

承认书

客户：合肥京东方视讯科技有限公司

品名：WiFi天线

料号：61005-00774

型号：SLK-BOE-3212H3-R-110I-B

机种：S4Pro收银机

日期：2023/12/18

| 供 应 商 签 核 SUPPLIER APPROVED SIGNATURES | | |
|---|------------------|-------------------|
| 担当 PREPARED by | 审查 CHECKED by | 核准 APPROVED by |
| 刘才亮 | 黄 震 | 林美财 |

供应商名称：深圳市亿圣邦科技有限公司

供应商地址：深圳市宝安区固戍前湾硬科技产业园C栋101

供应商电话：18025305599

供应商传真：0769-82553116

REVISION HISTORY
(产品变更明细书)

BOE

| | PART NO. : 61005-00774 | | MODEL NAME: | | S4Pro收银机 | |
|----------|------------------------|------------------------------|----------------------------|----------|-----------------------|---------------------------------|
| NO. | DATE (日期) | REASONS FOR CHANGE (变更原因) | COTENT OF CHANGE (变更内容) | | IMPORT TIME (导入时间) | WAY OF DISTINGUISH (变更后区分方式) |
| 1 | 2023/12/18 | 首次建立 | 首次建立 | | | |
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| APPROVED | | | CHECKED | DESIGNED | | DATE |
| 林美财 | | | 黄震 | 刘才亮 | | 2023/12/18 |

BOE

周如波整理

产品规格图面 产品环保要求:请在方框内打勾确认
是 ☐ 否 ☒ 无卤HF(Br<900ppm, Cl<900ppm, Br+Cl<1500ppm)

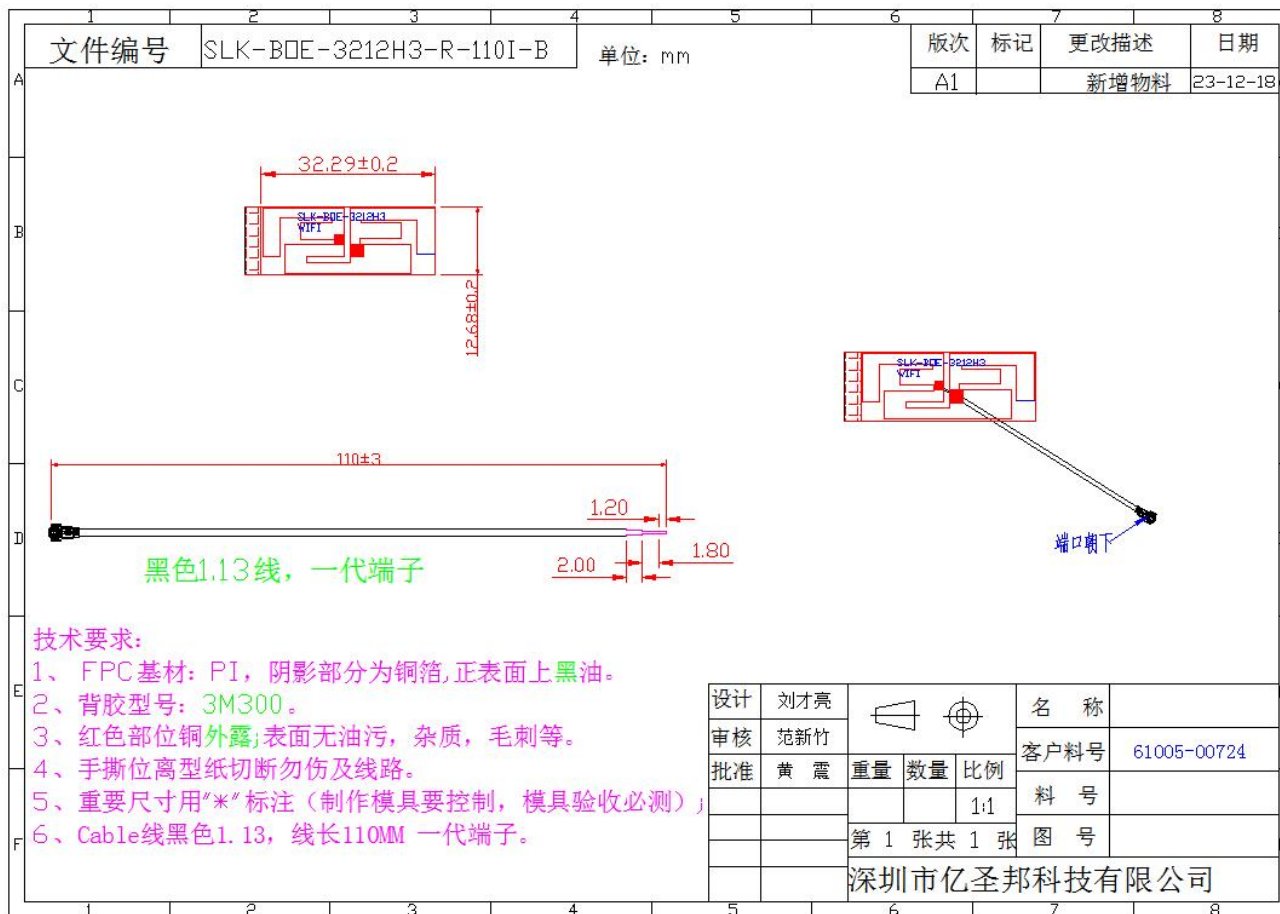


| | | | | | |
|----------|---------|----------|------------|-------------|-------------|
| APPROVED | CHECKED | DESIGNED | DATE | PART NO. : | 61005-00774 |
| 林美财 | 黄震 | 刘才亮 | 2023/12/18 | MODEL NAME: | S4Pro收银机 |

Product specification DRAWING (产品规格图面)

BOE

产品规格图面 产品环保要求:请在方框内打勾确认

是 ☐ 否 ☒ 无卤HF(Br<900ppm, Cl<900ppm, Br+Cl<1500ppm)

APPROVED

林美财

CHECKED

黄震

DESIGNED

刘才亮

DATE

2023/12/18

PART NO.:

MODEL NAME:

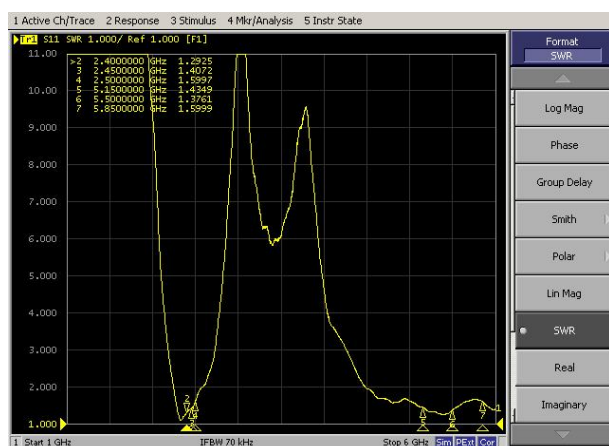
61005-00774

S4Pro收银机

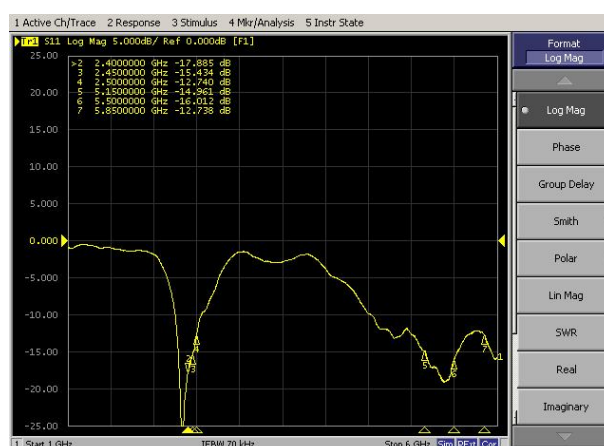
电气性能参数

| 特性 Characteristic | 规格 Specifications | 单位 unit |
|---------------------------|----------------------------------|--------------|
| 外形尺寸Dimensions | 32.29*12.68*0.12 | mm |
| 频率范围Frequency Range(GHZ) | 2.4-2.5+5.15-5.85 | GHz |
| 天线增益Antenna gain | 2.4G : 2.37 5G : 2.92 | dBi |
| 输入阻抗Impedance(Ω) | 50 | Ω |
| 天线类型Antenna type | PIFA Antenna | |
| 匹配参数Matching parameter | N/A | |
| 线长Line length | 110 \pm 3 | MM |
| 同轴电缆Coaxial cable | Black ϕ 1.13 | MM |
| 维持力Sustainability | >1Kg | Kg |
| 工作温度Working temperature | -30 $^{\circ}$ C~70 $^{\circ}$ C | $^{\circ}$ C |
| 存储温度Storage temperature | -30 $^{\circ}$ C~70 $^{\circ}$ C | $^{\circ}$ C |

VSWR



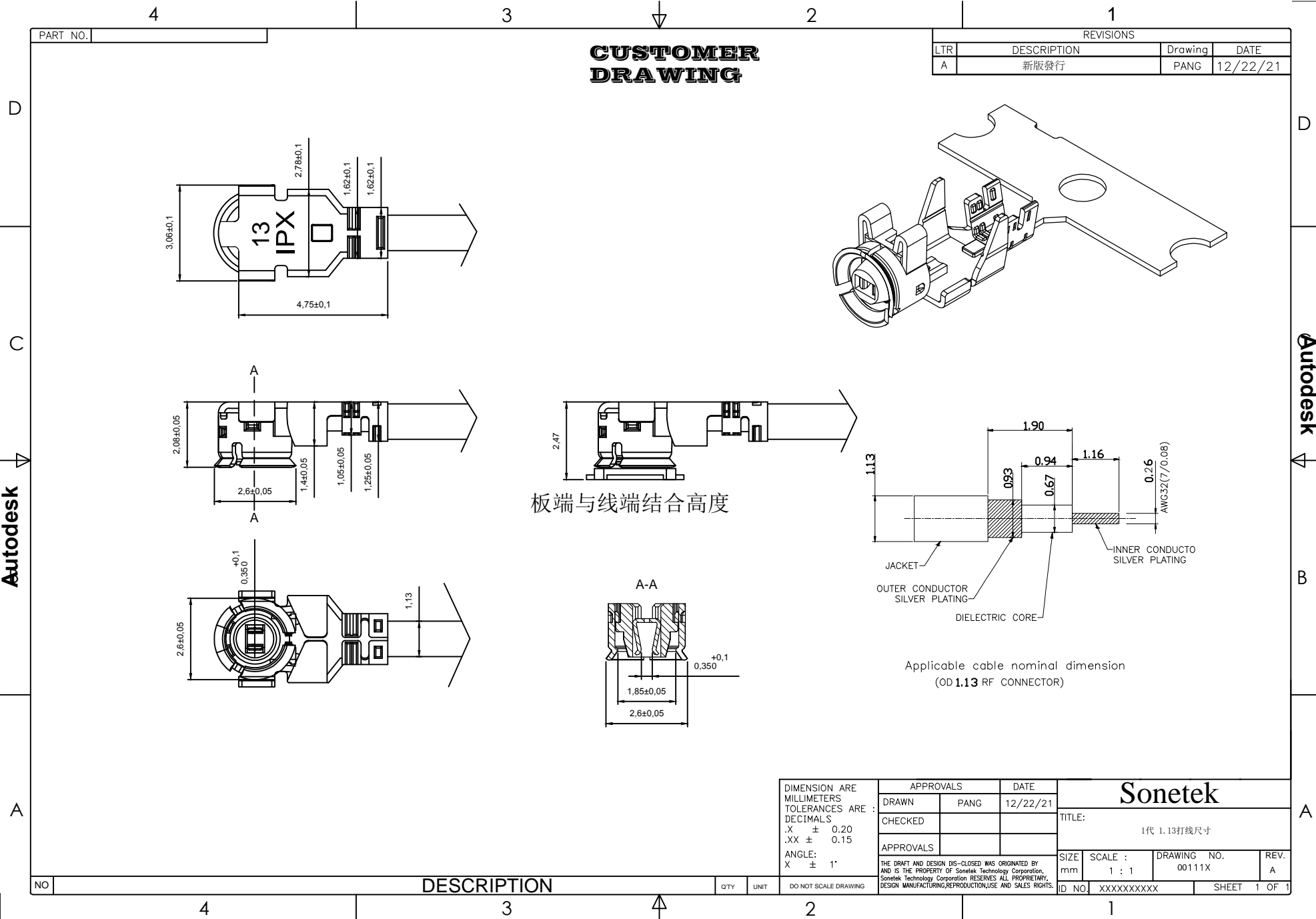
Return Loss



WIFI Antenna TRP/TIS

| WIFI | CH | 功率(11M) | 灵敏度(11M) | WIFI | CH | 功率(54M) | 灵敏度(54M) |
|---------|-----|----------|-----------|--------------|-----|----------|-----------|
| 802.11b | 1 | 16.4 | -86.6 | 802.11g | 1 | 16.93 | -77.25 |
| | 6 | 16.64 | -86.84 | | 6 | 17.27 | -77.98 |
| | 11 | 16.83 | -86.19 | | 11 | 17.6 | -77.87 |
| WIFI | CH | 功率(MCS7) | 灵敏度(MCS7) | WIFI | CH | 功率(MCS7) | 灵敏度(MCS7) |
| 802.11n | 1 | 16.9 | -72.14 | 802.11n | 36 | 15.05 | -72.92 |
| | 6 | 17.25 | -73.85 | | 149 | 15.4 | -72.62 |
| | 11 | 17.64 | -72.12 | | 165 | 14.61 | -72.18 |
| WIFI | CH | 功率(54M) | 灵敏度(54M) | WIFI | CH | 功率(MCS7) | 灵敏度(MCS7) |
| 802.11a | 36 | 15.99 | -76.83 | 802.11ac 40M | 36 | 15.81 | -70.89 |
| | 149 | 16.16 | -76.82 | | 149 | 15.98 | -70.95 |
| | 165 | 16.91 | -76.34 | | 161 | 16.51 | -70.44 |

| 产品规格 Product Type | | RF113/50 双锡线 | | | |
|---|--|--|---------------------------------|-----------------------------------|-----------------------|
| 结构图 Structure Drawing | |  | | | |
| 结构特性 Structure Characteristics | | | | | |
| 结构 Structure | | 项目 Item | | 标准值 Standard Value | |
| 内导体 Inner Conductor | | 材质 Material | | 镀锡铜线 Tinned Copper Wire | |
| | | 结构 Construction(mm) | | 7/0.08 | |
| | | 标称外径 Nom.Dia(mm) | | 0.24±0.02 | |
| 绝缘层 Insulation | | 材质 Material | | 聚全氟乙丙烯 FEP | |
| | | 标称外径 Nom.Dia(mm) | | 0.70±0.02 | |
| 外导体 Outer Conductor | | 材质 Material | | 镀锡铜线 Tinned Copper Wire 16*4/0.05 | |
| | | 标称外径 Nom.Dia(mm) | | 0.92±0.05 | |
| | | 编织覆盖率 Coverage Ratio(%) | | 90±5 | |
| 护套 Jacket | | 材质 Material | | 聚全氟乙丙烯 FEP | |
| | | 标称外径 Nom.Dia(mm) | | 1.13±0.05 | |
| 电气性能 Electrical Characteristics | | | | | |
| 项目 Item | | 标准值 Standard Value | 项目 Item | 频率 Frequency | 标准值 Standard Value |
| 阻抗 Impedanc (Ω) | | 50±2 | 衰减 Attenuation@20℃ (dB/m) | 1GHz | 2.20 |
| 电容 Capacitance(pF/m) | | 98 | | 2GHz | 3.10 |
| 速率 Velocity(%) | | 70 | | 3GHz | 3.80 |
| 驻波比 VSWR | | ≤1.30@DC-6GHz | | 4GHz | 4.40 |
| 最大工作电压 Max.Operating Voltage(V) | | 1000 | | 5GHz | 4.90 |
| 最大工作频率 Max.Operating Frequency(GHz) | | 6 | | 6GHz | 5.40 |
| 可靠性 Dependability | | | | | |
| 最小弯曲半径(单次)Min.Bending Radius/Single | | | mm | 5 | |
| 最小弯曲半径 (重复) Min.Bending Radius/Repeated | | | mm | 10 | |
| 工作温度范围 Operating Temperature | | | ℃ | -55- +200 | |
| 包装 Packing | | | | | |
| 包装方式 Packing Mode | | 纸盘 Papery Reel | | | |
| 包装长度 The Length of Each Reel(m) | | 1000 | | | |
| 每盘段数 The Joints of Each Reel | | ≤5 | | | |
| 最小段长 Min. Segment Length(m) | | ≥10 | | | |
| 使用提示 Trips for Use | | | | | |
| 存储环境 Storage Environment | | 温度：30℃以下，湿度：20-65% | | | |
| 最佳保存周期 The Best Save Cycle | | 2 个月，2 个月以上上锡效果变差，但电性能不受影响，夏季高温高湿环境开剥后需尽快流转 | | | |
| 加工温度 Processing Temperature | | 可短时承受 260℃的高温，300℃以上易发生分解，400℃以上发生显著的热分解 | | | |
| 铁氟龙收缩 Teflon Shrink | | 材料的固有属性，绝缘 0.2mm 以下，护套 0.3mm 以下 | | | |
| 护套窜动 Jacket Taaverse | | 加工长度（护套残留长度）低于 5CM 时易发生 | | | |



CHANG CHUN PLASTICS CO., LTD.

NO. 301, SONGKIANG ROAD, 7TH FL., TAIPEI, 10477 TAIWAN
TEL : 886-2-2503-8131 (REF) FAX : 886-2- 2501-8018

Engineering Plastics Polybutylene Terephthalate

Technical Data

CCP PBT 3030-201

PBT glass fiber 30% reinforced injection moulding grade.

Characteristics

- 1)excellent electrical property
- 2)excellent temperature resistance, high heat distortion temperature.
- 3)excellent mechanic and chemical property
- 4)excellent weatherability
- 5)excellent wear property
- 6)excellent moldability
- 7)High resistance to fuels, oil, fats and many solvents

Injection Moulding Condition

| | |
|-----------------------|---|
| Cylinder temperatures | : 240-270℃ |
| Nozzle temperature | : 260-270℃ |
| Mould temperature | : 40-120℃, suitable temperature 60-80℃ |
| Injection rate | : middle - fast |
| Screw speed | : 60-120 rpm, to be chosen in such a way that plasticizing time is just within cooling time. |
| Pressure | Injection pressure : 500-1200 kg/cm ² Holding pressure : 300-800 kg/cm ² Back pressure : 0-3 kg/cm ² |
| Mould shrinkage | Mould shrinkage 1.6 mm thickness horizon is 0.2-0.5% and vertical is 0.8-1.4% under the test method ASTM D955. |

Packaging

25 kg/ paper bag .

Material handing

Moisture pick-up from ambient air should be avoided. Keep hopper properly closed.

CHANG CHUN PLASTICS CO., LTD.

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TEL : 886-2-2503-8131 (REF) FAX : 886-2- 2501-8018

Engineering Plastics Polybutylene Terephthalate

CCP PBT 3030-201

| Property | Value | Unit | Test method ASTM |
|---|------------------|--------------------------|---------------------|
| Glass Fiber Content | 30 | % | |
| Specific gravity | 1.51 | - | D792 |
| Melting point | 225 | °C | DSC |
| Coef. of linear thermal expansion | 3 | 10 ⁻⁵ cm/cm°C | D696 |
| Heat deflection temperature under load | | | |
| --- 18.6 kg/cm ² | 210 | °C | D648 |
| --- 4.6 kg/cm ² | 220 | °C | D648 |
| Moisture absorption (24h) | 0.04 | % | D570 |
| Flammability acc. to UL94, 0.8 mm thickness | HB | - | UL94 |
| Tensile strength | 1300 | kg/cm ² | D638 |
| Tensile elongation | 4.0 | % | D638 |
| Flexural strength | 1950 | kg/cm ² | D790 |
| Flexural modulus | 82000 | kg/cm ² | D790 |
| Izod impact strength - notched 1/4" | 9.5 | kg-cm/cm | D256 |
| Hardness - rockwell | 121 | R | D785 |
| Dielectric strength, 2 mm thickness | 22 | KV/mm | D149 |
| Volume resistivity | 10 ¹⁵ | Ω-cm | D257 |
| Surface resistivity | 10 ¹³ | Ω | D257 |
| Dielectric constant | 3.7 | 60Hz | D150 |
| Dielectric dissipation factor | 0.001 | 60Hz | D150 |
| Arc resistance | 100 | SEC | D495 |

(1) For reference only

(2) All data in the table are the typical values of the material and not the minimum values of the material specifications.

Material safety data sheet

一、Goods and manufacturer information

| |
|---|
| Item name: Halogen-free polyimide copper foil substrate(Halogen-free PI -CCL) |
| Item number: SHIS or SHID |
| Name of the manufacturer or supplier / Address / Telephone/Portraiture: Suzhou Serengeti Electronic Material Co., Ltd. /NO. 168 north Taiping road, Taicang city , Jiangsu Province, China/0512-5337 8333/0512-5337 8355 |
| Emergency contact number/Phototelephony : 0512-5337 8333/0512-5337 8355 |

二、Component identification data

Pure substance :

| | |
|---|--|
| Chinese and English names: | 1. Halogen-free epoxy resin adhesive 2. Polyimide film 3. 3. Copper foil |
| Synonymous name: | - |
| Chemical Abstracts Agency Registration Number(CAS No.): | 1. (Halogen-free epoxy resin adhesive) 24969-06-0 25% ~ 41.2% 2. (Polyphenylene amine membrane) 25038-81-7 17.4% ~ 39.6% 3. (Copper foil) 7440-50-8 28.7% ~ 48% |
| Hazardous substance composition(percentage composition): | < 15(Halogen-free epoxy resin adhesive) |

三、Hazard identification data

| | |
|---|--|
| Most important harm and effect | Health hazard effect: No harm to the human body. |
| | Environment effects: - |
| | Physical and chemical harm: - |
| | Special harm: - |
| Cardinal symptom: - | |
| Hazardous classification of articles: - | |

四、Emergency treatment

| |
|---|
| First aid methods for different ways of exposure: |
| Inhalation: There is no way to inhale the film. |
| Skin contact: No stimulation. |
| Eye contact: No volatiles are allowed to touch. |
| Ingestion: There is no possible way for the film. |
| Most important symptoms and harmful effects: - |
| Protection of first aid personnel: - |
| Tips for doctors: - |

五、Fire extinguishing measures

| |
|--|
| Applicable fire-extinguishing agent: Use a fire extinguishing agent suitable for isolating the fire site. |
| Special hazards that may be encountered at the time of fire-fighting: Inhalation of high-temperature pyrolysis substances. |
| Special fire-fighting program: - |
| Special protective equipment for firefighters: Wear air respirator and |

protective gloves and fire-fighting clothes.

六、Emergency strain of leakage

Individual considerations: Use of personal protective equipment.

Environmental consideration: -

Cleaning method: -

七、Safety disposal and storage method

Handle: When operating, isolate from food and beverage.

Lay in: Store in a cool, dry and well-ventilated place.

八、Exposure prevention measures

Engineering control: -

Controlling parameter:

Average allowable concentration of eight hours per day/Short time average allowable concentration/Maximum allowable concentration: -

Biological index: -

Personal protective equipment:

Respiratory protection : A dust-proof mask.

Hand protection : Gloves.

Eye protection: Safety glasses.

Skin and body protection: -。

九、Physical and chemical properties

| | | | |
|-----------------------------------|-----------------------------------|--------------------------------|--|
| Material state: | Solid body | Form: | Membrane shape |
| Pigment: | Light brown ~ Dark brown(PI side) | Smell: | not have |
| PH value : | N/A | Boiling point/Boiling spread : | N/A |
| Decomposition temperature : | N/A | Flash point : | N/A test method : Open cup Closed cup |
| Autogenous ignition temperature : | N/A | Explosion limit : | N/A |
| Vapour pressure: | N/A | Vapour density : | N/A |

十、Stability and reactivity:

| | |
|---|---|
| Stability: | Stable under normal condition |
| Possible hazardous reactions in special conditions: | - |
| The situation to be avoided: | - |
| Substance to be avoided: | - |
| Hazardous decomposition products: | High thermal decomposition to produce nitrogen, phosphorus oxidation gas. |

十一、Toxic data

| | |
|-----------------|-----|
| Acute toxicity: | N/A |
| Local effect : | N/A |
| Sensitivity: | N/A |

| | |
|--------------------------------|-----|
| Chronic or long-term toxicity: | N/A |
| Special effects : | N/A |

十二、Ecological data

| | |
|---|---|
| Possible environmental impact/Environmental flow cloth: | - |
|---|---|

十三、Disposal method

| |
|---|
| Handle according to local environmental laws and regulations. |
|---|

十四、Transport information

| | |
|---|---|
| International shipping regulations: | Not available for IATA, ICAO. (Non-dangerous goods) |
| UN number : | -- |
| Domestic transportation regulations: | -- |
| Special delivery methods and matters needing attention: | -- |

十五、Regulatory data

| | |
|-------------------------|-------------------------------|
| Applicable regulations: | Applicable to RoHS, GP, WEEE. |
|-------------------------|-------------------------------|

十六、Other data

| | | | |
|-------------------|--|--|------------------|
| Rdocument ation : | -- | | |
| Tabulating unit: | Name: | Suzhou Serengeti Electronic Material Co., Ltd. | |
| | Address/Telephone: | NO. 168 north Taiping road, Taicang city , Jiangsu Province/0512-5337 8333 | |
| Lister: | Professional ranks and titles : Department Manager | | Name: Long Huang |
| Tabulation date: | 16 March, 2021 | | |
| Remarks: | The symbol "--" in the above data indicates that there is no relevant information at present. All data and data are used for reference only. Users should judge their availability according to the application requirements. | | |



Material Safety Data Sheet

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This material safety data sheet (MSDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a MSDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M™ 300LSE Adhesive Transfer Tapes: 8132LE, 8153LE, 9453FL, 9453LE, 9471FL, 9471LE, 9472FL, 9472LE, 9472LEU, 9653LE, 9671LE, 9672LE and 9698LE
MANUFACTURER: 3M
DIVISION: Industrial Adhesives and Tapes Division
ADDRESS: 3M Center, St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 03/27/13
Supersedes Date: 12/08/09

Document Group: 07-7168-3

Product Use:

Specific Use: Bonding & Attachment
Intended Use: Industrial use

SECTION 2: INGREDIENTS

| <u>Ingredient</u> | <u>C.A.S. No.</u> | <u>% by Wt</u> |
|--------------------------|-------------------|----------------|
| Paper or Film Liner | Mixture | Not Applicable |
| Acrylic Polymer Adhesive | Trade Secret | 100 |

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Roll of Tape

Odor, Color, Grade: Translucent adhesive, slight acrylate odor, paper or film quick release liner

General Physical Form: Solid

Immediate health, physical, and environmental hazards: This product, when used under reasonable conditions and in accordance with the 3M directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

No health effects are expected.

Skin Contact:

No health effects are expected.

Inhalation:

No health effects are expected. This product may have a characteristic odor; however, no adverse health effects are anticipated.

Ingestion:

No health effects are expected.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: No need for first aid is anticipated.

Skin Contact: No need for first aid is anticipated.

Inhalation: No need for first aid is anticipated.

If Swallowed: No need for first aid is anticipated.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

| | |
|--------------------------|-----------------------|
| Autoignition temperature | <i>Not Applicable</i> |
| Flash Point | <i>Not Applicable</i> |
| Flammable Limits(LEL) | <i>Not Applicable</i> |
| Flammable Limits(UEL) | <i>Not Applicable</i> |

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: No unusual fire or explosion hazards are anticipated.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Not applicable.

6.2. Environmental precautions

Not applicable.

Clean-up methods

Not applicable.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

7.2 STORAGE

Not applicable.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Not applicable.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.

8.2.2 Skin Protection

Avoid prolonged or repeated skin contact. Gloves not normally required.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Not an expected route of exposure.

8.3 EXPOSURE GUIDELINES

None Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|--|
| Specific Physical Form: | Roll of Tape |
| Odor, Color, Grade: | Translucent adhesive, slight acrylate odor, paper or fim quick release liner |
| General Physical Form: | Solid |
| Autoignition temperature | <i>Not Applicable</i> |
| Flash Point | <i>Not Applicable</i> |
| Flammable Limits(LEL) | <i>Not Applicable</i> |
| Flammable Limits(UEL) | <i>Not Applicable</i> |
| Boiling Point | <i>Not Applicable</i> |
| Density | <i>Not Applicable</i> |
| Vapor Density | <i>Not Applicable</i> |
| Vapor Pressure | <i>Not Applicable</i> |
| Specific Gravity | <i>Not Applicable</i> |
| pH | <i>Not Applicable</i> |
| Melting point | <i>No Data Available</i> |
| Solubility in Water | Nil |
| Evaporation rate | <i>Not Applicable</i> |
| Volatile Organic Compounds | <i>Not Applicable</i> |
| Percent volatile | <i>Not Applicable</i> |
| VOC Less H2O & Exempt Solvents | <i>Not Applicable</i> |
| Viscosity | <i>Not Applicable</i> |

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

None known

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance

Hydrocarbons
Carbon monoxide
Carbon dioxide

Condition

During Combustion
During Combustion
During Combustion

Hazardous Decomposition: Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Reclaim if feasible. If product can't be reclaimed, dispose of waste product in a sanitary landfill. Alternatively, incinerate the waste product in an industrial, commercial, or municipal incinerator.

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14: TRANSPORT INFORMATION

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 0 **Flammability:** 1 **Reactivity:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Reason for Reissue: The MSDS has been revised because 3M has adopted the 16-section ANSI/ISO format. The potential hazards of the product have not changed. We encourage you to reread the MSDS and review the information.

Revision Changes:

Section 1: Product name was modified.

Section 1: Product use information was modified.

Section 16: Disclaimer (second paragraph) was modified.

Section 10: Hazardous decomposition or by-products table was modified.

Section 14: Transportation legal text was modified.

Page Heading: Product name was modified.

Section 9: Density information was modified.

Section 9: Vapor density value was modified.

Section 9: Vapor pressure value was modified.

Section 9: Boiling point information was modified.

Section 5: Flammable limits (UE) information was modified.

Section 5: Flammable limits (LEL) information was modified.

Section 5: Autoignition temperature information was modified.

Section 5: Flash point information was modified.

Section 9: Property description for optional properties was modified.

Section 9: Specific gravity information was modified.

Section 9: pH information was modified.

Section 9: Melting point information was modified.

Section 9: Solubility in water text was modified.

Section 9: Flash point information was modified.

Section 9: Flammable limits (LEL) information was modified.

Section 9: Flammable limits (UEL) information was modified.

Section 9: Autoignition temperature information was modified.

Section 2: Ingredient table was modified.

Section 10: Materials to avoid physical property was modified.

Section 10: Conditions to avoid physical property was modified.

Section 6: 6.2. Environmental precautions heading was added.

Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.

Section 16: Web address was added.

Section 6: Personal precautions information was added.

Section 6: Methods for cleaning up information was added.

Section 8: Hand protection information was added.

Section 1: Address was added.

Copyright was added.
Company logo was added.
Section 6: Clean-up methods heading was added.
Telephone header was added.
Company Telephone was added.
Section 1: Emergency phone information was added.
Section 1: Emergency phone information was deleted.
Company Logo was deleted.
Copyright was deleted.
Section 16: Web address heading was deleted.
Section 6: Release measures heading was deleted.
Section 9: Property description for required properties was deleted.
Section 1: Address line 1 was deleted.
Section 1: Address line 2 was deleted.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M

3M USA MSDSs are available at www.3M.com

| key part list (规格，厂商，用量) | | | | | BOE |
|--------------------------|-------|---------|----------|----------------|-----|
| 序号 | 零部件名称 | 规格型号 | 材料 | 厂商 | 备注 |
| 1 | FPC | PI FPC | PI | 深圳市君毅翔电子科技有限公司 | |
| 2 | 线材 | 1.13双锡线 | 镀锡铜线+FEP | 深圳市天迈通信技术有限公司 | |
| 3 | 连接器 | RF 一代端子 | 镀金铜+PBT | 惠州市奇富康电子有限公司 | |
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|---|-------------------------|----------------|------|------|------|---|----|---|---|----|---|---|----|---|---|----|---|---|----|---|
| 测试项目 | 盐雾测试 | | | | | | | | | | | | | | | | | | | |
| 产品规格型号 | SLK-BOE-3212H3-R-110I-B | 检测数量：5PCS | | | | | | | | | | | | | | | | | | |
| 检测时间：2023-12-16 | | 完成时间2023-12-18 | | | | | | | | | | | | | | | | | | |
| 试验/检验设备： HY-60D 盐雾测试仪 HP-8753ES网络分析仪 | | | | | | | | | | | | | | | | | | | | |
| 试验/检验条件： 盐雾箱内温度为35±2℃； 试验室温度22-30℃ 2.盐雾沉降速度经48H喷雾后每80cm 面积上为1-2ML/h氯化钠浓度为50± 10g/L，PH值为6.5/7.2 | | | | | | | | | | | | | | | | | | | | |
| 判定标准： 1. 电气测试符合标准要求： 电压驻波比测试合格； 2.金属表面镀层无氧化、剥落、裂痕、分离等不良； 非金属部分无变色、变形、脱胶、开裂等不良 | | | | | | | | | | | | | | | | | | | | |
| <table><tr><td>样品编号</td><td>评价等级</td><td>不良描述</td></tr><tr><td>1</td><td>合格</td><td>无</td></tr><tr><td>2</td><td>合格</td><td>无</td></tr><tr><td>3</td><td>合格</td><td>无</td></tr><tr><td>4</td><td>合格</td><td>无</td></tr><tr><td>5</td><td>合格</td><td>无</td></tr></table> | | | 样品编号 | 评价等级 | 不良描述 | 1 | 合格 | 无 | 2 | 合格 | 无 | 3 | 合格 | 无 | 4 | 合格 | 无 | 5 | 合格 | 无 |
| 样品编号 | 评价等级 | 不良描述 | | | | | | | | | | | | | | | | | | |
| 1 | 合格 | 无 | | | | | | | | | | | | | | | | | | |
| 2 | 合格 | 无 | | | | | | | | | | | | | | | | | | |
| 3 | 合格 | 无 | | | | | | | | | | | | | | | | | | |
| 4 | 合格 | 无 | | | | | | | | | | | | | | | | | | |
| 5 | 合格 | 无 | | | | | | | | | | | | | | | | | | |
| 试验/检验判定： <div><input checked="" type="checkbox"/>合格<div><input type="checkbox"/> 不合格</div><div><input type="checkbox"/> 不作判定</div></div> | | | | | | | | | | | | | | | | | | | | |
| 测试：王鑫源 | | 审核：王国行 | | | | | | | | | | | | | | | | | | |

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4.驻波比测试



| | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------|------|--------|------|-----------------|----------|---------|--|--|--|--|------|---|---|---|---|---|------|------|------|------|------|------|
| 测试项目 | 驻波比测试 | | | | | | | | | | | | | | | | | | | | | | |
| 产品规格型号 | SLK-BOE-3212H3-R-110I-B | | | | 检测数量：5PCS | | | | | | | | | | | | | | | | | | |
| 检测时间：2023-12-18 | | | | | 完成时间：2023-12-18 | | | | | | | | | | | | | | | | | | |
| 试验/检验设备： 1.HP-8753ES网络分析仪 | | | | | | | | | | | | | | | | | | | | | | | |
| 试验/检验条件： 1.温度：18-25℃ 2.湿度≤70%RH | | | | | | | | | | | | | | | | | | | | | | | |
| 测试结果：合格 | | | | | | | | | | | | | | | | | | | | | | | |
| <table><tr><td>项目 条件</td><td colspan="5">天线驻波比≤2</td></tr><tr><td>测试样品</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr><tr><td>测试结果</td><td>1.23</td><td>1.26</td><td>1.24</td><td>1.25</td><td>1.32</td></tr></table> | | | | | | 项目 条件 | 天线驻波比≤2 | | | | | 测试样品 | 1 | 2 | 3 | 4 | 5 | 测试结果 | 1.23 | 1.26 | 1.24 | 1.25 | 1.32 |
| 项目 条件 | 天线驻波比≤2 | | | | | | | | | | | | | | | | | | | | | | |
| 测试样品 | 1 | 2 | 3 | 4 | 5 | | | | | | | | | | | | | | | | | | |
| 测试结果 | 1.23 | 1.26 | 1.24 | 1.25 | 1.32 | | | | | | | | | | | | | | | | | | |
| 试验/检验判定： <input checked="" type="checkbox"/> 合格 <input type="checkbox"/> 不合格 <input type="checkbox"/> 不作判定 | | | | | | | | | | | | | | | | | | | | | | | |
| 测试：王鑫源 | | | 审核：王国行 | | | | | | | | | | | | | | | | | | | | |

包装信息表

BOE

包装信息

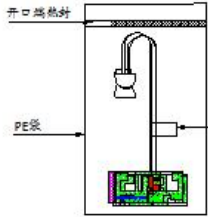
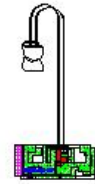
| | | | |
|---------|-------------|---------|--------|
| 零件编码 | 61005-00724 | | |
| 包装外尺寸 | 510*300*220 | 单箱净重 | 2.5千克 |
| 纸箱装入数 | 5000 | 单箱毛重 | 3.59千克 |
| 抗压值/kgf | 350 | 耐破值/Kpa | 15.2 |

辅料信息

| 序号 | 名称 | 规格 | 材质 | 用量 |
|----|-----|-------------|-----|----|
| 1 | 小鼓袋 | 16*24mm | PE | 40 |
| 2 | 大骨袋 | 23*345 | PE | 8 |
| 3 | 纸箱 | 510*300*220 | 牛卡 | 1 |
| 4 | 隔板 | 490*290MM | 牛卡 | 2 |
| 5 | 防潮剂 | 2g/包 | 硅胶颗 | 40 |
| 6 | | | | |

单个产品

每扎25pcs



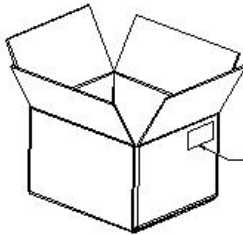
内袋包装说明:
1. PE袋包装, 每PE袋装100pcs.
2. PE袋进行封口.
3. 每袋需贴相应标签

京东方视讯科技有限公司

| | | | |
|---|-------------------------|---|-------|
|  4300267028 底 | |  | |
| BOE料号 | 61005-00724 | 数量 | 300 |
| 物料名称 | WiFi天线 | UL号 | |
| 规格型号/材质 | SLK-BOE-3212H3-R-1101-B | | |
| 生产日期 | 2023-12-05 | 毛重 | 1 KG |
| 批次号 | 23120501 | 箱号 | W0001 |
| OQC判定 | 环保标志 | BOE IQC判定 | |
| | | | |
| 供应商名称/代码 | | 0001024573 | |
| 备注 | 深圳市亿圣邦科技有限公司 | | |

外箱标签

外箱包装



外箱包装说明:
1. 外箱需贴1pc外箱标签,
2. 每箱装5000pcs产品;

外箱标签

通过包装测试: ☒ 跌落 (1A) ☒ 冲击 ☒ 碰撞 ☒ 振动 ☒ 路跑 (三级公路/300km)

☐ 环境测试 (测试条件:) 提供所做测试的报告

承诺: 供货方 (零件厂商名) 需保证包装设计的可靠性, 若该物料在海外运输中, 因包装保护不足导致品质异常, 皆由供货方 (零件厂商名) 承担。

供货方工程主管: 黄震

供货方品质主管: 郭亮

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环保要求

BOE

产品环保要求:请在方框内打勾确认 (FFC所用的所用的所有材料)

1、无卤HF(Br<900ppm, Cl<900ppm, Br+Cl<1500ppm)

是 ☐ 否 ☒

2、 ROHS 2.0 (ROHS2.0里的项目[铅及其化合物(Pb) 、六价铬及其化合物(Cr6 +)、镉及其化合物(Cd)、汞及其化合物(Hg)、多溴联苯(PBBs)、多溴二苯醚(PBDEs)、邻苯二甲酸二(2-乙基己)酯(DEHP)、邻苯二甲酸丁苄酯(BBP)、邻苯二甲酸二丁酯(DBP)、邻苯二甲酸二异丁酯(DIBP)] ;

是 ☒ 否 ☐

3、 REACH (满足欧盟REACH所规范的化学成分)

是 ☒ 否 ☐

4、红磷

是 ☐ 否 ☒

5、SCCPs管控:ND(≤50ppm)

是 ☒ 否 ☐

| | | | | | |
|------------------------------------|------------|------------|----|------------------|--------------------|
| 短链氯石蜡 (SCCPs C ₁₀₋₁₃) | 85535-84-8 | ND(<50ppm) | 即日 | ISO 18219 : 2015 | MCD、DOC、高风险 物料检测报告 |
|------------------------------------|------------|------------|----|------------------|--------------------|

6、多环芳香烃PAHs管控 (18项)

是 ☒ 否 ☐

7、邻苯二甲酸管控 (17项) : 禁止所有邻苯二甲酸盐物质 ; 附录增加DnHP

是 ☒ 否 ☐

| | | | | |
|---------------|---|----|---------------------|--------------------|
| 邻苯二甲酸管控 (见下表) | 终端产品 : 1000ppm 邻苯每一项均小于1000ppm 邻苯总和小于1000 ppm | 即日 | IEC62321/EN62321及其他 | MCD、DOC、高风险 物料检测报告 |
|---------------|---|----|---------------------|--------------------|

| | | |
|----|----------------------------|----------------------------|
| 1 | 邻苯二甲酸二丁酯 (DBP) | CAS#:84-74-2 |
| 2 | 邻苯二甲酸丁苄酯(BBP) | CAS#:85-68-7 |
| 3 | 邻苯二甲酸二 (2-乙基) 乙酯 (DEHP) | CAS#:117-81-7 |
| 4 | 邻苯二甲酸二正辛酯 (DNOP) | CAS#:117-84-0 |
| 5 | 邻苯二甲酸二异壬酯 (DINP) | CAS#:28553-12-0,68515-48-0 |
| 6 | 邻苯二甲酸二异癸酯 (DIDP) | CAS#:26761-40-0,68515-49-1 |
| 7 | 邻苯二甲酸二甲酯 (DMP) | CAS#:131-11-3 |
| 8 | 邻苯二甲酸二乙酯 (DEP) | CAS#:84-66-2 |
| 9 | 邻苯二甲酸二丙酯 (DPrP) | CAS#:131-16-8 |
| 10 | 邻苯二甲酸二异丁酯(DIBP) | CAS#:84-69-5 |
| 11 | 邻苯二甲酸二戊酯 (DPP) | CAS#:131-18-0 |
| 12 | 邻苯二甲酸二庚酯 (DHP) | CAS#:3648-21-3 |
| 13 | 邻苯二甲酸二环己酯 (DCHP) | CAS#:84-61-7 |
| 14 | 邻苯二甲酸二异辛酯(DIOP) | CAS#:27554-26-3 |
| 15 | 邻苯二甲酸二壬酯 (DNP) | CAS#:84-76-4 |
| 16 | 己二酸二异壬酯 (DINA) | CAS#:33703-08-1 |

| | | | | | |
|----------|---------|----------|------------|-------------|-------------|
| APPROVED | CHECKED | DESIGNED | DATE | PART NO.: | 61005-00724 |
| 林美财 | 黄震 | 刘才亮 | 2023/12/18 | MODEL NAME: | 产品机型 |

Declaration of conformity
符合性声明

BOE

本企业对所出货之零件做如下郑重声明：

- 1、本企业产品规格书填写内容及所提供检测报告、检测样品等真实有效；
- 2、本企业产品原辅材料来自于合格供应方，符合输入国或地区的法规（确认检测报告每年提供一次）及技术标准的要求；
- 3、本企业产品规格书提供的尺寸数据及出货检查等质量报告真实、准确，满足客户设计要求；
- 4、本企业承诺如有虚假将承担与此有关的一切法律责任。

签名：林美财

日期：2023-12-18



REACH 声明

BOE

承诺方：

我司充分认识到环境保护的重要性；并积极、努力的推进地球环境保护；响应客户目标、生产对环境无害的产品，为了达成环境保护品质目标，我们誓约诚信地执行下列事项：

- 1：我司生产的产品完全符合最新REACH法规要求。
- 2：若因我司提供的产品超出REACH法规要求，造成客户经济方面的损失或其他不预计的费用均由本公司承担。

公司名称：深圳市亿圣邦科技有限公司
签署签名：林美财
签署日期：2023-12-18

