

Product Data Sheet

SACB1053 4-5M097 (Syringe Packaging)

No Clean Solder Paste

Product Description

Asahi SACB1053, Sn95.5Ag1.0Cu0.5Bi3.0 solder alloy was developed to have better wettability in reflow soldering process. It is cost effective while shows comparable mechanical strength with SAC305.

SACB1053 4-5M097 (Syringe Packaging) is formulated specially for optimal characteristics in all types of dispensing applications with a wide range of needle diameters. The syringe packaging is packaged void-free as to ensure consistent dispensing in high speed automated process and prevent dried out issue.

Application

SACB1053 4-5M097 is designed for standard stencil printing. The printing speed can be set at 25 - 100 mm/sec. Its optimum printing condition is 23 to 25 °C and humidity of 50 to 65 %RH, with at least 24 hours stencil life of continuous printing (process dependant). This paste could be used on the 0.4mm pitch pattern. Adjustment may be necessary based on specific process requirement.



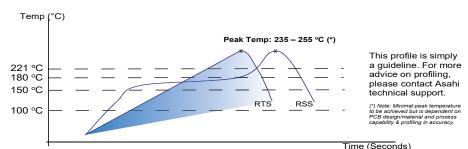
Specification (*Preliminary*)

| Alloy Alloy Composition Melting Temperature Differential Scanning Calorimetry Powder Size IPC TM-650 2.2.14 Paste Flux Flux Content IPC-TM-650 2.2.20 Halide Content JIS Z 3197 8.1.4.2.1 Water Extract Resistivity JIS Z 3197 8.1.1 Copper Mirror Test IPC-TM-650 2.3.32 Copper Corrosion Test IPC-TM-650 2.6.15 Flux Activity Classification IPC J-STD-004 Solder Paste Viscosity (2nd day) IPC-TM-650 2.4.34 JIS Z 3284 Annex 6 Tackiness JIS Z 3284 Annex 6 Tackiness JIS Z 3284 Annex 6 Resistance (85°C, 85%RH, 168hrs) IPC-TM-650 2.6.1.1 Slump Test JIS Z 3284 Annex 7 Solder Ball Test IPC-TM-650 2.4.43 JIS Z 3284 Annex 7 Solder Ball Test IPC-TM-650 2.6.4.3 JIS Z 3284 Annex 7 Solder Ball Test IPC-TM-650 2.4.43 JIS Z 3284 Annex 7 Solder Ball Test IPC-TM-650 2.4.43 JIS Z 3284 Annex 7 Solder Ball Test IPC-TM-650 2.4.43 JIS Z 3284 Annex 7 Solder Ball Test IPC-TM-650 2.4.43 JIS Z 3284 Annex 7 Solder Ball Test IPC-TM-650 2.4.43 JIS Z 3284 Annex 7 Solder Ball Test IPC-TM-650 2.4.43 JIS Z 3284 Annex 7 Solder Ball Test IPC-TM-650 2.4.43 JIS Z 3284 Annex 7 Solder Ball Test IPC-TM-650 2.4.43 JIS Z 3284 Annex 11 Residue Dryness Test JIS Z 3284 Annex 12 | Item | Result |
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| Test | JIS Z 3284 Annex 11 | |
| Test | Residue Dryness | Pass |
| JIS Z 3284 Annex 12 | | |
| | JIS Z 3284 Annex 12 | |



SACB1053 4-5M097 No Clean Solder Paste

Recommended Reflow Profile



| | RTS (Ramp To Spike) Profile | RSS (Ramp Soak Spike) Profile |
|--------------------------|-----------------------------|-------------------------------|
| Ramp up rate (100-150°C) | 3°C/sec max | 3°C/sec max |
| Soaking (150-180°C) | - | 40-120 sec |
| Reflow Time (>221°C) | 30-90 sec | 30-90 sec |
| Peak Temperature | 235-255°C | 235-255°C |
| Cooling Rate | 6°C/sec max | 6°C/sec max |

Residue Removal

Residue removal is not needed as this is a no clean solder paste. For assemblies that require cleaning, call Asahi technical support.

Storage, Handling and Shelf Life

Solder paste has to be thawed to room temperature (~25°C) prior using to avoid condensation.

Generally the solder paste could last for 6 months from date of manufacturing, if kept under proper condition and temperature of 0 - 10 °C. The syringe should be stored upright with the tip pointing downwards to avoid flux separation from solder powder throughout the shelf life of solder paste.

Health and Safety

Do not handle the paste with your bare hand. Use proper tool when handling the paste. If the paste touches the skin, wash thoroughly with soap and water. For more information, please refer to Material Safety Data Sheet.

Packaging

| Packaging Type | Weight | Packaging Part |
|----------------|--------|----------------|
| Syringe | 100g | G |
| | 75g | В |
| | 35g | А |

Solder Paste Product Coding System:

Alloy Type Powder Size - Series Type Formula Type - Packaging Part

Example: SACB1053 4-5 M097-B

DISCLAIMER OF LIABILITY

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