

# Ultrafine Powders Application

# 超微粉应用



## 产品优势 Product advantage



**高导热、导电性能, 高强度**  
High thermal conductivity, Electrical conductivity, High strength



**底座金属不变色**  
零卤、残留物极少, 40°C恒温箱烘烤240小时  
Zero halogen, Less residue, after 240 hours of 40 °C thermostat baking, the base metal color does not change.



**采用优良的超微粉满足大于20mil以上大功率晶片焊接**  
Using special Ultrafine powder to satisfy the need of high power chip soldering (more than 20mil)



**触变性好, 粘度合适, 出胶顺畅**  
可采用喷印、针转移、点胶、印刷等方式。  
Good thixotropy, Appropriate viscosity, Good jet-dispensing, Can be used to jet- printing, pin transfer, dispensing, printing, etc.

## 性能参数 Parameter

产品名称 Product	固晶锡膏FTD Die attach paste	喷印锡膏FTJ Jet printing paste	窄间距印刷FTP Narrow pitch paste	激光锡膏FTL Laser paste
锡粉尺寸 Size	T5、T6、T7、T8	T5、T6、T7、T8	T5、T6、T7、T8	SAC:T5、T6、T7 SnBi :T4、T5、T6
涂覆方法 Using method	Dispensing、Pin transfer	Jet printing	Printing	Dispensing、Jet printing
合金组成 Alloy	SAC305	SAC305	SAC305	SAC305 / SnBi58
锡膏粘度 Viscosity Pa.S	30~50	40~70	100~140	30~70
Ti 值	0.5~0.7	0.5~0.7	0.5~0.7	0.5~0.7
合金比例 Alloy %	83~84%	85~86%	86~88%	83~86%
助剂比例 Flux %	16~17%	14~15%	12~14%	14~17%
铜板腐蚀 Corrosion	Pass✓	Pass✓	Pass✓	Pass ✓
SIR	Pass✓	Pass✓	Pass✓	Pass ✓
锡珠测试 Solder ball	OK ✓	OK ✓	OK ✓	OK ✓
残留物干燥度 Residue dryness	OK ✓	OK ✓	OK ✓	OK ✓
应用领域 Application	LED Die attach	3D PCB、FPC	Mini LED、Microelectronic	热敏感器件 Heat sensitive device

注：可根据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.



Good wettability  
& Solderability

# 良好的 润湿性 可焊性

## 0201元件的焊接点 Join point of 0201 chip



4# 印刷量不足  
Type 4 insufficient printing



5# 印刷量不足  
Type 5 insufficient printing



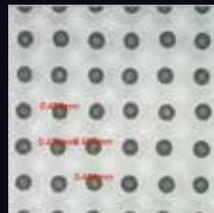
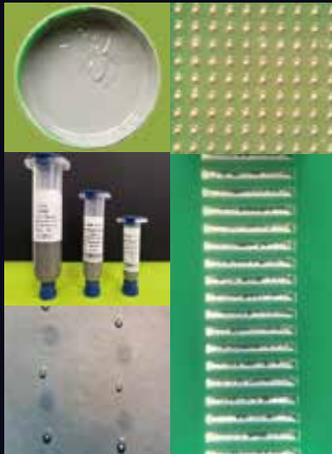
6# 印刷量足够  
Type 6 enough printing



7# 印刷量足够  
Type 7 enough printing

## 固晶锡膏 Die attach paste

- 1 出胶性能稳定  
Good dispensing properties
- 2 粘晶性能稳定  
Good adhesive force
- 3 无拉丝  
No satellite



0.476mm ———— 0.493mm

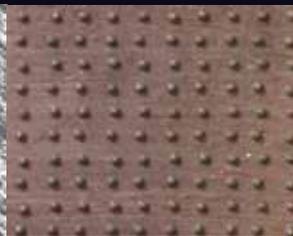
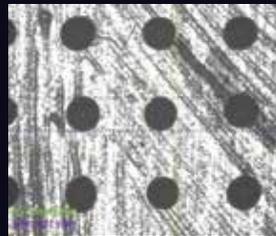


Circle 1 (diameter) 0.25 mm

Application	Solder Paste
Platform	S2-910
Jet/Pump/Valve and Configuration	[Model number] SV-60
Setting	[Needle] 30G
	[Dwell Time] 0.05s
	[Post Dwell] 0.05s
	[Setting Time] 0.002s
	[Multi Shots Delta] 0
	[Retract Distance] 1mm
	[Retract Speed] 10mm/s
	[Retract Accel] 200mm/sec <sup>2</sup>
	[Valve on] 0.02s
	[Fluid pressure] 5psi
[Dispense Gap] 0.65mm	
Fluid Manufacturer & Product number	(Type6)

## 喷锡锡膏 Jet printing paste

- 1 喷锡稳定性  
Good jet-dispensing properties
- 2 无溅射  
No satellite
- 3 最小锡膏点可达0.15mm  
Minimum solder paste point can reach 0.15mm.



## 窄间距印刷锡膏 Micro-bump narrow pitch paste

- 1 印刷性能稳定  
Good printability
- 2 抗坍塌  
Good slump
- 3 抗电迁移性能强  
Good resistance to electromigration

