

承 认 书

Approval Sheet

客户 (Customer): /

客户料号 (Cus .P/N): /

华联威料号 (HLW P/N): DS615-0231-2638

品名规格 (PronameSpec): D-SUB DMS 59P/F 铆合卧贴

送样日期 (Delivery Date): 2022/09/03

承认日期 (Acknowledge Date): 2022/09/03

| | | | |
|---|------------------|---------------------------|--------------------|
| 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 |
| 蒋成英 | 欠必峰 | 魏红 | 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

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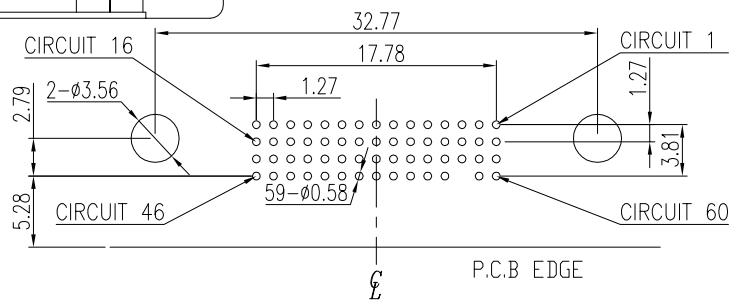
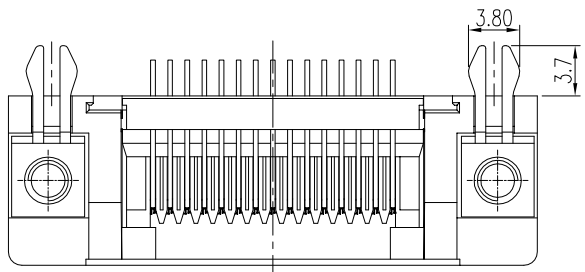
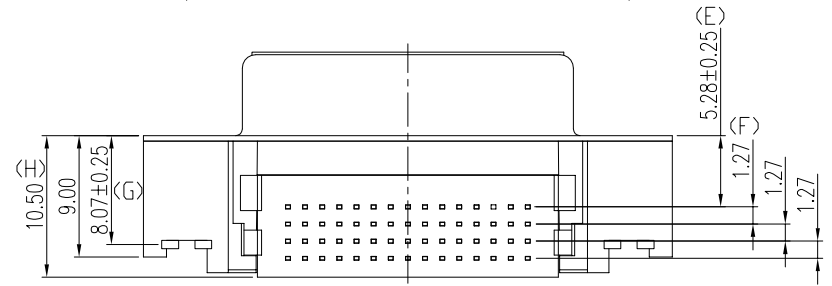
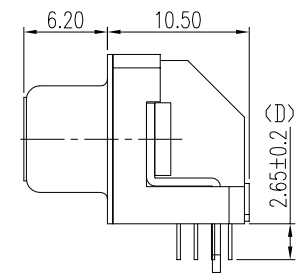
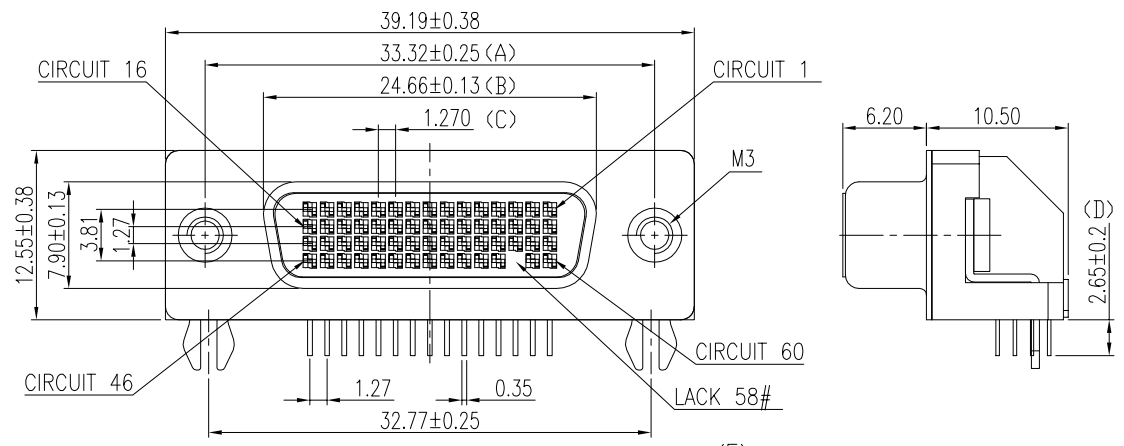
| | | |
|------|-------------|-------------|
| REV. | ECN.NO. | APPD. |
| A | EXXXXXXXXXX | yangguifeng |

SPECIFICATIONS

- 1.1 Voltage: 40 VAC(RMS)
- 1.2 Current Rating: 3 Ampere per Contact
- 1.3 Contact Resistance: 20 Milliohms Max.
- 1.4 Insulation Resistance: 500 Megohms Min.
- 1.5 Dielectric Withstanding Voltage: 500V DC(RMS)
- 1.6 Total Mating Force: 4.5 Kgf Max.
- 1.7 Total Unmating Force: 1.0 Kgf Min.
- 1.8 Durability: 500 cycles
- 1.9 Operating Temperature: -20°C to +80°C

NOTES

- 1. MATERIAL:
 - Housing:LCP, UL 94V-0, Color:Ivory.
 - Latch:LCP, UL 94V-0, Color:Ivory.
 - Terminal:Copper Alloy.
 - Shell:SPCC.
 - Boardlock:Copper Alloy.
 - Rivet:Copper Alloy.
- 2. FINISH:
 - Terminal:Gold Plated over Nickel at Contact Area.
 - Shell:Nickel Plated.
 - Boardlock:Tin Plated.
 - Rivet:Nickel Plated.
- 3. This Product is RoHs Compliance Product.



RECOMMENDED P.C.B LAYOUT
INSPECTION DIMENSION:(A)~(H)

DS615-023X-XXX8

- 1: 铁壳镀镍
- 2: 镀全金2u"
- 3: 米黄色
- 6: LCP

| | | | | | |
|--------------------------------------|-------------|---|-------------------|-------|--------|
| TOLERANCE UNLESS OTHERWISE SPECIFIED | | FLW 深圳市华联威电子科技有限公司 | | | |
| .XXX ±0.10 | | HUA LIAN WEI TECHNOLOGY ELECTRONICS CO;LTD. | | | |
| .XX ±0.20 | | | | | |
| .X ±0.30 | | | | | |
| APPROVED | | PART NAME: | D-SUB DMS 59母铆合卧贴 | | |
| CHECKED | | PART No: | DS615-0231-2638 | | C |
| DRAWN | yangguifeng | PROJECTION: | UNIT: | SCALE | SHEET |
| DATE | 2021.12.01 | | mm | 1:1 | 1 OF 1 |
| | | | | | REV. A |

D-SUB系列產品SPEC

| TEST ITEM | | REQUIREMENT | PROCEDURE |
|-------------------------------|---------------------------------|---|---|
| 1 | Examination of Product | Meets requirements of product drawing. No physical damage. | Visual inspection. |
| 2 | Operating Temperature | -55°C ~+85°C | |
| 3 | Storage Temperature | -55°C ~+105°C | |
| ELECTRICAL REQUIREMENT | | | |
| 4 | Rating Voltage | 300VDC max | on any signal pin with respect to the shield |
| 5 | Rating Current | 1Amperes DCmax | 55°C ,maximum ambient 85°C ,maximum temperature change (ANSI/EIA 364-70,TP-70) |
| 6 | Contact Resistance | [30] m Ohm Max(Initial) [50] m Ohm Max(Final) | Subject mated contacts assembled in housing to 20mV Max open circuit at 100mA Max. EIA-364-23. |
| 7 | Dielectric withstanding Voltage | No flashover,No sparkover,No excess leakage,No breakdown | [500]VAC for 1minute Test between adjacent circuits of unmated connector. EIA-364-20C |
| 8 | Insulation Resistance | [1000] M Ohm Min. | Impressed voltage 500 VDC. Test between adjacent circuits of unmated connector. EIA-364-21C. |
| 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. |
| Mechanical Requirement | | | |
| 10 | Connector Mating Force | <u>4.44</u> kgf Max 9pin <u>7.72</u> kgf Max 15pin <u>12.71</u> kgf Max 25pin <u>17.71</u> kgf Max 37pin | Operation Speed : [25] mm/min. Measure the force required to mate connector. EIA-364-13 |

| | | | |
|-----------------------------------|-------------------------------|---|---|
| 11 | Connector Unmating Force | 0.33kgf Max 9pin 15pin 0.79kgf Max 25pin 37pin 0.45kgf Max 1.14kgf Max | Operation Speed : [25] mm/min. Measure the force required to unmate connector. EIA-364-13 |
| 12 | Durability | Contact Resistance Shall be less than 40 mohms after 1000 cycles for 30 μ in gold plated,750 cycles for gold flash plated | Operation Speed : [25] mm/minute. EIA-364-09C |
| 13 | Vibration | No discontinuity at 1 μ s or longer(each contact) when continuity is tested per ANSI/EIA-364-46 | Condition III,Method 5A,15 minute/axis ANSI/EIA-364-28 |
| 14 | Mechanical Shock | No discontinuity at 1 μ s or longer(each contact) when continuity is tested per ANSI/EIA-364-46 | Subject mated connector to 50g half sine in 11 msec from shocks in the X,Y,Z axis(9 shocks total) |
| 15 | Solder ability | At least 95% of the immersed area shall be covered with new solder | 1)Temperature of fused solder: 260+5 $^{\circ}$ 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:260+5 $^{\circ}$ C . 3) Dipping time: 5+0.5s Socket EIA 364-56 |
| 17 | Thermal Shock | No physical damage to the samples and LLCR-50 m Ω max per contact | Mated connectors exposed to 10 cycles between -55 $^{\circ}$ C to 85 $^{\circ}$ 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 \pm 2 $^{\circ}$ 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) | Contact Resistance shall be less than 40 ohms | Mated Connector 85 $^{\circ}$ C , 250 hours, EIA-364-17B. |
| 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 $^{\circ}$ C .After the test specimens shall be washed with running water and dried naturally EIA 364-26 |

| 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：魏红

| 4 | Temperature cycling test | Temperature: 70—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): 欠必鋒

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09月03日 版次:A1

| | | | | | | | | |
|------------------|----------------------|--|---|-----------------|---------|-------|----------|----------|
| 料號 | DS615-0231-2638 | 制令單號 | / | 送檢單位 | 工程部 | 首件製作者 | 裝配 | |
| 品名 | D-SUB DMS 59P/F 铆合卧贴 | 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 (5PCS) | AQL | CRI:0 | MAJ:0.40 | MIN:0.65 |
| MIL-STD-105E(II) | | <input checked="" type="checkbox"/> 正常 <input type="checkbox"/> 加嚴 <input type="checkbox"/> 減量 | | | ACC/REJ | 0 | / | / |

不良数: 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 | | | | |
| | 39.19±0.38 | D | 39.23 | 39.25 | 39.24 | 39.26 | 39.25 | √ | | | | | |
| | 33.32±0.25 | D | 33.36 | 33.34 | 33.35 | 33.37 | 33.36 | √ | | | | | |
| | 12.55±0.38 | D | 12.58 | 12.56 | 12.55 | 12.54 | 12.56 | √ | | | | | |
| | 32.77±0.25 | D | 32.78 | 32.75 | 32.74 | 32.76 | 32.73 | √ | | | | | |
| | 10.50±0.20 | D | 10.52 | 10.53 | 10.55 | 10.52 | 10.53 | √ | | | | | |
| | 5.28±0.25 | D | 5.26 | 5.26 | 5.25 | 5.27 | 5.24 | √ | | | | | |
| | 1.27±0.20 | D | 1.28 | 1.24 | 1.26 | 1.25 | 1.24 | √ | | | | | |
| | 6.20±0.20 | D | 6.23 | 6.25 | 6.23 | 6.24 | 6.26 | √ | | | | | |
| | 10.50±0.20 | D | 10.53 | 10.54 | 10.56 | 10.54 | 10.53 | √ | | | | | |
| | 2.65±0.20 | D | 2.67 | 2.64 | 2.65 | 2.66 | 2.64 | √ | | | | | |
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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:

| | | | | | |
|------------|-----|------------|---|---------------|----|
| 核 准 APP | 欠必鋒 | 審 核 CHK | / | 檢驗員 INSPBY | 但芬 |
|------------|-----|------------|---|---------------|----|

电镀报告表

| 品名: D-SUB DMS 59P/F 铆合 (端子) | | 版次:A.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------|--------|----|-----------|----------|----|------|------|---|---------|--------|----|-----------|----------|---|---------|--------|----|-----------|----------|---|---------|--------|----|-----------|----------|---|---------|--------|----|-----------|----------|
| 电镀规格:Ni40u", Au 2u"MIN | 日期:2022-05-24 | 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>69.7u"</td><td>OK</td><td>2022/5/24</td><td>13:55:12</td></tr><tr><td>2</td><td>40u"MIN</td><td>62.3u"</td><td>OK</td><td>2022/5/24</td><td>13:55:14</td></tr><tr><td>3</td><td>40u"MIN</td><td>72.5u"</td><td>OK</td><td>2022/5/24</td><td>13:55:16</td></tr><tr><td>4</td><td>40u"MIN</td><td>57.6u"</td><td>OK</td><td>2022/5/24</td><td>13:55:18</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 | 69.7u" | OK | 2022/5/24 | 13:55:12 | 2 | 40u"MIN | 62.3u" | OK | 2022/5/24 | 13:55:14 | 3 | 40u"MIN | 72.5u" | OK | 2022/5/24 | 13:55:16 | 4 | 40u"MIN | 57.6u" | OK | 2022/5/24 | 13:55:18 |
| 数据 | 测试标准 | 实测值 | 判定 | 测试日期 | 测试时间 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 40u"MIN | 69.7u" | OK | 2022/5/24 | 13:55:12 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 40u"MIN | 62.3u" | OK | 2022/5/24 | 13:55:14 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 40u"MIN | 72.5u" | OK | 2022/5/24 | 13:55:16 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 40u"MIN | 57.6u" | OK | 2022/5/24 | 13:55:18 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2、表层电镀测试 (Au) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <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>2u"MIN</td><td>2.01u"</td><td>OK</td><td>2022/5/24</td><td>14:10:23</td></tr><tr><td>2</td><td>2u"MIN</td><td>2.09u"</td><td>OK</td><td>2022/5/24</td><td>14:10:25</td></tr><tr><td>3</td><td>2u"MIN</td><td>2.10u"</td><td>OK</td><td>2022/5/24</td><td>14:10:27</td></tr><tr><td>4</td><td>2u"MIN</td><td>2.08u"</td><td>OK</td><td>2022/5/24</td><td>14:10:29</td></tr></tbody></table> | | | 数据 | 测试标准 | 实测值 | 判定 | 测试日期 | 测试时间 | 1 | 2u"MIN | 2.01u" | OK | 2022/5/24 | 14:10:23 | 2 | 2u"MIN | 2.09u" | OK | 2022/5/24 | 14:10:25 | 3 | 2u"MIN | 2.10u" | OK | 2022/5/24 | 14:10:27 | 4 | 2u"MIN | 2.08u" | OK | 2022/5/24 | 14:10:29 |
| 数据 | 测试标准 | 实测值 | 判定 | 测试日期 | 测试时间 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2u"MIN | 2.01u" | OK | 2022/5/24 | 14:10:23 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 2u"MIN | 2.09u" | OK | 2022/5/24 | 14:10:25 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 2u"MIN | 2.10u" | OK | 2022/5/24 | 14:10:27 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 2u"MIN | 2.08u" | OK | 2022/5/24 | 14:10:29 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

核准: 欠必锋

审核: 李娟

检验员: 但芬

电镀报告表

| | | | | | |
|-------------------------|---------------|--------|----|------------|----------|
| 品名: D-SUB DMS 59P/F铆合外壳 | | 版次:A.0 | | | |
| 电镀规格:Cu:40u",Ni:30u" | 日期:2022.07.26 | 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 | 63.2u" | OK | 2022.07.26 | 11:35:05 |
| 2 | 30u"min | 57.9u" | OK | 2022.07.26 | 11:36:07 |
| 3 | 30u"min | 55.6u" | OK | 2022.07.26 | 11:37:09 |
| 4 | 30u"min | 58.8u" | OK | 2022.07.26 | 11:38:11 |
| 2、底层电镀测试 (Cu) | | | | | |
| 数据 | 测试标准 | 实测值 | 判定 | 测试日期 | 测试时间 |
| 1 | 30u"min | 36.5u" | OK | 2022.07.26 | 11:35:05 |
| 2 | 30u"min | 32.3u" | OK | 2022.07.26 | 11:36:07 |
| 3 | 30u"min | 34.7u" | OK | 2022.07.26 | 11:37:09 |
| 4 | 30u"min | 36.1u" | OK | 2022.07.26 | 11:38:11 |

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-1345 |
| METHOD | NEUTRL SALT SPRAY CORROSION TEST | REF | |
| 客户 | | 试验起始日期 | 2022年09月01日 20:00 时起 |
| | | DATE | 2022年09月02日 08:00 时止 |
| 样品名称 | D-SUB DMS 59P/F 铆合卧贴 | 试验数量 | 5PCS |
| P/N | DS615-0231-2638 | QTY | |

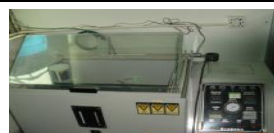
试验条件 (TEST CONDITION)

- 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 PHENOMENON AFTER TEST | 判定 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

东莞市海嵘兴塑胶有限公司

LCP材质分析报告

| 品 名 | 比 例 | 用 途 |
|---------|-------|----------------|
| 杜邦LCP树脂 | 0.68 | 构成材料主要成份 |
| 抗氧剂 | 0.003 | 抗氧化 |
| 日本住友TAP | 0.002 | 润滑及增加流动性 |
| 大洋安定剂 | 0.005 | 稳定机械性能, 方便重复使用 |
| 玻纤 | 0.30 | 增强 |
| 色母 | 0.01 | 着色 |

注：以上数据真实可靠，但并非绝对值，并不做任何商业依据。



佛山市顺德区天硕贸易有限公司

Foshan Shunde Tianshuo Trade Company Limited

日期: 2021-10-19

编号: FB2110136

| 收货单位PURCHASER: _____ | | | | 产品名称: <u>SPCC-SD</u> | | | | | | | | | | | |
|--------------------------------------|-----------------|---------------------------------|--------------------|--------------------------|--------|---------|---------|--------|--------|---------|---------------------------|--------------|----------------|------------|------------|
| 检验标准SPECIFICATION: <u>JIS G 3141</u> | | | | 检验情况: <u>合格</u> | | | | | | | | | | | |
| 产品规格 SPECIFICATION MM | 钢卷号 COIL. NO | 材质牌号 SYMBOL OF QUALITY | 净重 WEIGHT KG | 化学成份CHEMICAL COMPOSITION | | | | | | | 力学性能MECHANICAL PROPERTIES | | | | |
| | | | | Fe % | C % | Mn % | Si % | P % | S % | Al % | 抗拉强度T.S Mpa | 延伸率EL (%) | 屈服强度Y.S Mpa | 杯突 (mm) | 硬度 (HV) |
| 0.30x1250 | DL45657 | SPCC-SD | 7835 | 99 | 0.031 | 0.17 | 0.07 | 0.22 | 0.24 | | 361 | 29 | 259 | | 143 |
| 0.30x1250 | DL45658 | SPCC-SD | 7690 | 99 | 0.032 | 0.16 | 0.07 | 0.21 | 0.22 | | 362 | 30 | 256 | | 141 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

质量控制中心:

审核: 谢和钢

制表人: 胡万银



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

