

# Solder Paste (Anti-Flux Splattering)

Prevent flux/solder ball splattering and achieve high reliability

## LFM-48 SPM

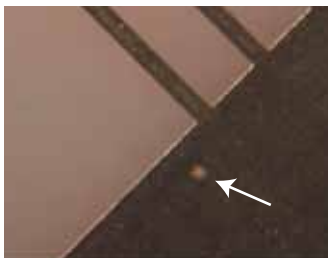
Excellent printability and flux characteristics will dramatically reduce flux/solder ball splatter. LFM-48 SPM is designed for high reliability (RMA) and can be used without cleaning.

[Application] ● Preventing flux/solder ball splatter in no-clean process, soldering near contacts, use with Au-flash substrates, increase of reliability in cell phones, PDA, communication devices, industrial equipment and automotive use.



### Example of Flux & Solder ball splattering

Example of flux splattering



Example of solder ball splattering



#### Customer Quote (a major mobile phone manufacturer)

**Flux splatter will become approx. 1/10.**

Contacts such as key pad of a cell phone is very sensitive and easily affected by flux splattering during reflow. Before using SPM, it took 2 hours for the removal of flux splattering and 1 hour for the inspection process. After Switched to SPM, the number of splatter became approx. 1/10. SPM had improved the shortening of process and better quality also.

### Comparison of flux splattering test

[Test conditions] Print solder paste on testing substrates apply reflow heat and count the number of splattering flux

○Substrates: evaluation substrates / Material : Glass epoxy / Surface finish : Gold flush finish  
○Reflow Condition : { PH } 160~190°C 90sec, { 220Cover } 35sec, { peak } 240°C

LFM-48 SPM



Conventional Solder Paste



Competitive Solder Paste



#### Line up Solder paste

(Example) LFM-48W SPM  
Alloy + Size of the solder powder + Flux

#### Solder paste Specifications

Flux	Alloy composition	Size of the solder powder	Flux content	Melting temperature
SPM	LFM-48 (Sn-3.0Ag-0.5Cu)	X (Type 3)	11.0%	217-220°C
	LFM-14 (Sn-3.5Ag-0.7Cu)	W (Type 4)		217-218°C

※ LFM-48 holds the sublicenses for JP PAT No.3027441 and US PAT No. 5527628

※ The size of the solder powder: X 25-45[μm], W 20-38[μm]

※ For the availability of your required solder paste, please ask our sales representatives.

Technology for the future

**almit**  
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