MTSC Vietnam Solution
Your Manufacturing Test Partner

Heraeus

Technical Data Sheet

MICROBOND™

Product Type: No Clean Solder Paste
Product Name: Microbond® SMT701
Product ID: FC701 SAC105-88P4

Description

FC701 SAC105-88P4 solder paste is a state-of-the-art lead free no clean solder paste that promotes outstanding wetting and minimizes soldering defects. The FC701 flux system is specifically optimized for lead free alloys, e.g. Sn/Ag/Cu. This formula provides superior performance on a variety of surfaces finishes and leaves behind a clear residue.

Key Benefits

- Good wetting on OSP, HASL surface and Al board
- Good void performance
- Transparent residue

Applications

- Printing

Product Code and Alloy

Product Code					Powder Properties		
Paste	Alloy	Metal Content	*Viscosity	Powder Type	Particle Size	Alloy	Melting Point
FC701	SAC105	88%	P	4	20 – 38 µm	Sn98.5/Ag1/Cu0.5	217 – 227 °C

*D = Dispense grade P = Print grade L = Dipping/Jetting grade, Low

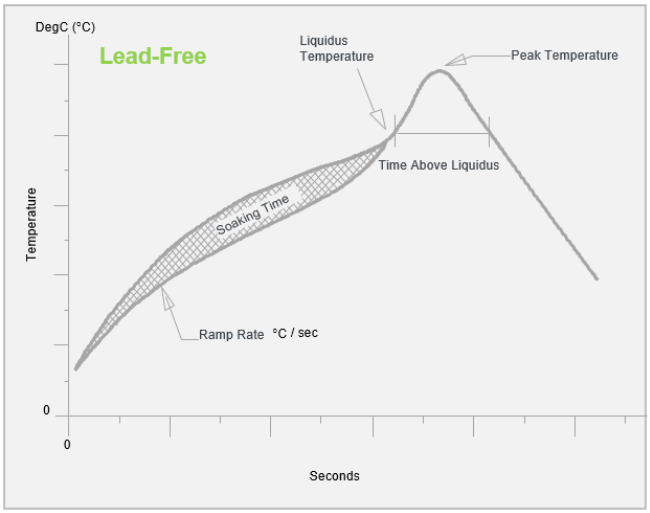
Flux Activity

Activity Level (J-STD 004)	Classification
ROL0	No Clean/ Solvent Clean

Halogen Content

Halogen-Zero (No halogen added in the flux)
Tolerances: Halogen < 50 ppm; measured according to BS EN 14582

Recommended Reflow Profile



* Graph not drawn to scale

Recommended Profile	
Average Ramp Rate	1 – 3 °C/s
Peak Temperature	15 °C (min) – 40 °C (max) above Melting Temperature
Time above liquidus	45 – 90 s
Reflow Atmosphere Type 3 – 5	Reflow in Air or in N_2 with < 2000 ppm O_2

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Cleaning Instructions

After reflow flux residues may remain on the circuit and do not need to be washed. For cleaning of wet paste or if desired for cleaning of flux residues Zestron and Vigon cleaners can be used – see separate cleaning recommendations.

Storage

- Store the solder paste in tightly-sealed containers and avoid exposure to sunlight and high humidity
- Max expiration date: please refer to the expiry date on the label of the packaged product
- Storage condition in the refrigerator at 2 - 10 °C

Paste Preparation

- Remove paste from fridge: Before opening the package, leave paste for at least 4 hours (depending on jar/ cartridge size) at room temperature, so that paste warms up
- Do not open jar/cartridge while paste is cold to prevent condensation
- Do not heat the paste beyond room temperature

MTSC Vietnam Solution Jsc
Phone number: +84 973 402 406
Emai;: sales.vn@mtsc-solution.com