Partnership in Solder Technology Innovation

## R Lead-Free Solder Paste PF629-P

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

### **BASIC OVERVIEW**

SnAg0.3Cu0.7 Solder Paste Low Halide 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/Ag0.3/Cu0.7	JIS-Z-3282
Melting Point	217~226 °C	
Particle Size	(Type 3) +45μm < 1% , - 20μm < 10% (Type 4) +38μm < 1% , - 20μm < 10%	IPC-TM-650, 2.2.14
Powder Shape	Spherical	
Flux Content	11 ± 1.0 wt%	JIS-Z-3197, 8.1.2
Halide Content	<0.5 wt% (in flux)	J-STD-004
Viscosity	200 ± 30 Pa.s (25±1°C, 10rpm, Malcom)	JIS-Z-3284 Annex 6
Flux Type	ROL1	J-STD-004

### Alloy Detail Composition

(Sn)	(Ag)	(Cu)	(Ni)	(Ge)	(Zn)	(Al)	(Sb)	(Fe)	(As)	(Bi)	(Cd)	(Pb)
REM.	0.2~	0.5~	0~	0~	0.001	0.001	0.05	0.02	0.03	0.06	0.002	0.05
	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%)												

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Scan Code for Solder Paste Documents



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### **PERFORMANCE & RELIABILITY**

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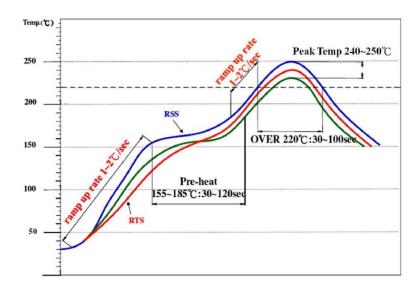
Copper Plate Corrosion Test	Pass	JIS-Z-3197, 8.4.1
Spreading Test	> 75%	JIS-Z-3197, 8.3.1.1
Copper Mirror Test	Pass	IPC-TM-650, 2.3.32
Viscosity Test (25°C,10 rpm)	200 ± 30 Pa.s	JIS-Z-3284. Annex 6
Tackiness Test (gf)	> 130 (8hr)	JIS-Z-3284. Annex 9
Slump Test	Pass	JIS-Z-3284. Annex 7,8
Solder Ball Test	Pass	JIS-Z-3284. Annex 11

S.I.R. Test	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, 85% RH for 596hrs

### **RECOMMENDED REFLOW PROFILE**



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Ramp Up Rate (30-150°C):	1.0-2.0 °C/sec
Pre-heating Time (150-185°C):	30-120 sec
Time Period Above 220°C:	30-100 sec
Ramp Up During Reflow:	1.0-2.0 °C/sec
Peak Temperature:	240-250 °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.

Ramp Op Rate (30-150 C):	1.0-2.0 C/sec
Pre-heating Time (150-185°C):	30-120 sec
Time Period Above 220°C:	30-100 sec
Ramp Up During Reflow:	1.0-2.0 °C/sec
Peak Temperature:	240-250 °C
Ramp Down Cooling Rate:	1.0-6.0 °C/sec



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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 - P - T3 - 500**

Solder Alloy PF629 = SnAg0.3Cu0.7

Flux P = ROL1 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

CARTRIDGE

SYRINGE

### CONTACTS

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### www.nevo-solder.com

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