

SOLDER PASTE

Mini | Micro LED 封装焊料解决方案

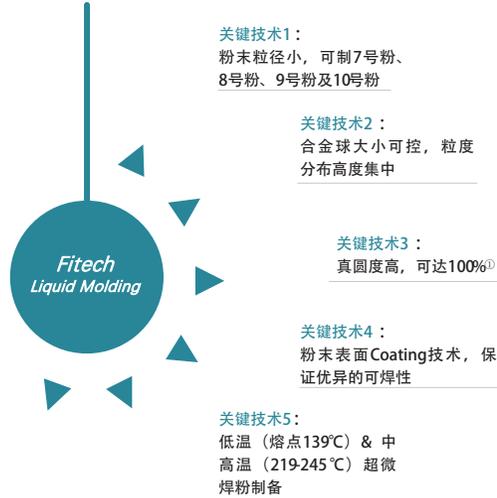
Fitech® mLED 1370 / 1550
Type 8 Solder powder inside

Fitech® Ultra-fine solder solutions

8号粉超微印刷锡膏 | 最小印刷点Φ=80μm

液相成型球形合金粉末制备技术

Liquid Molding Technology



[专利号: 201510438826.0 / 202010800494.7]

超微焊粉粒径分布

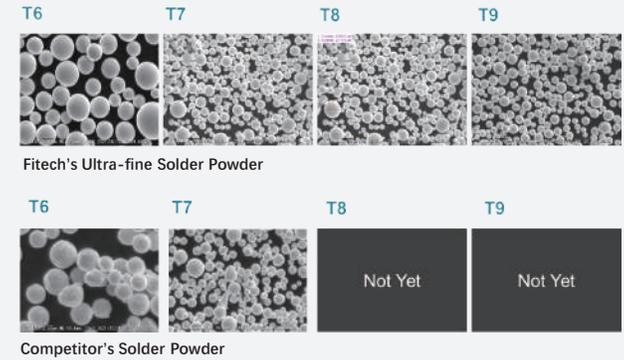
Ultra-fine Solder Powder Size Distribution

Size/μm	Type 7(2-11μm)			Type 8(2-9μm)			Type 9(1-5μm)		
	11+	11-2	2-	8+	8-2	2-	5+	5-1	1-
Fitech	≤1	≥94	≤5	≤1	≥94	≤5	≤5	≥90	≤5
JIS Z3284	≤1	≥80	≤10	≤1	≥80	≤10	Not Yet		
J-STD-005A	≤1	≥80	≤10	Not Yet			Not Yet		

深圳福英达焊粉粒径集中度远超行业标准

球形合金粉末形貌对比

Comparison of Alloy Solder Powder



工艺稳定性-优良的工艺性能

Process Stability-Excellent Printability

Bump formulation on Φ=80um pad

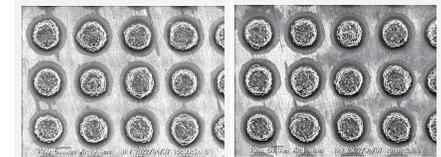
Products:Fitech® mLED 1550 Photo: by SEM/Microscope

连续印刷

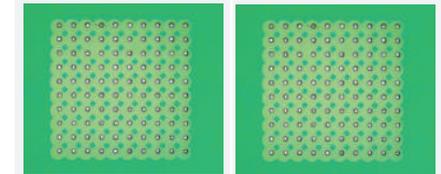
0H

8H

形状保持和稳定性, 优异的脱模转印性能



无锡珠、桥连



Fitech mLED™ 1370 低温超微无铅锡膏、 Fitech mLED™ 1550 中温超微无铅锡膏在实际应用中体现出了优异的印刷性、脱模转印性能、形状和稳定性及足量且均匀的印刷量。长时间印刷后无锡珠、桥连缺陷。

工艺稳定性-稳定的粘度和触变系数

Process Stability-Stable Viscosity and Ti

连续印刷8H Continuously print for 8H

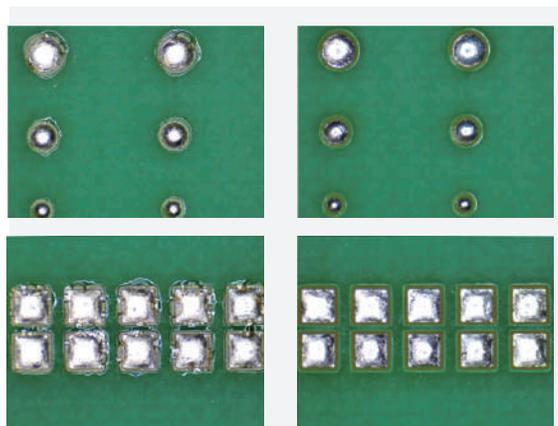


清洗 - 免洗 / 水基清洗

Cleanable with Water-based Agent

清洗前后外观 Appearance before and after cleaning

Composition: SAC305 Size: Type 8 (2-8 μ m)



清洗前

清洗后

mLED 芯片尺寸 vs 焊粉类型

mLED Chip Size vs Solder Powder Type

基于Fitech的锡膏产品 Based on Fitech's solder paste product

Application	Fitech Product	Alloy	Melting Point	Powder Type	Solder Point Size: Dispensing / Printing	Chip size
Mini LED	Reflow N 1700	SnBiAgK	137-145	Type 7 (11-2 μ m)	70/100 μ m	8 μ m x 15 μ m
	Reflow N 2310	SAC305	217-219			
	Reflow N 2800	BX	262-270			
	mLED 1370	SnBiAg0.4	139	Type 8 (8-2 μ m)	60/80 μ m	75 μ m x 145 μ m
	mLED 1550	SAC305	217-219			
FACA 1388	SnBiAg0.4	139	Type 9 (5-1 μ m)	50/70 μ m	60 μ m x 120 μ m	
mLED 1590	SAC305	217-219				
Micro LED	FACA 1309	SnBiAg0.4	139	Type 10 (2-1 μ m)	NA	15 μ m x 45 μ m
	Under development	SAC305	217-219		~30 μ m	35 μ m x 75 μ m
		SnBiAg	139			

Fitech mLED™ 1370/1550 可水基清洗无铅超微锡膏可提供最小60/80 μ m的锡膏点, 可为最小75 μ m x 145 μ m芯片提供可靠焊接效果。如需更小焊点可选用Fitech 9号锡膏

产品参数表 - Fitech mLED™ 1370/1550

Parameters of Fitech mLED™ 1370/1550

物理特性	Fitech mLED™ 1370	Fitech mLED™ 1550
合金成分	SnBiAg0.4	SAC 305
焊粉型号	Type 8	Type 8
粒径尺寸	2-8 μ m	2-8 μ m
熔点	139°C	217-219°C
助焊剂类型	水基清洗/免洗	水基清洗/免洗
卤素	无卤	无卤
工艺	印刷	印刷

