

# Low Melting Point **Lead Free** Solder Paste

## TB48 - M741

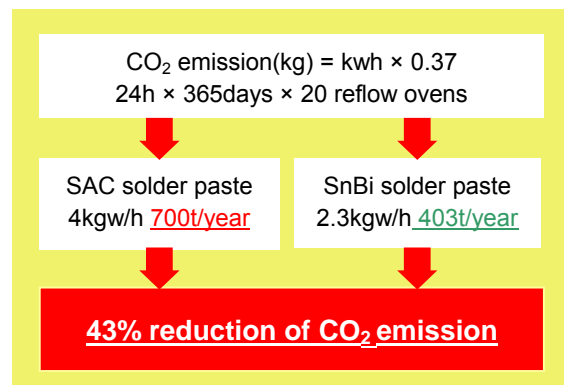
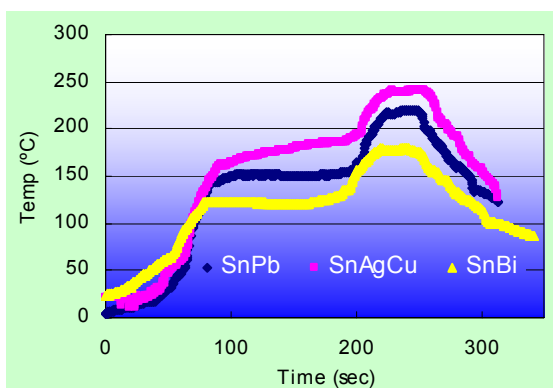
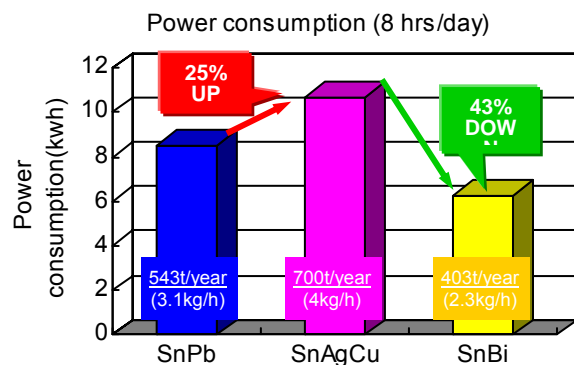
- Allows the use of a LOWER reflow profile than normally used for Tin/Lead solders.
- Greatly helps reduce the emissions of CO2. **ANTI-GLOBAL WARMING** solder paste.
- EXCELLENT WETTING and LOW VOIDING characteristics.

### ■ Increasing demand for LOW melting point solders

There are increasing demands for a high quality lower melting point alloy due to;

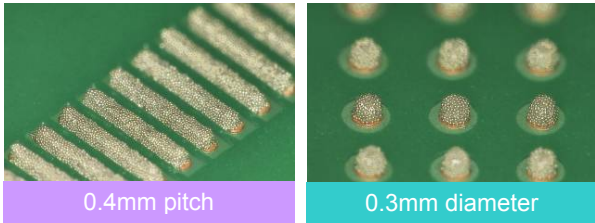
- Continual use of heat sensitive components and thinner PC boards.
- Inferior solderability may require a Nitrogen atmosphere to be used because of the excessive oxidation caused by the high temperature process.
- Need to reduce emissions of environmentally disruptive substances.
- Increased melting point of lead free solders requires higher heat energy and results in increased CO2 emissions.

Consequently, this low melting point solder alloy realizes an energy saving due to a lower thermal input requirement and as a result, a significant reduction in CO2 emissions.



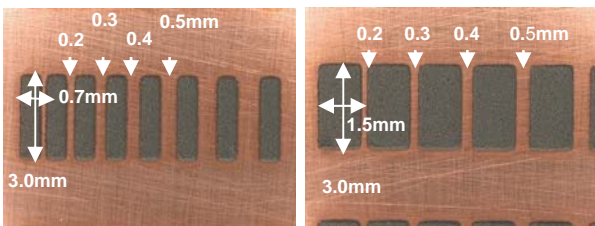
## ■ Printing (Laser cut stencil 120micron)

New flux formulation successfully prevents chemical reaction between solder and ensures consistent continual print performance.



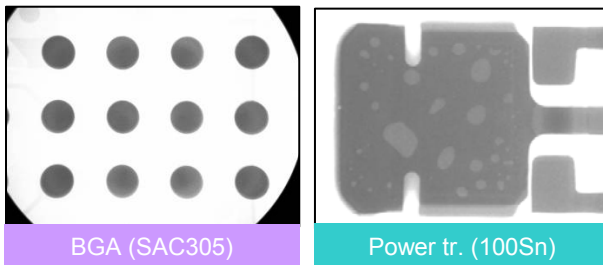
- 1st print after 200 strokes -

## ■ Heat slump



- Heat profile : 120°C× 5 min
- Test method : JIS Z 3284

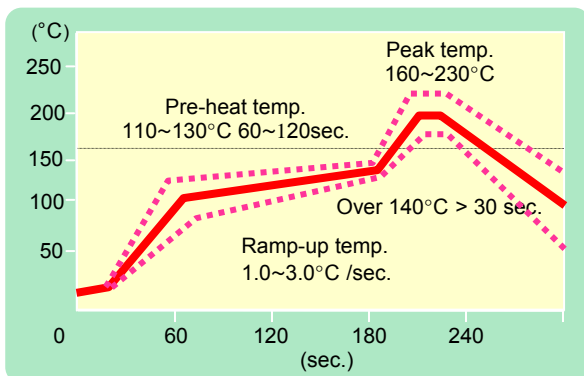
## ■ Voiding



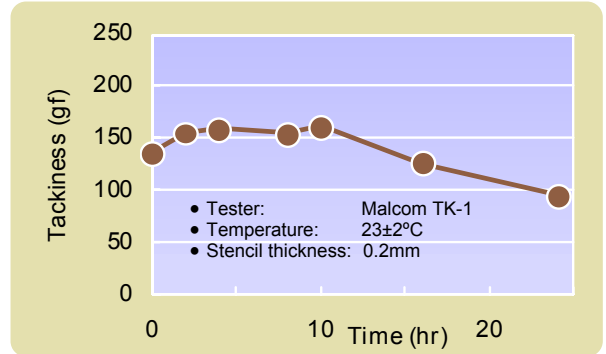
BGA (SAC305)

Power tr. (100Sn)

## ■ Recommended reflow profile

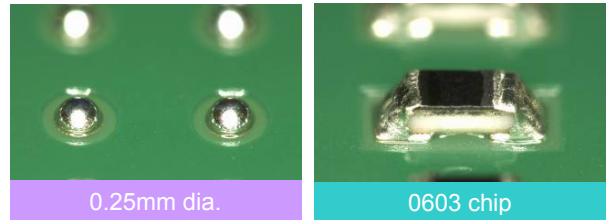


## ■ Tack time



## ■ Solder wetting

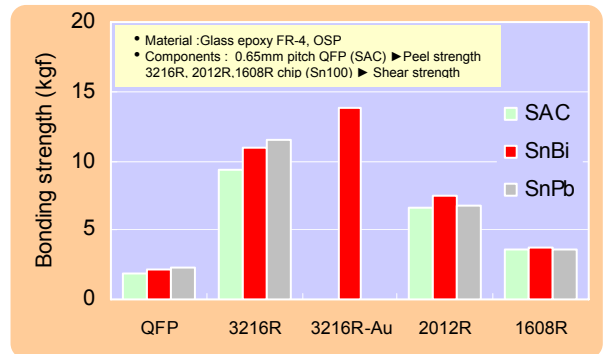
Assures complete melting and a good wetting meniscus to super fine pattern components under air reflow.



0.25mm dia.

0603 chip

## ■ Bonding strength



## ■ Specifications

Application		Printing - Stencil
Product		TB-M741
Alloy	Composition (%)	Sn42.0, Bi58.0
	Melting point (°C)	138 (eutectic)
	Particle size (µm)	20 - 45
Flux	Halide content (%)	0.0
	Flux type	ROL0 *ANSI J STD-004A
Product	Flux content (%)	11.0
	Viscosity (Pa.S)	190
	Copper plate corrosion	Passed
	Tack time	> 16 hours
	Shelf life (below 10°C)	6 months

\*Specifications are subject to change.

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