



HT-50 V 感光防焊油墨技术资料

HT-50 V Photoimageable solder mask data sheet

一、性能介绍 Features:

易操作使用，高度解像，优良的附着力、耐热性及良好的耐电金、化金性能。

Easy operation, high resolution, good adhesion, heat resistance and good performance for electric gold, immersion gold.

二、技术资讯 Specification:

| 项目 Items | 产品名称 Product name | HT-50 V |
|----------------------------------|----------------------|---|
| 颜色 Color | | 紫色 Violet |
| 粘度（主剂） Viscosity(main agent) | | 25℃, 粘度计/Brookfield Viscometer DV2T |
| | | 350±20dPa.s |
| 混合比例 Mixing ratio | | 主剂：硬化剂=75:25 Main agent: Hardener=75:25 |
| 混合后使用期限 Pot life after mixing | | 24 小时（25℃以下暗处保存） 24hours(Store in dark place below 25℃) |
| 保存期限 Shelf life | | 制造后 6 个月 6 months after production |
| 附着力 Adhesion | | 100/100 |
| 铅笔硬度 Hardness | | ≥6H |
| 耐溶剂性 Solvent resistance | | PGM-AC, 室温下浸泡 30min 后, 以 3M 胶带做拉力测试, 无油墨脱落 PGM-Ac 30 min immerse at room temperature, no peeling off after tape test. |
| 耐酸性 Acid resistance | | 10vol%H ₂ SO ₄ (aq), 室温下浸泡 30min 后, 以 3M 胶带做拉力测试, 无油墨脱落 10vol%H ₂ SO ₄ 30 min immerse at room temperature, no peeling off after tape test. |
| 耐碱性 Alkaline resistance | | 10wt%NaOH(aq), 室温下浸泡 30min 后, 以 3M 胶带做拉力测试, 无油墨脱落 10 wt% NaOH 30 min immerse at room temperature, no peeling off after tape test. |
| 耐焊锡 Solder resistance | | 288℃×10sec×3times |
| 绝缘电阻 Insulation resistance | | ≥1.2×10 ¹¹ Ω |
| 包装 Potting | | 1kg/套, 5kg/套 1kg/set, 5kg/set |



三、操作程序 Process recommendations:

| 产品名称 Product name 项目 Items | HT-50 V | 注意事项 Notes |
|--|---|---|
| 调油 Mixing | 添加适量专用稀释剂搅拌 5-10min, 静置 15min 以上再使用 Add the appropriate special diluent and stir 5-10min, hold 15min or more before using | 稀释剂添加量可根据粘度需求进行添加 Diluent amount can be added according to the viscosity requirement |
| 前处理 Pretreat | 酸洗→磨刷→喷刷→高压水洗→水洗→烘干 金刚砂浓度: 18-22% 酸洗 H ₂ SO ₄ 浓度: 3-5% Acid washing→Scrubbing→Spray brush→High pressure water washing, →Rinsing→Drying Emery concentration: 18-22% H ₂ SO ₄ concentration: 3-5% | 磨痕测试: 12-18mm 水破测试: ≥30s 喷痕测试: 同板面不同位置喷嘴堵塞≤5个 The grinding mark test: 12 to 18 mm The water break test: ≥ 30 s Spray mark test: with different location of the nozzle clogging ≤5 |
| 丝印/辊涂 Screen printing Roller coating | 丝印网目: 36-43T 刮刀: 75度 辊涂 Silk screen mesh: 36-43T Squeegee: 75degree Roller coating | 丝印完成后静置 15min 以上再进行预烤 Recommend to hold 10 minutes before prebaking |
| 预烤 Pre curing | 双面烘干: 75°C×35-45min Double-sided: 75°C×35-45min 单面烘干: Single-sided: 第一面: 75°C×18-20min, Side1: 75°C×18-20min, 第二面: 75°C×25-30min Side2: 75°C×25-30min | 预烤或曝光后静置 15min 以上, 预烤到显影静置时间不可超过 24hr. Hold above 15min after pre curing and exposure, The hold time from pre curing to developing should not exceed 24hr. |
| 曝光 Exposure | 600~800mJ/ cm ² , 21 级曝光尺: 9-12 格盖膜 600~800mJ/ cm ² , Stouffer 21 steps :9-12steps cover coating | |
| 显影 Developing | Na ₂ CO ₃ 浓度: 0.8-1.2% Na ₂ CO ₃ concentration: 0.8-1.2% 温度: 28-32°C Temperature: 28-32°C 喷淋压力: 1.5-2.5kg/cm ² Spray pressure: 1.5-2.5kg/cm ² 时间: 55-70sec Time: 55-70sec PH 值: 9-11 PH value: 9-11 | A. 上喷淋比下喷淋压力大 0.5kg/cm ² 可以预防卡板 B. 显影点控制: 50-60% A. The above spray pressure is larger than the below spray pressure 0.5kg/cm ² can prevent the plug board B. Developing point control: 50-60% |
| 后烤 Final curing | 65-170°C×16-18 仓, 时间 70-180 分钟。 65-170°C×16-18 oven, time: 70-180 minutes. | 如塞孔板或厚铜板要求先低温分段烤后再高温固化 A plug hole or thick copper of PCB request five sections of baking at low temperature before high temperature curing |

注明: 以上为建议参数, 现场使用时请根据自身工艺设备的实际情况进行调整。

Note: the above is the recommended parameters, on-site use, according to the actual situation of their own equipment to adjust.