

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.

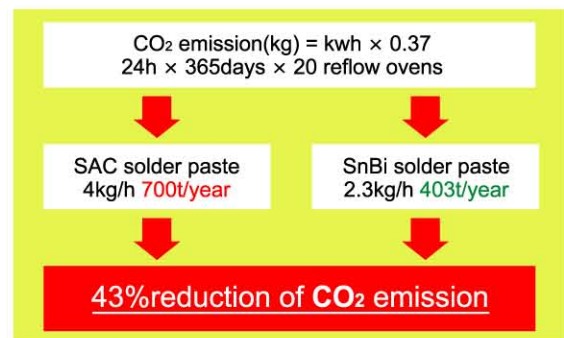
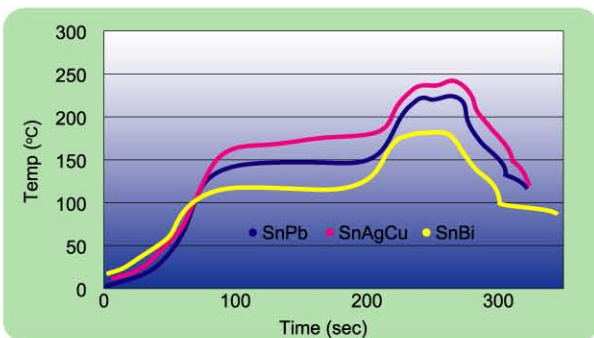
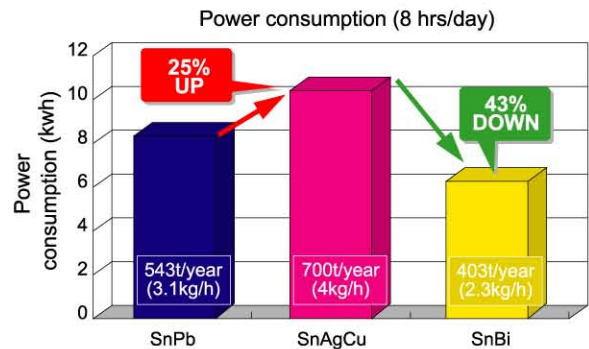
■ Increasing demand for LOW melting point solders

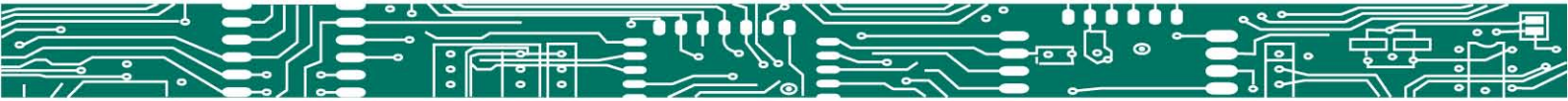
There are increasing demands for a high quality lower melting point alloy due to;

- 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.

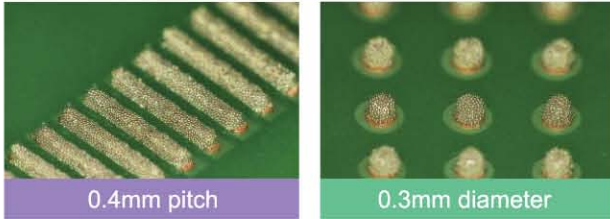
Hot air reflow oven





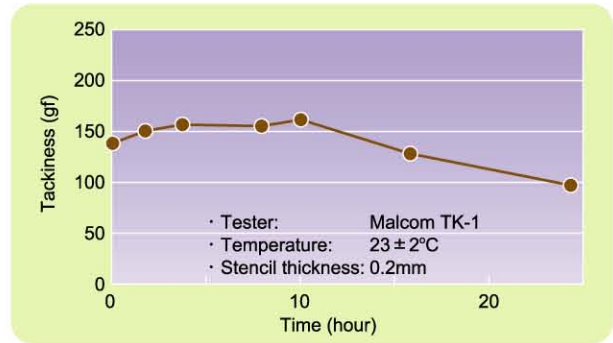
■ **Printability** (Laser cut stencil 120micron)

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

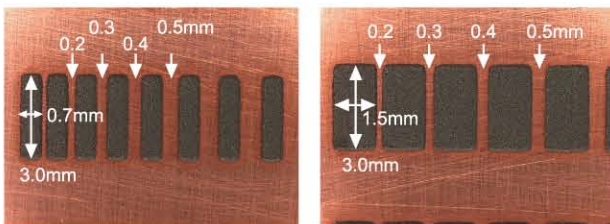


- 1st print after 200 strokes -

■ **Tack time**



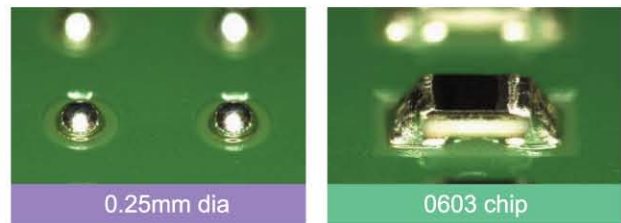
■ **Heat slump**



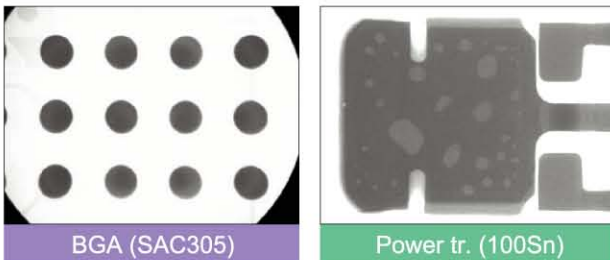
• Heat profile : 120°C × 5 min
• Test method : JIS Z 3284

■ **Solder wetting**

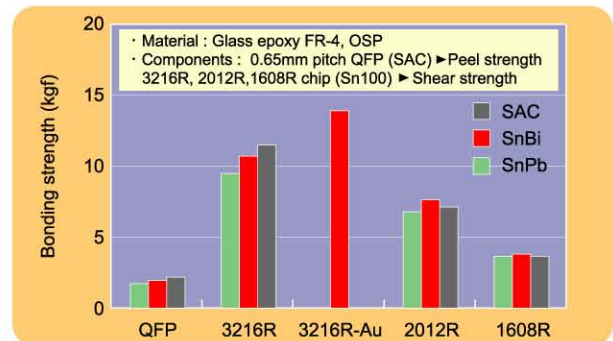
Assures complete melting and a good wetting meniscus to super fine pattern components under air reflow.



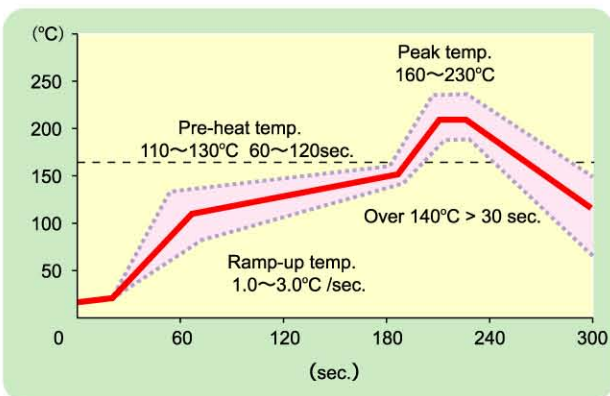
■ **Voiding**



■ **Bonding strength**



■ **Recommended reflow profile**



■ **Specifications**

Application		Printing - Stencil
Products	Application	TB48-M741
	Products	TB48-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-004)
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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