

承 认 书

Approval Sheet

客户 (Customer): /

客户料号 (Cus .P/N): /

华联威料号 (HLW P/N): HD21-0915-G61018

品名规格 (PronameSpec): HDMI 19P/F 单耳无后盖

送样日期 (Delivery Date): 2021/11/25

承认日期 (Acknowledge Date): 2021/11/30

| | | | |
|---|------------------|---------------------------|--------------------|
| 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 |
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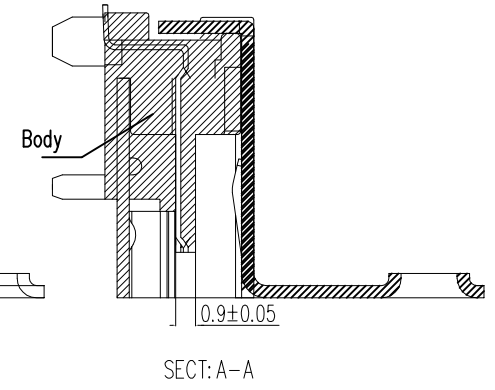
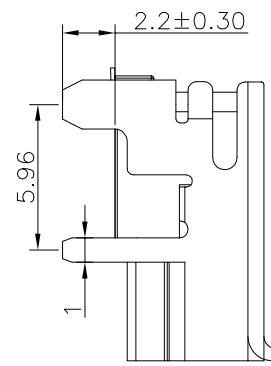
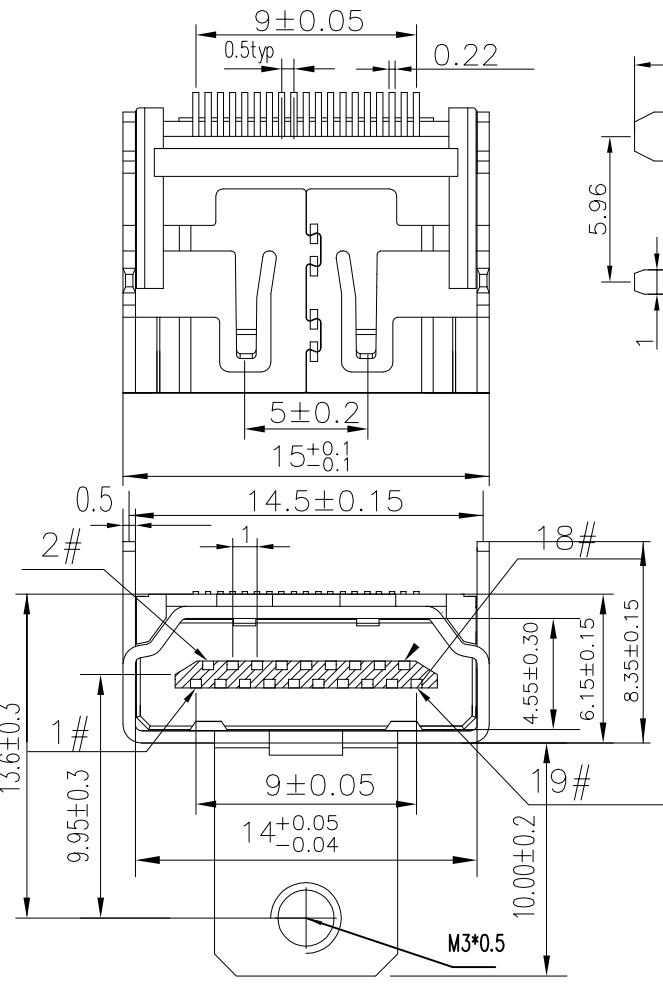
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| REV. | ECN.NO. | APPD. |
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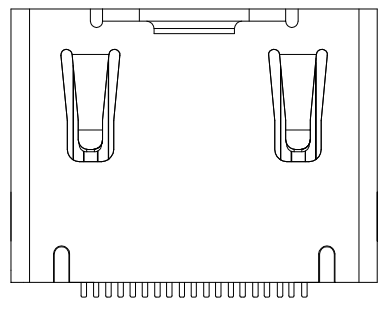
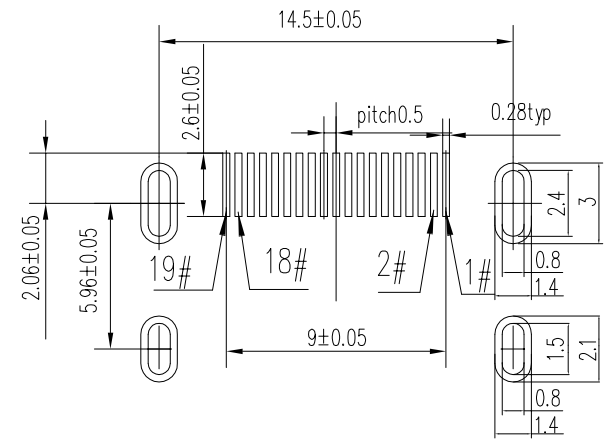
- NOTES:
- MATERIAL:
 - Housing:thermoplastic plastics
 - terminals:Copper Alloy
Gold plated in contact area:
Tin plated in termination
Nickel Plated overall
 - Shell:Steel&Copper Alloy
Nickel/Au Plated overall
 - ELECTRICAL CHARACTERISTICS:
 - Rating Current :0.5 Ampere
 - Rating Voltage :40 V Max
 - Contact Resistance:30 Milli ohms
 - Insulation Resistance:100 Mega ohms Min.
 - MECHANICAL CHARACTERISTICS:
 - Connector Mating force: 4.5kg MAX
 - Connector Unmating force:1.0Kg min
 - Durability:10000Cycles.
 - ENVIRONMENT CHARACTERISTICS:
 - Operating temperature:-20°C to +85°C
 - Storage temperature:-20°C to +65°C



HD21-0915-G61018

5:铜壳镀镍
G:半金G/F
6:LCP

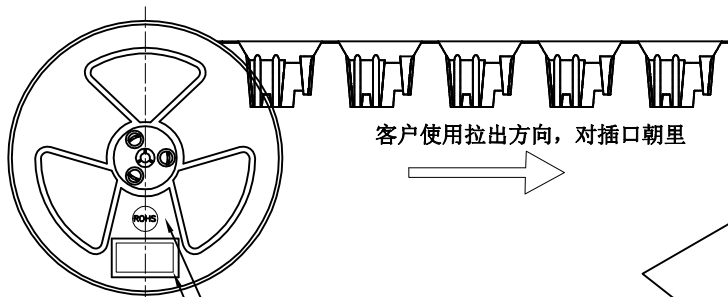
1:吸塑盒
1:黑色



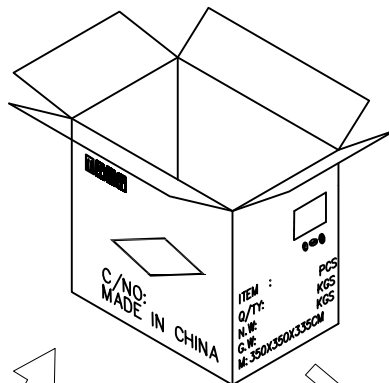
P.C.B
EDGE

P.C.B LAYOUT

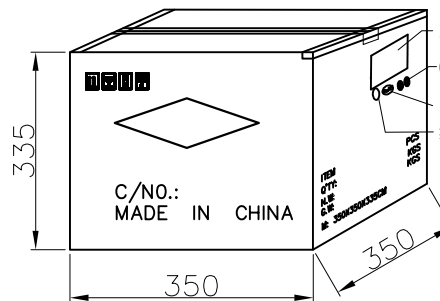
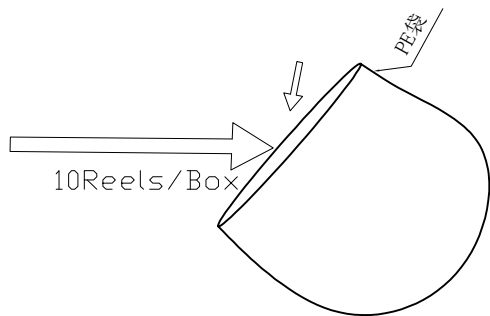
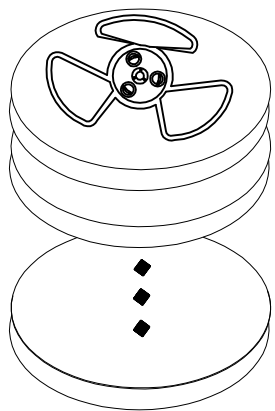
| TOLERANCE UNLESS OTHERWISE SPECIFIED | | FLW 深圳市华联威电子科技有限公司 | | | |
|--------------------------------------|------------|---|----------------------|-------|---------|
| .XXX ±0.10 | .X' ±3' | HUA LIAN WEI TECHNOLOGY ELECTRONICS CO;LTD. | | | |
| .XX ±0.20 | .XX' ±2' | | | | |
| .X ±0.30 | | | | | |
| APPROVED | | PART NAME: | HDMI 19P/F SMT 单耳无凸点 | | |
| CHECKED | | PART No: | HD21-0915-G61018 | C | |
| DRAWN | weihong | PROJECTION: | UNIT: | SCALE | SHEET |
| DATE | 2023.03.27 | | mm | 1:1 | 10F1 |
| | | | | | REV. A1 |



ROHS标签
产品标签贴于椭圆孔一侧



1. 将全检后的产品放入载带内，前空10PCS空格，后空10PCS空格，中间放250PCS产品，每箱放10盘，每箱装2500PCS
2. 将载带盘放入350*350*335的纸箱中，然后用透明胶纸封箱，箱胶带采用“工字型”封箱。
2. 依据客户要求在外箱产品标签处贴上相应的标签。



TOLERANCE UNLESS OTHERWISE SPECIFIED
.XX ±0.15
.X ±0.30
X ±0.50
.X* ±3*

| | | |
|---|------------------|--------------|
| 产品名称 PART NAME: | HDMI 19P/F 单耳无后盖 | |
| 料号 | HD21-0915-G61018 | P |
| 图号 | B-1104 | |
| HLW 深圳市华联威电子科技有限公司 HUA LIAN WEI TECHNOLOGY ELECTRONICSCO;LTD. | | |
| weihong | DATE | 2022. 04. 07 |

| | | | | | | | |
|-------------|-------------|------------------------|----------|--------------|-------|-------------------|----------|
| REV: | DESCRIPTION | REV BY | APPROVED | DATE | MATL: | SEE SPECIFICATION | APPROVED |
| A0 | 新版发行 | A1 | weihong | 2021. 04. 07 | mm | 1:1 | A1 |
| PROJECTION: | | THIRD ANGLE PROJECTION | | CHECKED | UNIT: | SCALE | REV(NO) |
| UNIT: | | SCALE | REV(NO) | SHEET | DRAWN | weihong | |
| UNIT: | | SCALE | REV(NO) | SHEET | DRAWN | weihong | |
| UNIT: | | SCALE | REV(NO) | SHEET | DRAWN | weihong | |

HDMI系列产品SPEC

版本版次: C

制定日期 20200707

适用范围 通用

1. Scope (范围)

1.1 Contents(内容)

This specification covers the performance, tests and quality requirements for the Electronics HDMI Connector.
(此份产品规格适用于HDMI连接器的产品功能, 测试方法及质量要求)

2. Requirements (要求):

2.1 Rating(额定条件)

A. Voltage rating(额定电压):40V AC

B. Current rating(额定电流):0.5A

C. Operation Temperature Range(操作温度范围):-30°C to +85°C

3. Test Condition(测试条件):

3.1 Temperature range(温度范围):+15°C to +35°C

3.2 Humidity range (湿度范围):25% to 85%

4. Test Methods and Requirements:(测试方法及要求)

4.1 Examination of product (产品外观)

| | | | |
|-------|--------------------------------|--------------|---|
| 4.1.1 | Examination of Product 产品外观 | Visual 目视 | No peeling off the plating deformation of the base or damage. 不得有电镀层剥落, 塑料变形或破损 |
|-------|--------------------------------|--------------|---|

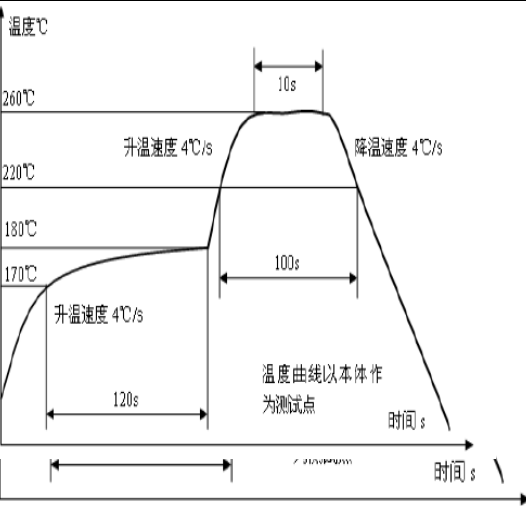
4.2. Electrical Performance(电气性能)

| | | | |
|-------|--|---|---|
| 4.2.1 | Contact Resistance 接触阻抗 | (EIA-364-06B) Mated connectors, Contact: measure by dry circuit, 20 m Volts maximum, 10 mA Shell: measure by open circuit, 5 Volts maximum, 100 mA 配对的连接器, 端子: 测试端子在回路中施加直流最大20mV 10mA的电流再测端子的电阻值 外壳: 测试外壳在开路中施加电流最大5V 100mA的电流再测外壳的电阻值 | Initial Contact resistance Excluding conductor Resistance:30 mΩ max (Target design value) 接触电阻初始值最大不能超过30 mΩ (目标设计值) |
| 4.2.2 | Dielectric Withstanding Voltage (耐电压) | (EIA-364-20C) Unmated connectors, apply 500V AC (RMS.) for 1 minute between adjacent terminals of ground. Mated connectors, apply 300V AC (RMS.) for 1 minute between adjacent terminals of ground. 没有配对的连接器在相邻的端子或接地之间通上500V的交流电压1分钟 配对的连接器在相邻的端子或接地之间通上300V的交流电压1分钟 | 1. No Breakdown or flashover 2. Leakage current:0.5mA Max 1. 不能有损坏或跳火花 2. 漏电流<0.5mA |

| | | | |
|----------------------------------|---------------------------------------|--|--|
| 4.2.3 | Insulation Resistance 绝缘阻抗 | (EIA-364-21C) Unmated connectors, apply 500V DC for 1 minute between adjacent terminals of ground. Mated connectors, apply 100V DC for 1 minute between adjacent terminals of ground. 没有配对的连接器在相邻的端子或接地之间通上500V的直流电压1分钟 配对的连接器在相邻的端子或接地之间通上150V的直流电压1分钟 | 100MΩ min (unmated) 10 MΩ min (mated) 没有配对需大于100 MΩ 配对需大于10 MΩ |
| 4.3 Mechanical Performance(机械性能) | | | |
| 4.3.1 | Insertion/Withdrawal Force 插入力/拔出力 | (EIA-364-13) Insertion and withdrawal speed: 25mm/minute. 插入和拔出的速度为25mm/分 | Maximum insertion force 44.1N 插入力不超过44.1N(4.5kg) Withdrawal force 9.8N min 39.2N max 拔出力9.8-39.2N(1.0-4.0kg) |
| 4.3.2 | Durability 寿命测试 | (EIA-364-09) Measure contact and shell resistance after the following. Automatic cycling: 10000 cycles at 100±5 Cycles per hour. 以每小时100±5的插拔次数测试10000循环后测量端子和外壳的接触阻抗 | Contact Resistance 接触阻抗 Contact: Change from initial Value: 30 milliohms maximum. Shell: Change from initial Value: 50 milliohms maximum. 端子: 从初始值开始变化量小于30mΩ 外壳: 从初始值开始变化量小于50mΩ |
| 4.3.3 | Vibration 振动 | (EIA-364-28条件3) Amplitude: 1.52mm P-P or 147m/s ² {15G} Sweep time: 50-2000-50Hz in 20 minutes. Duration: 12 times in each (total of 36 times) X, Y, Z, axes. Electrical load DC 100mA current shall be flowed during the test.(ANSI/EIA-364-28 Condition III) 在直流100毫安通电状态下测试, 在X,Y,Z垂直3方向上, 频率50-2000-50赫兹(加速度往复20分钟), 全振幅1.52mm P-P或147 m/s ² {15G}, 每轴12回计36回 | Appearance: No damage 外观: 无损坏 Contact Resistance 接触阻抗 Contact: Change from initial Value: 30mΩ Max. 端子: 从初始值开始变化量小于30mΩ Shell Part: Change from initial Value: 50mΩ Max. 外壳: 从初始值开始变化量小于50 mΩ Discontinuity: 1μ sec Max. 间断性: 不超过1微秒 |
| 4.3.4 | Physical shock 冲击性 | (EIA-364-27条件A) Pulse width: 11msec Waveform: Half-sine 490m/s ² (50G) 3 strokes in each X, Y, Z axes. (ANSI/EIA-364-27 condition A) 周期: 11msec 冲击波形: 正弦半波490m/s ² (50G) 3循环在X, Y, Z 轴 | Appearance: No damage 外观: 无损坏 Contact Resistance 接触阻抗 Contact: Change from initial Value 30mΩ Max 端子: 从初始值开始变化量小于30mΩ Shell Part: Change from initial Value 50mΩ Max 外壳: 从初始值开始变化量小于50mΩ Discontinuity: 1μ sec Max. 间断性: 不超过1微秒 |
| 4.4 Environmental Performance | | | |

| | | | |
|--------|----------------------------|--|--|
| 4.4..1 | Thermal shock test 冷热冲击 | EIA-364-32C条件1) 10 cycles of: a)-55±3℃ for 30 minutes b) +85±3℃ for 30 minutes 10个循环, a)-55±3℃ 30 分钟 b) +85±3℃ 30 分钟 | Appearance: No Damage. 外观: 没有损坏 Contact Resistance 接触阻抗 Contact: Change from initial Value 30mΩ Max Shell Part: Change from initial Value 50mΩ Max 端子: 从初始值开始变化量小于30mΩ 外壳: 从初始值开始变化量小于50mΩ |
| 4.4..2 | Solder ability 焊锡性 | (EIA-364-52) To be sipped in the solder bath 245±5℃ Coverage for 3 seconds.将焊锡脚浸在245±5℃的锡炉中<3秒 | The inspected area of each lead must have 90% solder coverage minimum 表面粘锡面积不少于90% |
| 4.4..3 | Humidity 恒温恒湿 | (EIA-364-31B) (A) Mate connectors together and perform the test as follows 配对的连接器测试条件 Temperature: -25℃ to +85℃(温度: -25℃到+85℃) Relative Humidity: 80% to 90%(相对湿度: 80%到90%) Duration:4 cycles(96 hours) (持续时间: 4个循环共96小时) Upon completion of the test, specimens shall be conditioned ambient room conditions for 24 hours, after which the specified measurements shall be performed. 试验完成后, 样品放置于室温条件中24小时后再进行测试 | Appearance: No Damage 外观, 没有损坏 Contact Resistance 接触阻抗 Contact: Change from initial Value 30mΩ Max Shell Part: Change from initial Value 50mΩ Max 端子: 从初始值开始变化量小于30mΩ 外壳: 从初始值开始变化量小于50mΩ |
| | | (EIA-364-31B) (B) Unmated each connector and perform the test as follows. 没有配对的连接器测试条件 Temperature: +25℃ to +85℃(温度: +25℃到+85℃) Relative Humidity: 80% to 90%(相对湿度: 80%到90%) Duration:4 cycles(96 hours) (持续时间: 4个循环共96小时) Upon completion of the test, specimens shall be conditioned ambient room conditions for 24 hours, after which the specified measurements shall be performed. 试验完成后, 样品放置于室温条件中24小时后再进行测试 | Appearance: No Damage 外观, 没有损坏 Conform to item of dielectric withstanding Voltage and Insulation Resistance. 符合耐电压及绝缘阻抗要求 |

| | | | |
|-------|-------------------------------------|---|--|
| 4.4.4 | Salt Spray 盐水喷雾 | <p>EIA-364-26B)</p> <p>Temperature: 35±2°C 温度: 35±2°C</p> <p>Concentration for salt: 5% 盐水浓度: 5%</p> <p>(1)Duration: 24H 持续时间: 24小时</p> <p>Condition(条件):</p> <p>Contact plated gold more than 15u" (include 15 u"),and the material of shell for copper alloy, or stainless.</p> <p>端子镀金厚度大于等于15 u" 且壳体材质是铜合金或是不锈钢</p> <p>(2) Duration: 12H 持续时间: 12小时</p> <p>Condition(条件):</p> <p>Contact plated gold less than 15 u" ,and/or the material of shell for steel</p> <p>端子镀金厚度小于15u" 且/或壳体材质是铁</p> | <p>No detrimental corrosion(Terminal solder tail unrequested)</p> <p>产品无氧化, 锈蚀(端子焊脚镀锡处不作要求)</p> <p>Contact Resistance 接触阻抗</p> <p>Contact: Change from initial Value 30mΩ Max</p> <p>Shell Part: Change from initial Value 50mΩ Max</p> <p>端子: 从初始值开始变化量小于30mΩ</p> <p>外壳: 从初始值开始变化量小于50mΩ</p> |
| 4.4.5 | Cold resistance (Unmated) 冷阻抗 | <p>(EIA-364-17B)</p> <p>Unmated connectors and expose to -40±3°C for 250 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed.</p> <p>没配对的连接器放置于-40±3°C温度中250小时, 当完成实验后, 样品放置一般环境中1到2小时后, 在进行测试</p> | <p>Appearance: No Damage.</p> <p>外观: 没有损坏</p> <p>Contact Resistance 接触阻抗</p> <p>Contact: Change from initial Value 30mΩ Max</p> <p>Shell Part: Change from initial Value 50mΩ Max</p> <p>端子: 从初始值开始变化量小于30mΩ</p> <p>外壳: 从初始值开始变化量小于50mΩ</p> |
| 4.4.6 | Heat resistance (Unmated) 热阻抗 | <p>(EIA-364-17B)</p> <p>Mated connectors and expose to 85±2°C for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed.</p> <p>配对的连接器放置于85±2°C温度中96小时, 当完成实验后, 样品放置一般环境中1到2小时后, 在进行测试</p> | <p>Appearance: No Damage.</p> <p>外观: 没有损坏</p> <p>Contact Resistance 接触阻抗</p> <p>Contact: Change from initial Value 30mΩ Max</p> <p>Shell Part: Change from initial Value 50mΩ Max</p> <p>端子: 从初始值开始变化量小于30mΩ</p> <p>外壳: 从初始值开始变化量小于50mΩ</p> |
| 4.4.7 | Thermal Aging 高温老化 | <p>(EIA-364-31B, Condition 4, Method A)</p> <p>Unmated connectors and expose to +105±2°C for 250 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed.</p> <p>没配对的连接器放置于+105±2°C温度中250小时, 当完成实验后, 样品放置一般环境中1到</p> | <p>Appearance: No Damage.</p> <p>外观: 没有损坏</p> <p>Contact Resistance 接触阻抗</p> <p>Contact: Change from initial Value 30mΩ Max</p> <p>Shell Part: Change from initial Value 50mΩ Max</p> <p>端子: 从初始值开始变化量小于30mΩ</p> <p>外壳: 从初始值开始变化量小于50mΩ</p> |

| | | | |
|-------|------------------------------|--|--|
| 4.4.8 | Resistance to Soldering Heat | <p>for wave soldering : mil-std-202f,method 210 A,test condition B 波峰焊: mil-std-202f, method 210 A, 试验条件B Pre-heat : 80℃, 60 Seconds 预热:80℃, 60秒 Temperature : 260 ± 5 °C 温度:260±5℃ Immersion duration : 10 ± 1 sec. 浸泡时间:10±1秒</p> <p>for manual soldering :手动焊接: mil-std-202f,method 210 A,test condition A Pre-heat : No预热:没有 Temperature : 350 ± 10 °C 温度:350±10℃ Immersion duration : 3.5±0.5 sec.浸泡时间:3.5±0.5秒</p> | No physical damage shall occur. 不可有损坏 |
| | |  | |

Note 1: Shall meet visual requirements, show no physical damage, and meet requirement of additional tests as specified in the test sequence in Figures 2
说明1: 测试要求不能有物理损坏, 测试依据表格二的顺序进行

3.Product Qualification And Requalification Test:产品测试顺序表 Figure 2

| Test or Examination | Test Group | | | | | | | | | | | | | |
|---------------------------------------|------------|-----|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| | A | B | C | D | E | F | G | H | I | J | K | L | M | N |
| Test Sequence | | | | | | | | | | | | | | |
| 4.1.1.Examination of Product 产品外观 | 1,9 | 1,3 | 1,5 | 1 | 1,5 | 1,5 | 1,5 | 1,3 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1 |
| 4.2.1.Contact Resistance 接触阻抗 | 2,8 | | 2,4 | | 2,4 | 2,4 | 2,4 | | 2,4 | 2,4 | 2,4 | 2,4 | 2,4 | |
| 4.2.2.Dielectric Withstanding Voltage | 3,7 | | | | | | | | | | | | | |
| 4.2.3.Insulation Resistance 绝缘阻抗 | 4,6 | | | | | | | | | | | | | |
| 4.3.1.Insertion/Withdrawal force 插拔力 | | 2 | | | | | | | | | | | | |
| 4.3.2.Durability 寿命测试 | | | 3 | | | | | | | | | | | |
| 4.3.3.Vibration 振动性 | | | | | 3 | | | | | | | | | |

| | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.3.4.Physical shock 冲击性 | | | | | | 3 | | | | | | | | |
| 4.4.1.Thermal shock test 冷热冲击 | | | | | | | 3 | | | | | | | |
| 4.4.2.Solderability 焊锡性 | | | | | | | | 2 | | | | | | |
| 4.4.3.Humidity 恒温恒湿 | 5 | | | | | | | | 3 | | | | | |
| 4.4.4.Salt Spray 盐水喷雾 | | | | | | | | | | 3 | | | | |
| 4.4.5.Cold resistance 冷阻抗 | | | | | | | | | | | 3 | | | |
| 4.4.6.Heat resistance 热阻抗 | | | | | | | | | | | | 3 | | |
| 4.4.7.Thermal Aging 高温老化 | | | | | | | | | | | | | 3 | |
| 4.4.8.IR-reflow 回流焊测试 | | | | | | | | | | | | | | 2 |
| NO. of Test samples(Min.) 测试样 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| <p>NOTE 2: (a) Numbers indicate sequence in which tests are performed. (b) Discontinuities shall not take place in this test group, during tests.</p> <p>说明 2: (a)测试依照矩阵要求数量进行。 (b)在测试中，群组测试不能间断</p> | | | | | | | | | | | | | | |

核准：唐竹君

制作人：覃裕华

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:24H | SALT SPRAY TESTER | No Oxidation | Pass | Pass | Pass | Pass | Pass | P | |
| 2 | Resistance to soldering heat test | Temperature: 245±5°C Duration:10±1sec | OVEN | No physical damage | Pass | Pass | Pass | Pass | Pass | P | |
| 3 | Solder ability test | Temperature: 245±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): 欠必鋒

測試(Tester): 但芬



深圳市华联威电子科技有限公司

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
 2021年11月30日 版次:A1

| 料號 | HD21-0915-G61018 | 制令單號 | / | | 送檢單位 | 工程部 | 首件製作者 | 裝配 | | | | | |
|------------------|------------------|--|---------|-----------|----------|-----------|-------|---------|----------|-----|-----|-----|----|
| 品名 | HDMI 19P/F 单耳无后盖 | 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 | | | 抽样数 | AQL | CRI:0 | MAJ:0.4 | MIN:0.65 | | | | |
| 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 | 0.22±0.20 | D | 0.25 | 0.24 | 0.23 | 0.22 | 0.23 | √ | | | | | |
| | 0.50±0.30 | D | 0.50 | 0.49 | 0.49 | 0.49 | 0.49 | √ | | | | | |
| | 9.0±0.05 | D | 8.99 | 8.98 | 8.97 | 8.96 | 8.95 | √ | | | | | |
| | 5.0±0.20 | D | 5.15 | 5.14 | 5.15 | 5.14 | 5.13 | √ | | | | | |
| | 15.0±0.10 | D | 14.94 | 14.93 | 14.93 | 14.94 | 14.93 | √ | | | | | |
| | 14.5±0.15 | D | 14.43 | 14.42 | 14.41 | 14.40 | 14.39 | √ | | | | | |
| | 0.50±0.30 | D | 0.51 | 0.50 | 0.49 | 0.48 | 0.47 | √ | | | | | |
| | 1.0±0.20 | D | 1.00 | 0.99 | 1.00 | 0.99 | 0.99 | √ | | | | | |
| | 9.00±0.05 | D | 8.99 | 8.99 | 8.99 | 8.99 | 8.99 | √ | | | | | |
| | 14.0±0.05/-0.04 | D | 14.43 | 14.42 | 14.41 | 14.40 | 14.39 | √ | | | | | |
| | 13.6±0.30 | D | 13.41 | 13.40 | 13.39 | 13.38 | 13.37 | √ | | | | | |
| | 9.95±0.30 | D | 10.03 | 10.02 | 10.01 | 10.00 | 9.99 | √ | | | | | |
| | 9.55±0.20 | D | 9.41 | 9.40 | 9.39 | 9.38 | 9.37 | √ | | | | | |
| | 6.15±0.15 | D | 6.28 | 6.27 | 6.26 | 6.25 | 6.24 | √ | | | | | |
| | 8.35±0.15 | D | 8.33 | 8.32 | 8.31 | 8.30 | 8.29 | √ | | | | | |
| | 4.55±0.30 | D | 4.76 | 4.73 | 4.25 | 4.34 | 4.28 | √ | | | | | |
| 2.2±0.30 | D | 2.00 | 1.99 | 1.98 | 1.97 | 1.96 | √ | | | | | | |
| 5.96±0.20 | D | 6.02 | 6.01 | 6.00 | 5.99 | 5.98 | √ | | | | | | |
| 1.0±0.20 | D | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | √ | | | | | | |

檢驗依據: 《工程圖紙》 《檢驗規範》 《承認書》 樣品 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: 合格Accept 退貨Reject 特采Waive 挑選Sort

核准: 欠必鋒

審核: 刘联英

檢驗員: 但芬



深圳市华联威电子科技有限公司

电镀报告表

品名: HDMI 19P/F 单耳无后盖 (外壳) 版次:A.0

电镀规格:Ni:30u"

日期:2021/11/15

页次:1/1

厂商:同华

测试设备:CMI X-射线膜厚测试仪

1、表层电镀测试 (Ni)

| 数据 | 测试标准 | 实测值 | 判定 | 测试日期 | 测试时间 |
|----|---------|--------|----|------------|----------|
| 1 | 30u"min | 93.4u" | OK | 2021/11/15 | 19:17:14 |
| 2 | 30u"min | 98.6u" | OK | 2021/11/15 | 19:18:50 |
| 3 | 30u"min | 96.3u" | OK | 2021/11/15 | 19:21:11 |
| 4 | 30u"min | 94.5u" | OK | 2021/11/15 | 19:23:05 |

核准: 欠必锋

审核: 刘联英

检验员: 但芬

| | | | | | |
|----------------------------|---------|---------------|----|------------|----------|
| 品名:HDMI 19P/F 单耳无后盖(端子) | | 版次:A.0 | | | |
| 电镀规格:Ni40u", Sn40u", Au1u" | | 日期:2021/11/15 | | | |
| 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) | | | | | |
| 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 | 2021/11/15 | 14:15:03 |
| 2 | 40u"MIN | 58.3u" | OK | 2021/11/15 | 14:15:05 |
| 3 | 40u"MIN | 67.5u" | OK | 2021/11/15 | 14:15:07 |
| 4 | 40u"MIN | 62.4u" | OK | 2021/11/15 | 14:15:09 |
| 2、表层电镀测试 (Sn) | | | | | |
| 数据 | 测试标准 | 实测值 | 判定 | 测试日期 | 测试时间 |
| 1 | 40u"MIN | 105.3u" | OK | 2021/11/15 | 14:20:12 |
| 2 | 40u"MIN | 112.7u" | OK | 2021/11/15 | 14:20:14 |
| 3 | 40u"MIN | 118.9u" | OK | 2021/11/15 | 14:20:16 |
| 4 | 40u"MIN | 114.3u" | OK | 2021/11/15 | 14:20:18 |
| 3、表层电镀测试 (Au) | | | | | |
| 数据 | 测试标准 | 实测值 | 判定 | 测试日期 | 测试时间 |
| 1 | 1u"MIN | 1.05u" | OK | 2021/11/15 | 14:25:06 |
| 2 | 1u"MIN | 1.17u" | OK | 2021/11/15 | 14:25:08 |
| 3 | 1u"MIN | 1.13u" | OK | 2021/11/15 | 14:25:10 |
| 4 | 1u"MIN | 1.02u" | OK | 2021/11/15 | 14:25:12 |

核准: 欠必锋

审核: 刘联英

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 | 2021年11月29日 08:00 时起 |
| | | DATE | 2021年11月30日 08:00 时止 |
| 样品名称 | HDMI 19P/F 单耳无后盖 | 试验数量 | 5PCS |
| P/N | HD21-0915-G61018 | | |

试验条件 (TEST CONDITON)

- 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: 24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: 刘联英

试验员: 但芬

Materials Information

PRODUCT NAME: LCP M-401 BK

COMPOSITION/INFORMATION OF LCP M-401 BK

SUBSTANCE/MIXTURE: Mixture

SYNONYM(S): Aromatic Liquid Crystal Polymer(LCP)

| 品名 | 比例 | 用途 |
|------------|-------|------------|
| 德众泰 LCP 树脂 | 0.565 | 构成材料主要成分 |
| 抗氧化剂 | 0.002 | 抗氧化 |
| 科莱恩热稳定剂 | 0.003 | 增加高温稳定性 |
| 黑色母 | 0.01 | 着色 |
| 滑石粉 | 0.2 | 增强剂, 增加流动性 |
| 玻纤 | 0.22 | 增强 |

NAME OF COMPANY: DZT Engineering Plastics Tech. Co.,Ltd

ADDRESS: Building 2 Zhichong Industrial Park, Hi-Tech Zone, Jiangmen City,
Guangdong Province, China

SECTION IN CHARGE: Quality Assurance Department

TEL/FAX: +86-750-3689920/+86-750-3689921

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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

