



Lead-Free Solder Paste

PF606-P25

Rev. 2016/03/01 Ver. 02-01

BASIC OVERVIEW



SnAg3.0Cu0.5X Solder Paste
Halide Free
No Clean
Low Voiding

APPLICATIONS

Universal Lead-Free SMD Solder Paste
Wide Range of Applications and PCB designs

FEATURES

| | | |
|-------------------|---|--------------------|
| Appearance | Gray paste w/o visible foreign and clusters | |
| Alloy Composition | Sn/Ag3.0/Cu0.5/x | JIS-Z-3282 |
| Melting Point | 217~219 °C | |
| Particle Size | (Type 3) +45μm < 1% , - 20μm < 10% (Type 4) +38μm < 1% , - 20μm < 10% (Type 5) +25μm < 1% , - 15μm < 10% (Type 6) +15μm < 1% , - 5μm < 10% | IPC-TM-650, 2.2.14 |
| Powder Shape | Spherical | |
| Flux Content | 11.5 ± 1.0 wt% | JIS-Z-3197, 8.1.2 |
| Halide Content | < 0.05 wt% (in flux) | J-STD-004 |
| Viscosity | 200 ± 30 Pa.s (25±1°C, 10rpm, Malcom) | JIS-Z-3284 Annex 6 |
| Flux Type | ROLO | J-STD-004 |

Alloy Detail Composition

| (Sn) | (Ag) | (Cu) | (Ni) | (Ge) | (Zn) | (Al) | (Sb) | (Fe) | (As) | (Bi) | (Cd) | (Au) | (In) | (Pb) |
|------|-------------|-------------|------------|------------|--------------|--------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|
| REM. | 2.8~ 3.2 | 0.3~ 0.7 | 0~ 0.01 | 0~ 0.01 | 0.001 MAX | 0.001 MAX | 0.05 MAX | 0.02 MAX | 0.03 MAX | 0.10 MAX | 0.002 MAX | 0.05 MAX | 0.10 MAX | 0.05 MAX |

Patent No.: Japanese Patent No. 3296289, U.S Patent No. 6179935B1, Germany Patent No.19816671C2

(wt%)

Scan Code for Solder
Paste Documents





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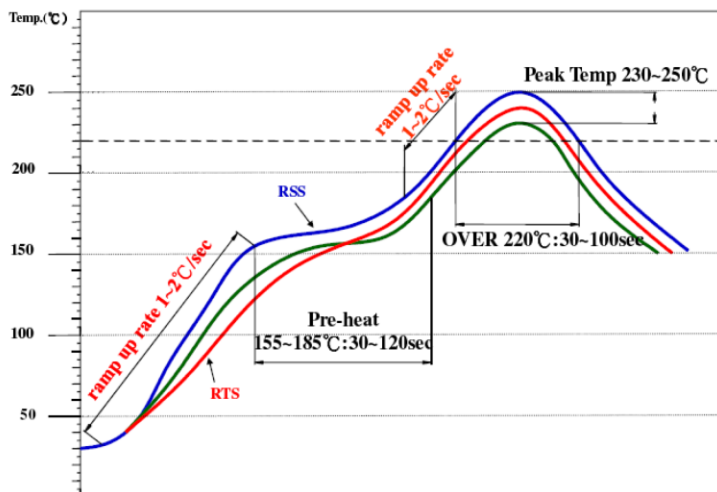
PERFORMANCE & RELIABILITY

| | | |
|-------------------------------|---------------|-----------------------------|
| Copper Plate Corrosion Test | Pass | JIS-Z-3197, 8.4.1 |
| Spreading Test | > 70% | JIS-Z-3197, 8.3.1.1 |
| Ion Chromatography Test | <0.05 wt% | IPC-TM-650, Method 2.3.28.1 |
| Copper Mirror Test | Pass | IPC-TM-650, 2.3.32 |
| Viscosity Test (25°C, 10 rpm) | 200 ± 30 Pa.s | JIS-Z-3284. Annex 6 |
| Tackiness Test (gf) | > 130 (8hr) | JIS-Z-3284. Annex 9 |
| Slump Test | Pass | JIS-Z-3284. Annex 7,8 |
| Solder Ball Test | Pass | JIS-Z-3284. Annex 11 |

| | | | |
|------------------------|---|-------------------------------|----------------------|
| S.I.R. Test | ▲ | > 1 x 10 ⁹ Ω, Pass | IPC-TM-650, 2.6.3.3 |
| Electro Migration Test | ◆ | Pass | IPC-TM-650, 2.6.14.1 |

▲ Test Conditions : 85 °C, 85% RH for 168hrs ◆ Test Conditions: 65°C, 88.5% RH for 596 hrs

RECOMMENDED REFLOW PROFILE



Ramp Up Rate (30-150°C): 1.0-2.0 °C/sec

Pre-heating Time (155-185°C): 30-120 sec

Time Period Above 220°C: 30-100 sec

Ramp Up During Reflow: 1.0-2.0 °C/sec

Peak Temperature: 230-250 °C

Ramp Down Cooling Rate: 1.0-6.0 °C/sec

Note: The recommended reflow profile is provided as a guideline. Optimal profile may differ due to oven type, assembly layout or other process variables.



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STORAGE & HANDLING:

- Refrigerate the solder paste at 0-10°C. Shelf life is 6 months from production date (sealed package).
- Keep away of direct sunlight.
- Allow the paste to reach defined printing temperature (room temperature) for 3-4 hrs. Do not heat up the solder paste rapidly.
- For jars packaging, mix the solder paste before use for 1-3 mins by plastic spatula.
- It is recommended to finish fresh paste within 24 hrs. Do not store used paste and fresh paste in the same jar.
- If printing process was interrupted for more than 1 hour, remove the remained paste from stencil and seal in the jar.
- Recommended printing environment is 22-28°C and RH 30-60%.

Note: For more information, please refer to solder paste application guideline sheet

HOW TO ORDER

PF606 – P25 – T3 – 500

| Solder Alloy | Flux | Particle Size | Weight / Packaging |
|----------------------|------------|---------------|------------------------------|
| PF606 = SnAg3.0Cu0.5 | P25 = ROLO | T3 = 20-45µm | 30 = syringe 30g |
| | | T4 = 20-38µm | 100 = syringe 100g |
| | | T5 = 15-25µm | 150 = syringe 150g |
| | | T6 = 5-15µm | 250 = plastic jar 250g |
| | | | 500 = plastic jar 500g |
| | | | 600 = small cartridge 600g |
| | | | 1200 = large cartridge 1200g |



CONTACTS

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