

无铅无银焊料

Lead-free & silver-free solder

无铅无银焊料系列，是福英达根据客户的要求针对常规 SAC 焊料由于银的存在容易产生电迁移的问题，开发的无铅无银超微焊料。根据客户的不同需求提供包含 SnCuX、SN100C 等合金，粒径型号 T6、T7、T8、T9，产品类别有超微焊粉、免洗锡膏、水洗锡膏、锡胶，不同型号的产品。该无铅无银焊料系列，锡粉球形度好，粒度分布窄，合金无铅无银，不存在银的迁移，焊点光亮，润湿性好。

Fitech's lead-free & silver-free ultra-fine solder products are developed to solve the problem of electromigration due to the presence of silver in conventional SAC solder according to customer's requirements. Products of such as SnCuX and SN100C alloys are offered in ultra-fine solder powder, no-clean solder paste, water soluble solder paste and epoxy solder adhesive with the particle size from Type 6 to Type 9 according to customers' needs. Lead-free & silver-free solder series has advantages such as good sphericity, narrow particle size distribution, no silver migration, bright solder joints and good wettability.



特性 Features



无铅无银焊料, 避免银迁移现象

Lead-free & silver-free, no silver migration



采用T6~T9超微焊粉, 满足微间距良好的印刷性能要求

Particle size from Type 6 to Type 9, good printability in narrow pitch and micro assembly



合金焊点光亮, SN100C焊点可靠性与SAC305相当

Bright solder joints, SN100C has as good the reliability as SAC305



良好的润湿性和可焊性

Good wettability and solderability



环保无卤, 可选择免清洗和水洗型号

Halogen-free; no-clean and water-soluble products are available.



超微粉Coating处理, 抗氧化性好, 焊料稳定性好

Ultra-fine solder powders are coated with Fitech's unique technology, good oxidation resistance and stability feature.

无铅无银焊料 *Lead-free & silver-free solder*

性能参数 *Parameter*

产品名称 <i>Product</i>	FTD-007	FTP-007	FTD-017	FTP-017	备注
锡粉尺寸 <i>Size</i>	T6(5~15 μ m)	T7(2~11 μ m)	T8(2~8 μ m)	T9(1~5 μ m)	PSD
合金 <i>Alloy</i>	SnCuX	SnCuX	SN100C (SnCu0.7Ni0.04Ge0.006)		
熔点 <i>Melting Point</i>	227°C	227°C	227°C	227°C	DSC
涂覆方法 <i>Using method</i>	点胶/Dispensing	印刷 <i>Printing</i>	点胶/Dispensing	印刷 <i>Printing</i>	
粘度 <i>Pa.s</i>	30~70Pa.S	120~180Pa.S	30~70Pa.S	120~180Pa.S	Malcom-PCU
Ti值	0.5~0.7	0.45~0.65	0.5~0.7	0.45~0.65	Malcom-PCU
合金比例 <i>Alloy%</i>	81~85%	85~89%	81~85%	85~89%	JIS Z-3197
助焊剂比例 <i>Flux %</i>	19~15%	15~11%	19~15%	15~11%	JIS Z-3197
铜板腐蚀 <i>Corrosion</i>	Pass ✓	Pass ✓	Pass ✓	Pass ✓	JIS Z-3197
残留物干燥度 <i>Residue dryness</i>	Pass ✓	Pass ✓	Pass ✓	Pass ✓	JIS Z-3284
锡珠测试 <i>Solder ball</i>	Pass ✓	Pass ✓	Pass ✓	Pass ✓	JIS Z-3284
扩展率 <i>Rate of expansion</i>	>85%	>85%	>85%	>85%	JIS Z-3197
卤素含量 <i>Halogen content</i>	无卤素 氟元素或溴元素小于900 ppm, 总量小于1500 p,pm Halogen free Cl or Br <900 ppm, total<1500 ppm				JIS Z-3284

*可按客户需求进行其他合金组成、锡粉尺寸及锡膏粘度进行定制。Can be customized for other alloy composition, powder size and paste viscosity.

产品应用

Product Application

超微焊料适用于微间距高密度封装，无铅无银材料解决电迁移问题，进一步提高了可靠性，特别适用于 SiP 高密度集成封装、大功率半导体器件、高可靠性封装、在高温环境下工作的电子器件及对银迁移有特别要求的器件封装中，替代 SAC305 焊料。

Lead-free & silver-free series is an ideal choice for SiP super integrated packaging, high-power semi-conductor devices packaging, high-reliability packaging and devices which work under high temperature & humidity. An alternative for SAC305.

注意事项 *Precautions*

01 过回流焊 /Reflow soldering

回流峰值温度高于熔点 (227°C) 的温度 25~45°C

Reflow peak : 25°C ~ 45°C above Melting Temperature.

氮气回流参考值 /Reference value of nitrogen reflux

< 100PPM

T6 在氮气回流中氧气

Type 6 Reflow in N₂ with <100 ppm O₂

02 产品储存 /Product storage

冰箱储存温度在 0~10°C 的条件

Store at 0~10°C

