Partnership in Solder Technology Innovation

R Lead-Free Solder Paste PF629-P25

Rev. 2017/06/12 Ver.02-01

BASIC OVERVIEW



SnAg0.3Cu0.7 Solder Paste Halide Free No Clean

APPLICATIONS

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

FEATURES

| Appearance | Gray paste | w/o visib | | | | | |
|-------------------|---------------------------------------|-----------|------------|----------|-------|--------------------|--|
| Alloy Composition | Sn/Ag0.3/C | u0.7 | JIS-Z-3282 | | | | |
| Melting Point | 217~226 °C | | | | | | |
| Particle Size | (Type 3) | +45µm | < 1% | , - 20µm | < 10% | J-STD-005 | |
| | (Type 4) | +38µm | < 1% | , - 20µm | < 10% | | |
| Powder Shape | Spherical | | | | | | |
| Flux Content | 11.5 ± 1.0 wt% | | | | | JIS-Z-3197, 8.1.2 | |
| 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) | (Pb) |
|--|------|------|------|------|-------|-------|------|------|------|------|-------|------|
| | 0.2~ | 0.5~ | 0~ | 0~ | 0.001 | 0.001 | 0.05 | 0.02 | 0.03 | 0.06 | 0.002 | 0.05 |
| REM. | 0.4 | 0.9 | 0.01 | 0.01 | MAX | MAX | MAX | MAX | MAX | MAX | MAX | MAX |
| Patent No.: 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 | IPC-TM-650, 2.6.15 | |
|------------------------------|---------------|-----------------------|--|
| Halogen Content Test | ROLO | BS EN14582 | |
| 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 | |
| Spreading Test | > 70% | JIS-Z-3197, 8.3.1.1 | |
| 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 | |

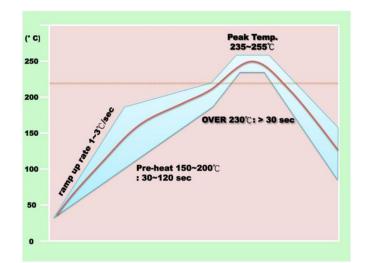
| S.I.R. Test | | Pass | IPC-TM-650, 2.6.3.3 | |
|------------------------|---|------|----------------------|--|
| Electro Migration Test | ٠ | Pass | IPC-TM-650, 2.6.14.1 | |

▲ Test Conditions : 85 °C, 85% RH for 168hrs

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Test Conditions: 65°C, 88.5% RH for 596 hrs

RECOMMENDED REFLOW PROFILE



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| Ramp Up Rate (30-150°C): | 1.0-3.0 °C/sec |
|-------------------------------|----------------|
| Pre-heating Time (150-200°C): | 30-120 sec |
| Time Period Above 230°C: | >30 sec |
| Peak Temperature: | 235-255 °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.

| Pre-heating Time (150-200°C): | 30-120 sec |
|-------------------------------|----------------|
| Time Period Above 230°C: | >30 sec |
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| | |



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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

PF629 – P25 – T3 – 500

Solder Alloy PF629 = SnAg0.3Cu0.7 Flux P25 = ROL0

Particle Size T3 = 20-45μm T4 = 20-38μm

Weight / Packaging 30 = syringe 30g 100 = syringe 100g 150 = syringe 150g 250 = plastic jar 250g 500 = plastic jar 500g 600 = small cartridge 600g 1200 = large cartridge 1200g



SYRINGE

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