

# Low melting point solder paste

## T4AB58-M742

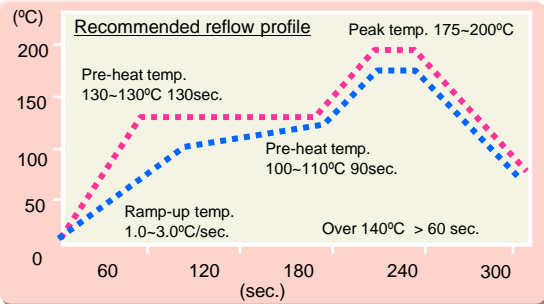
Alloy composition: Sn Bi57.6 Ag0.4



- Lower melting point (138-140°C) than SAC305 by adopting Sn-Bi based alloy
- Enables savings in both electricity and Co<sub>2</sub> emission during reflow process
- Halogen free (Cl, Br ≤ 900ppm / Cl + Br ≤ 1500ppm)



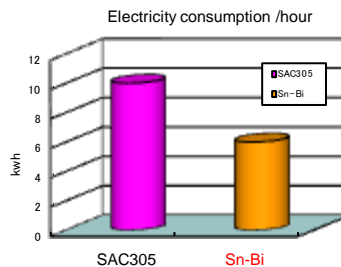
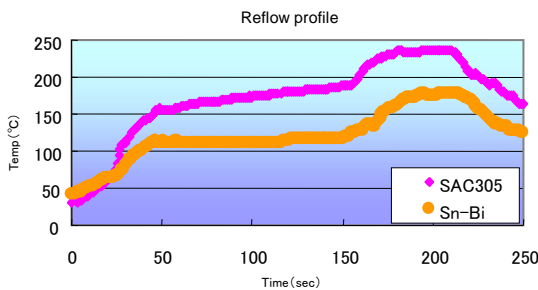
### Advantages of low melting point alloy



- ◆ Enables savings in electricity during the reflow process
- ◆ Enables reduction in Co<sub>2</sub> emissions during reflow process
- ◆ Reduces the running cost of the reflow process
- ◆ Applicable to temperature sensitive boards and components

### Power saving effect by using a lower temperature reflow profile

#### Comparison of electricity consumption between SAC305 and Sn-Bi based alloy

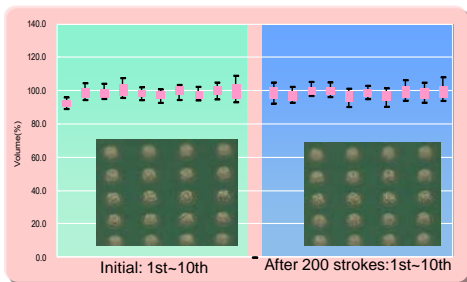


Succeeded in approx. 40% reduction compared to SAC305 !

In parallel, able to reduce Co<sub>2</sub> emissions

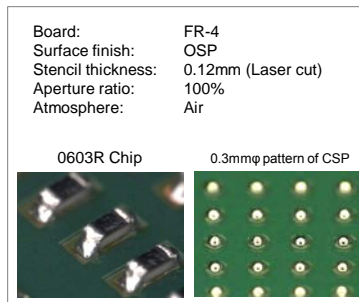
### Viscosity stability

#### Continual printability on Ø0.3mm pattern of CSP



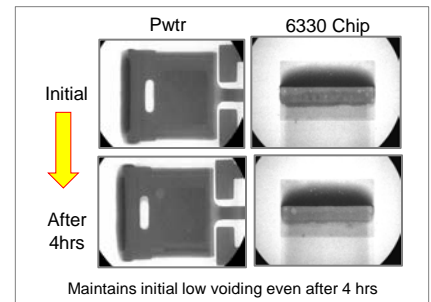
### Wetting performance

#### Wetting property in small components



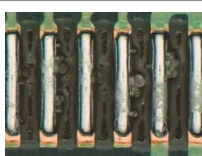
### Voiding property

#### Comparison of voiding between initial print and print after 4 hrs of continual printing



### Suitable to FR-1 bakelite board

#### Case of bubble occurrence in FR-1 bakelite board



- Alloy of solder paste: SAC305
- Board type: FR-1

Gas generated from a FR-1 board appeared as bubbles in flux residue due to high reflow temperature

Since low melting point solder paste can be used with temperature sensitive materials such as FR-1 boards, it is possible to reduce material costs and helps you improve cost performance in your production.

### Specifications of low melting point alloy series

Product name	T4AB58-M742	TB48-M742	TAB58-M742
Alloy composition	Sn Bi57.6 Ag0.4	Sn Bi58.0	Sn Ag1.0 Bi57.0
Melting point (°C)	138-140	138	138-140
Particle sizes	20-38µm(58)	20-45µm(48)	20-38µm(58)
Viscosity (Pa.s)		190±30	
Flux content (%)		10.0±1.0	