低阿尔法高铅焊料

Low alpha high lead solder

RoHS 豁免产品，高可靠性产品

低α高铅焊料系列，是福英达公司根据客户的要求开发的具有低α粒子计数的高铅焊料。封装材料放射出微量的α粒子会造成软性错误，对微型化的高可靠性装置产生不利影响，因此要求封装材料必须具有低α粒子计数。福英达低α产品包含 Sn5Pb92.5Ag2.5、Sn5Pb95 等合金，粒径型号为 T3、T4、T5、T6。该低α高铅焊料系列具有锡粉球形度好、粒度分布窄、氧含量低、化学纯度高等优点，满足α粒子放射规格要求，并可提供客制化开发服务。

Fitech's Low alpha high lead solder products are developed to meet the low alpha count demand of customers. Tiny amounts of alpha particles could impact unfavorably on devices of high reliability by occurring soft error. This product line provides SnPb2.5Ag2.5 and Sn5Pb95 alloy in particle size from Type 3 to Type 6. Low alpha high lead solder product line has advantages such as good sphericity, narrow particle size distribution, low oxygen content, high pureness. It meets low alpha count demand and can be customized.

产品质量证明书 Certificate of Quality

产品名称 Product	锡基焊锡粉 Solder Powder	合金成分 Alloy	LA-925-3	规格 Size	T3(25-45μm)
批次Batch	N03210728	比重 Gravity	11.02g/cm3	熔点Melting Point: 296℃	

检测项目 Item	来料合金成分 Incoming material composition		锡粉检测结果 Result	合格与否 Pass/Fail	检测方法 Test Method
成分分析 Composition Analysis	Sn	5.00	5.03	pass	**滴定法** Titration Analysis
	Pb	Bal	Bal	pass	
	Bi	0.0004	0.0003	pass	
	Sb	0.0003	0.0002	pass	
	Cu	0.0005	0.0002	pass	
	Zn	0.0001	0.0001	pass	
	Ag	2.50	2.4445	pass	
	Al	0.0001	<0.0001	pass	**直读光谱分析** Arc /Spark Spectrum Analysis
	As	0.0001	0.0003	pass	
	Au	<0.0001	0.0004	pass	
	Cd	0.0001	<0.0001	pass	
	Fe	0.0003	0.0001	pass	
	In	<0.0001	/	/	
	Ni	0.0001	<0.0001	pass	
α粒子计数	LA <0.01cph/cm^2		0.005	Pass	--

焊粉α粒子放射率测试及成分分析　Solder alpha particle emitter test and composition analysis

特性 *Features*

RoHS 豁免产品，高可靠性产品

RoHS-exemption product with high reliability

低α放射粒子，满足放射规格要求

Low alpha count, meet the demand of radiation specs.

锡粉具有良好的球形度和粒度分布性能，氧含量低

Good sphericity, narrow particle size distribution, and low oxygen content

提供T3~T6不同尺寸型号焊粉，满足不同间距良好的印刷性能要求

Particle size from Type 3 to Type 6, good printability in narrow pitch and micro assembly

锡粉Coating处理，抗氧性能好，焊料稳定性好

Solder powders are coated with Fitech’ s unique technology, good anti-oxidation and stability feature.

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

FiTech

低阿尔法高铅焊料 *Low Alpha High Lead solder*

性能参数 *Parameter*

产品名称 Product	FLA-925		FLA-950		备注 Remark
合金 Alloy	$Sn_5Pb_{92.5}Ag_{2.5}$		Sn_5Pb_{95}		
锡粉尺寸 Size	T3(25~45µm)、T4(20~38µm)、T5(10~25µm) 、T6(5~15µm)				PSD
形貌 Appearance	球形 Sphericity		球形 Sphericity		SEM
熔点Melting point	296°C		312°C		DSC
微量元素含量 Microelement content	Total:<50ppm				
氧含量 Oxygen content	T3<80ppm	T4<100ppm	T5<130ppm	T6<180ppm	Testing with Infrared Ray
α粒子计数 Alpha particle count	LA<0.01 cph/cm2,ULA<0.002 cph/cm2				
锡珠测试 Solder ball	Pass ✓	Pass ✓	Pass ✓	Pass ✓	JIS Z-3284
扩展率 Rate of expansion	>85%	>85%	>85%	>85%	JIS Z-3197

* 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.

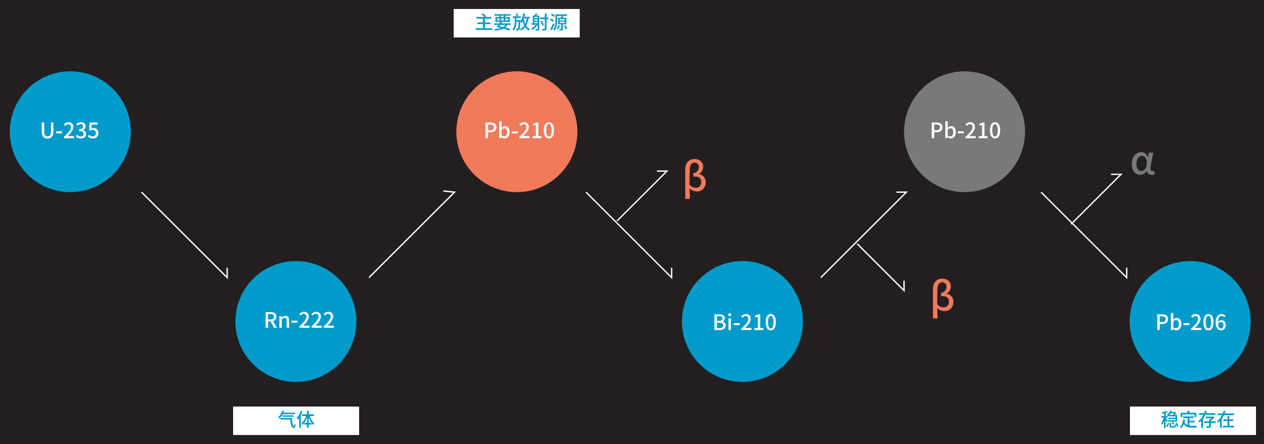
产品应用

Product Application

适用于半导体先进封装，如 FC-BGA 及 FC-CSP 电容器零件表面贴装组件等。

Low alpha high lead products apply to semi-conductor advanced packaging, such as FC-BGA and FC-CSP used in capacitor SMT.

α 粒子来源 *The source of alpha particles*



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