

Hi-performance No-clean Solder Paste

SE48-M955 & SS48-M955

■ Features

- 1) Employment of rigidly classified 20~45 micron solder powder ensures outstanding continual printability with fine pitch (0.5mm/20mil) and even super fine pitch (0.4mm/16mil) applications and long stencil idle time.
- 2) Carefully selected rosins and activators ensure powerful solder wetting.
- 3) Extremely long stencil idle time and tack time, offering a wide process window.
- 4) Low colour flux residue offers superior cosmetic appearance.
- 5) Conforms to Bellcore tests (Copper Mirror, Halides, Surface Insulation Resistance, Electromigration) GR-78-CORE, Issue 1.

■ Specifications

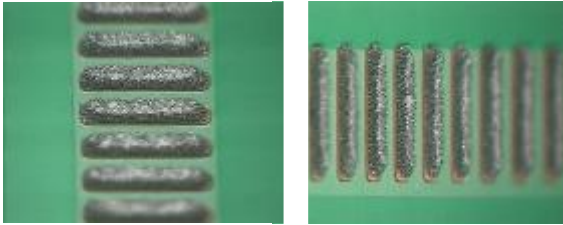
Application		Printing - Stencil	
Products		SE48-M955 (SS48-M955)	
Alloy	Composition (%)	Sn63, Pb37 (Sn62, Pb36,Ag2)	
	Shape	Spherical	
	Particle size (µm)	20 - 45	
Flux	Halide content (%)	0.0	
	Surface insulation resistance * ¹	Initial value (Ω)	$> 1 \times 10^{12}$
		After humidification (Ω)	$> 1 \times 10^{11}$
	Aqueous solution resistivity* ² (Ω cm)		$> 5 \times 10^4$
Flux type		ROLO	
Product	Flux content (%)	10	
	Viscosity* ³ (Ps)	2,100	
	Copper plate corrosion* ⁴	Passed	
	Solder spread factor (%)	90	
	Tack time	> 36 hours	
	Shelf life (below 10°C)	6 months	

1. SIR 40°C×90%RH×96Hr
 2. Aqueous solution resistivity In accordance with MIL specifications.
 3. Viscosity Malcom spiral type viscometer, PCU-205 at 25°C 10rpm
 4. Copper plate corrosion In accordance with JIS.



Printability – SE48-M955

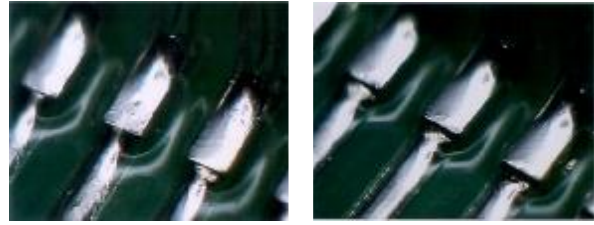
(Continual printing at 50mm/sec. stencil 150 μm laser cut)



0.4mm pitch (30th print)

Solder wetting

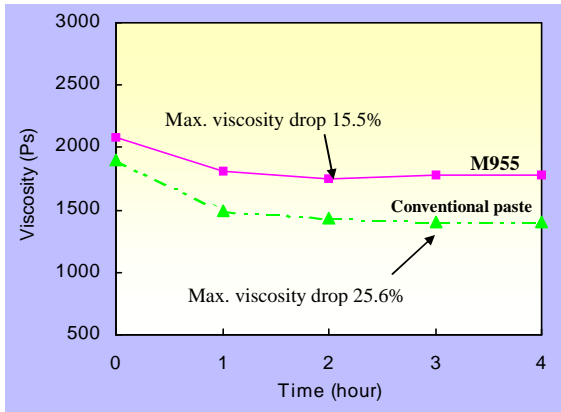
(QFP 0.65mm pitch, Fe/Ni base alloy with Sn/Pb plated)



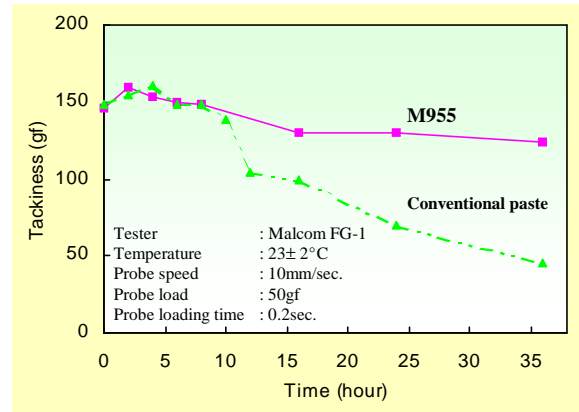
SE48-M955

Conventional solder paste

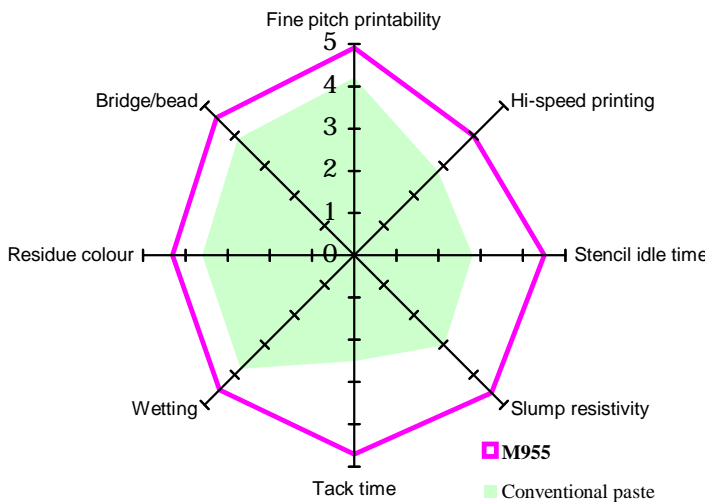
Viscosity variation in continual printing



Tack force



Features comparison (0: Bad → 5: Good)



Recommended reflow profile

