°	DRAWG NO.	TYPE-C-DS24PF865
DRAWING	Wu Qifa	UNIT	mm		TITLE:	防水24P四脚插板双排SMT 8.65L 舌头外露 IPX8
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Product Name 品名	SPECIFICATION Number 编号	File No:SPEC-2021-001	Revision:	A
USB TYPE C REC.	DS24PF865	Date: 2021-6-11	Page:	2/7

1. SCOPE

This specification is applied to the requirements for USB TYPE C REC. connector .This specification covers the materials, electrical, mechanical and environmental performance of the applicable product description and test method.

2. REQUIREMENTS

2.1 Design and Construction

Product shall be of the design, construction and physical dimensions specified on the Applicable product drawing.

2.2 Materials

Refer to the drawing.

2.3 Related documents

EIA-364

2.4 Rating

Item	Standard
Rated Voltage (Maximum)	AC:5V(RMS)
Rated Current (Maximum)	DC:5A
Operating temperature range	0°C~+50°C 85%RH MAX
Storage Temperaur Range	-20°C~+60°C 85%RH MAX

3. TEST STANDARD

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows

3.1 Ambient temperature: 15°C to 35°C

3.2 Relative humidity: 25% to 85%

3.3 Air pressure: 86Kpa to 106 Kpa

3.4 Test Requirements and Procedures Summary



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Item		Test Condition/Method	Requirement
1	Examination of Product	Meets requirements of product drawing.	Outward appearance shall be good without such injurious problem and structure shall be meet the design and dimension requirement of drawing
2	Gold Plating Thickness Measurement	Shall be confirmed with eyes in accordance with each drawing. Shall be confirmed by using X-RAY detector.	Outward appearance shall be good without such injurious problem and thickness. shall be meet the design requirement of drawing.

Electrical Performance

3	Low Level Contact Resistance (LLCR)	The low level contact resistance (LLCR) measurement is made across the plug and receptacle mated contacts and does not include any internal paddle cards or substrates of the plug or receptacle. The test boards shall be provided with the connectors to be tested. • Measure at 20 mV (max) open circuit at 100 mA. EIA 364-23	The following requirements apply to the power and signal contacts: • 40 mΩ (max) initial for VBUS, GND and all other contacts. • 50 mΩ maximum after initial measurement.
4	Dielectric Withstanding voltage	Applicable to both receptacle and plug. • Measurement per Method B. EIA-364-20	The dielectric shall withstand 100 VAC (RMS) for one minute.
5	Insulation Resistance	Applicable to both receptacle and plug. EIA-364-21	A minimum of 100 MΩ insulation resistance is required between adjacent contacts of unmated and mated connectors.
6	Contact Current Rating	A current of 5 A shall be applied collectively to VBUS pins (i.e., pins A4, A9, B4, and B9) and 1.25 A shall be applied to the VCONN pin (i.e., B5) as applicable, terminated through the corresponding GND pins (i.e., pins A1, A12, B1, and B12). A minimum current of 0.25 A shall also be applied individually to all the other contacts, as applicable. When current is applied to the contacts, the temperature of the connector pair shall be allowed to stabilize.	The temperature rise of the outside shell surface of the mated pair above the VBUS and GND contacts shall not exceed 30°C above the ambient temperature.



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Mechanical Performance

7	Insertion Force	The insertion force test shall be done at a maximum speed of 12.5 mm (0.492") per minute. EIA 364-13	Within the range from 5 N to 20 N. This requirement does not apply to the plugs that are used for direct docking without a cable.
8	Extraction Force	The extraction force test shall be done at a maximum speed of 12.5 mm (0.492") per minute. EIA-364-13.	Within the range of 8 N to 20 N, measured after a preconditioning of five insertion/extraction cycles (i.e., the sixth extraction). After an additional twenty-five insertion/extraction cycles, the extraction force shall be measured again (i.e., the thirty-second extraction) and the extraction force shall be within: a) 33 % of the initial reading, and b) within the range of 8 N to 20 N. The extraction force shall be within the range of 6 N to 20 N after 10,000 insertion/extraction cycles. This requirement does not apply to the plugs that are used for direct docking without a cable.
9	Durability or Insertion/Extraction Cycles	Perform 25 plug/unplug cycles. Cycle rate of 500 ± 50 cycles per hour followed by a plug. ↓ Extraction force ↓ Perform 2,468 plug/unplug cycles. Rotate the receptacle or plug 180° and perform 2,500 plug/unplug cycles. Rotate the receptacle or plug 180° and perform 2,500 plug/unplug cycles. Rotate the receptacle or plug 180° and perform 2,500 plug/unplug cycles. Cycle rate of 500 ± 50 cycles per hour (total of 10,000 plug/unplug cycles, flipping every 2,500 cycles). EIA-364-09.	10,000 cycles minimum. Low level contact resistance and dielectric withstanding voltage shall be checked to be within spec after the 10,000 durability cycles .

Environmental Performance



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10	Temperature Life	105° C without applied voltage for 120 hours. 105° C without applied voltage for 72 hours when used as preconditioning(Perform 50 unplug/plug cycles). EIA 364-17, Method A.	Low level contact resistance meets spec before , 50 milliohms max. after the Temperature Life test.
11	Vibration	Test Condition VII, Test Letter D EIA 364-28	No evidence of physical damages and no discontinuity longer than 1 microsecond. Low level contact resistance meets spec before and after the Vibration test.
12	Cyclic Temperature and Humidity	EIA 364-31	Low level contact resistance meets spec before and after the Cyclic Temperature and Humidity test.
13	Thermal Shock	25 Cycles -55°C and +85°C. EIA 364-32, Test Condition I NOTE: To determine actual test result. Universal Serial Bus Type-C Connectors and Cable Assemblies Compliance Document: 10 Cycles -55°C and +85°C.	No evidence of any physical damage. Low level contact resistance meets spec before and after the Thermal Shock test.
14	Mixed Flowing Gas	Samples should be placed in an environmentally controlled 'test chamber' that is monitored by a gas analyzing system for controlled concentrations of the specified gas mixture. Test coupons shall also be used and the weight gain reported. Test duration is 7 days. EIA 364-65,Class II A	Low level contact resistance meets spec before and after the Mixed Flowing Gas test.
15	Humidity(steady state)	EIA-364-31C standard;Method II, Condition A(96 Hours); Operational, If possible Humidity:90~95%, Temperature:40+/-2, Test time is 96H. Check every 5-10 min in beginning, then every 30 min, and so on (to ensure test is not too aggressive)	no severe cosmetic fail and the function is ok.
16	Salt Mist	5+1% NaCl spray at 35±2C ° for 48H(follow EIA-364-26B standard) After test , clean the surface of product with Warm water, and holding less than 16H at room temperature, then Check the product's cosmetic, no severe cosmetic issue (Corrosion). 48hrs Check every 5-10 min in beginning, then every 30 min, and so on (to ensure test is not too aggressive)	No severe cosmetic damage or corrosion.



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17	Resistance to Soldering heat	Solder bath method: Solder temperature $260\pm 5^{\circ}\text{C}$, Immersion time:10 Sec. EIA-364-56 <p>TEMP</p> <p>TIME</p> <p>Pre-heat:180-200°C (120sec Min) 2-4°C/sec</p> <p>2-4°C/sec</p> <p>260°C (10 sec)</p> <p>220°C (60sec Min)</p>	Appearance: No damage.	
18	Solderability	Solder temperature: $250\pm 5^{\circ}\text{C}$ Soldering time: 3 to 5 Seconds. EIA-364-52	The inspected area of each lead must have 95% solder coverage Minimum.	



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TEST GROUP AND SEQUENCE

ITEM	DESCRIPTION	TEST ROUP											
		A-0	A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9	A-10	
		TEST SEQUENCE											
1	Examination of Product	1	1, 6	1, 8	1, 8	1, 8	1, 11	1, 3	1, 3	1, 3	1, 7	1, 7	
2	Gold Plating Thickness Measurement	2											
3	Low Level Contact Resistance (LLCR)		2,5	2,5,7	2,5,7	2,5,7	3,8				2,5	2,5	
4	Dielectric Withstanding voltage						2,9						
5	Insulation Resistance						10				3,6	3,6	
6	Contact Current Rating							2					
7	Insertion Force						4						
8	Extraction Force						5,7						
9	Durability or Insertion/Extraction Cycles Preconditioning:Perform 50 unplug/plug cycles		3 (Pre)	3 (Pre)	3 (Pre)	3 (Pre)	6						
10	Temperature Life (72 hours when used as preconditioning)		4		4 (Pre)	4 (Pre)							
11	Vibration				6								
12	Cyclic Temperature and Humidity			6									
13	Thermal Shock			4									
14	Mixed Flowing Gas					6							
15	Humidity(steady state)										4		
16	Salt Mist											4	
17	Resistance to Soldering heat									2			
18	Solderability								2				
Sample quantity (pcs)		5	5	5	5	5	5	5	5	5	5	5	
Note :													

制表:

审核:

审批: