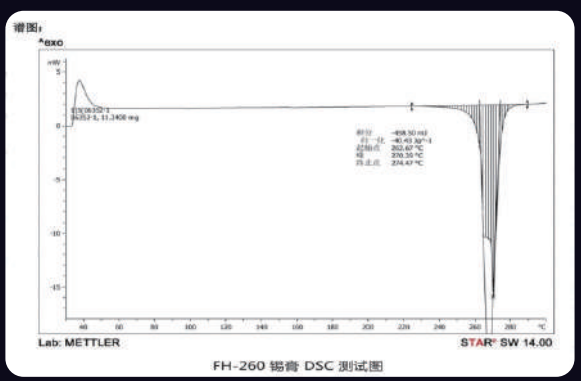
高温无铅锡膏

High Temperature Lead-free Solder Paste

FH-260 系列，福英达根据客户的需求针对功率半导体与微电子封装二次回流焊接研发的高温（熔点 265°C）无铅产品，合金以铋元素为基础添加增强型微纳米颗粒合成，成功替代高铅类锡膏，并满足 RoHS 环保的标准。本产品分别可实现印刷（FH-260P 系列）与点胶（FH-260D 系列）工艺。

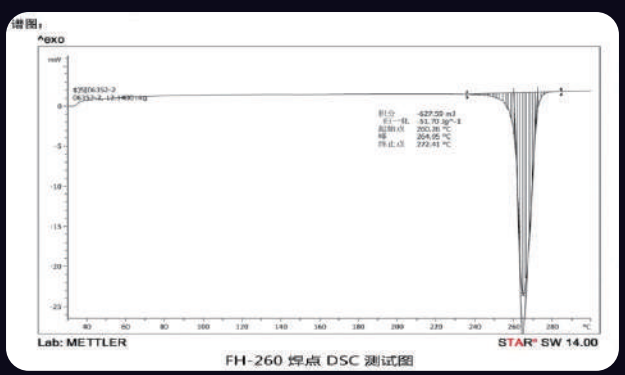
FH-260 series, Fitech developed high-temperature (melting point 265°C) lead-free products for the secondary reflow soldering of power semiconductors and microelectronic packages according to customer needs. The alloy is based on bismuth and is synthesized with enhanced micro-nano particles. Replace high-lead solder paste and meet RoHS environmental protection standards. This product can realize printing (FH-260P series) and dispensing (FH-260D series) processes respectively.

锡膏DSC与焊点DSC *Solder paste DSC and solder joint DSC*



FH-260 锡膏 DSC 测试图

锡膏DSC / Solder paste DSC 270°C



FH-260 焊点 DSC 测试图

焊点DSC / solder joint DSC 265°C

特性 *Features*

突破 RoHS 豁免限制，无铅无锑，满足环保要求

Break through RoHS exemption restrictions, lead-free and antimony-free, and meet environmental protection requirements

触变性好，粘度合适，良好的润湿性与可焊性

Good thixotropy, suitable viscosity, good wettability and solderability

高密度集成电路封装及二次回流电路板的焊接

High-density integrated circuit packaging and secondary reflow circuit board welding

采用优良的超微粉能在小间距及微组装上有**良好的印刷性能**

Using fine ultrafine powder, good printability in narrow pitch and micro assembly

添加微纳米颗粒增加润湿性和高可靠性，**产品性能稳定**可满足长时间印刷和点胶工艺

Adding micro-nano particles to increase wettability and high reliability, productperformance is stable to meet long-time printing and dispensing processes

无卤素、残留物极少、免清洗

Halogen free, Less residue, No cleaning

深圳市福英达工业技术有限公司
ShenZhen Fitech Co., Ltd .

高温无铅锡膏 *High Temperature Lead-free Solder Paste*

性能参数 *Parameter*

产品名称 Product	FH-2605P	FH-2606P	FH-2605D	FH-2606D
锡粉尺寸 Size	T5 10-25μm	T6 5-20μm	T5 10-25μm	T6 5-20μm
D50	20μm	9.5μm	20μm	9.5μm
合金组成Alloy	Bi + 增强型微纳米颗粒/ Enhanced micro and nano particles			
熔点Melting point	270°C	270°C	270°C	270°C
涂覆方法 Using method	印刷 / printing		点胶或针转移Dispensing、Pin transfer	
粘度Pa.s	100~140		30~70	
Ti值	0.5~0.7		0.5~0.7	
合金比例 Alloy %	86~90%		83~85%	
助焊剂比例Flux %	10~14%		15~17%	
铜板腐蚀 Corrosion	Pass ✓	Pass ✓	Pass ✓	Pass ✓
残留物干燥度 Residue dryness	Pass ✓	Pass ✓	Pass ✓	Pass ✓
锡珠测试 Solder ball	Pass ✓	Pass ✓	Pass ✓	Pass ✓
卤素含量 Halogen content	无卤素 氯元素或溴元素小于900 ppm，总量小于1500 ppm		Halogen free Cl or Br <900 ppm，total<1500 ppm	

* 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

适用于 QFN、CSP、小型集成电路等电子产品和高温工作的半导体器件组装焊接、高密度集成电路封装及需要二次回流电路板的焊接等领域。

It is suitable for QFN, CSP, small integrated circuit and other electronic products and high-temperature semiconductor device assembly welding, high-density integrated circuit packaging and welding of circuit boards that require secondary reflow.

注意事项 *Precautions*

01 过回流焊 /Reflow soldering

回流峰值温度高于熔点（270℃）的温度 25~45℃

Reflow peak : 25℃ ~ 45℃ above Melting Temperature

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

< 200PPM

T5 在氮气回流中氧气

Type 5 Reflow in N_2 with< 200ppm O_2

< 100PPM

T6 在氮气回流中氧气

Type 6 Reflow in N_2 with <100 ppm O_2

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