



HT-50 L3GM-1 哑面感光防焊油墨技术资料

HT-50 L3GM-1 Matte 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:

产品名称 Product name	HT-50 L3GM-1
项目 Items	
颜色 Color	哑绿色 Matte green
粘度（主剂） Viscosity(main agent)	25℃, 粘度计/Brookfield Viscometer DV2T
	400±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 L3GM-1	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℃×35-45min Double-sided: 75℃×35-45min 单面烘干: Single-sided: 第一面: 75℃×18-20min, Side1: 75℃×18-20min, 第二面: 75℃×25-30min Side2: 75℃×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℃ Temperature: 28-32℃ 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℃×16-18 仓, 时间 70-180 分钟。 65-170℃×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.