

TO:

## SPECIFICATION

NAME : almit SRC Solder Paste  
Sn63U SS4M

Product No.	Type
K-038-0145	Sn63U SS4M Flux Content 15% Solder Powder Size: 10 – 28 ( $\mu$ m)

### NIHON ALMIT CO., LTD

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1. Product Number & Name :  
almit SRC Solder Paste Sn63U SS4M

2. Scope :

This spec. is specified for almit solder paste Sn62 SS4M delivered by Nihon Almit Co., Ltd. to Messrs. \_\_\_\_\_ .

3. Weight & Allowances: (g)

Weight	250	100
Allowance	-0, +10	-0, +10

4. Chemical Composition : (wt%)

Comp.	Sn	Pb	Ag	Sb	Cu	Bi	Zn	Fe
Sn62	63±0.5	Bal	≤0.10	≤0.12	≤0.05	≤0.10	≤0.001	≤0.02
	Al	As	Cd	Au	In	Ni	P	S
	≤0.001	≤0.03	≤0.002	≤0.080	≤0.10	≤0.010	≤0.010	≤0.005

5. Solder Powder Size & Distribution (J-STD-005 3.3.2)  
% of Sample by Weight – Nominal Size

Type	None Larger Than	Less Than 1% Larger than	90% Minimum Between	10% Maximum Less Than
Type5	30 Microns	25 Microns	15-25 Microns	15 Microns

6. Characteristics :

Characteristics	Standard	Test Methods
Metal Percent (wt%)	85.0±1.0	IPC-TM-650 2.2.20
Silver Chromate	Pass	IPC-TM-650 2.3.33
Copper Mirror Test	Pass	IPC-TM-650 2.3.32
SIR (85°C, 85%, 168 hr, measured out of chamber) (Ω)	≥1×10 <sup>8</sup>	IPC-TM-650 2.6.3.3
Corrosion Test	Pass	IPC-TM-650 2.6.15
Flux materials composition	RO	J-STD-004 1.2
Quantitative Halide	L1<0.5%	IPC-TM-650 2.3.35
Fluorides By Spot Test	Pass	IPC-TM-650 2.6.35.1

7. Physical Properties:

Metal Name	Solidus (°C)	Liquidus (°C)	Specific Gravity
Sn63	183	183	8.4

8. Lot Size :

A single lot is consisted of, and may vary between 10 - 100kg, depends upon the production plan.

9. Quality and Inspection :

Inspection items are applied to each lot as follows:

Item No.	Inspection Item	Contents	Standard
1	Appearance	Color	Comparison with Limit Specimen
2	Weight	Net Weight	-0, +10 (g)
3	Solder Powder Size	10/28	$90 \leq$ (wt%)
4	Metal Composition	Sn	$63 \pm 0.5$ (wt%)
		Pb	Balance (wt%)
5	Characteristics	Flux Content	$15.0 \pm 0.5$ (wt%)
6		Solder Balling Test (*Almit Method)	Comparison with Limit specimen
7		Viscosity (Spiral type, 10rpm, 25°C) (IPC-650-2.4.34.3)	$100 \pm 30$ (Pa·s)
			$100000 \pm 30000$ (cps)
8		Solderability on Cu Plate	Comparison with Limit Specimen
9	Dryness	Chalk powder should be easily removed from each test specimen.	

\*Straight lines of solder paste are printed on to a JIS-2 type substrate then reflowed. The reflowed solder is examined with a stereo microscope at 30X magnification. No more than 2 solder balls larger than one fifth the size of the pattern gap is allowed per gap.

10. Packing :

Individual Packaging		Outer Packaging	
Unit	Packaging	Unit	Packaging
100 g 250 g	Polyethylene cartridge	—	Cardboard box

11. Identification :

	Polyethylene Cartridge	Cardboard Box
Name	almit SRC Solder Paste Sn63U SS4M	Same as the left
Lot No.	(Ex.) 080101-1	Ditto
Solder Powder Size	10-28 $\mu$ m	Ditto
Use before	(Ex.) 08-03-31 (Indicate in the Christian era)	Ditto
Weight (Net)	(Ex.) 250 g	Ditto
Company Name	NIHON ALMIT CO., LTD.	Ditto

12. Maker Address :

Nihon Almit Co., Ltd.  
Almit Bldg., 2-14-2 Yayoicho, Nakano-ku, Tokyo, Japan

13. In case of changing this spec., it should be accepted by \_\_\_\_\_.

《HOW TO HANDLE Sn63U SS4M》

1. Storage:

- Hold in a refrigerator. (0-10°C)
- It is recommended to use within 3 months from manufacturing date.
- The solder paste should be used as quickly as possible once lid has been opened.
- Unused solder paste in the jar should be refrigerated after re-applying the inner and outer lids.

2. How to Use:

- Prior to usage, solder paste should be removed from refrigeration for over 2 hours until it reaches room temperature.
- We recommend to stir the solder paste by mixing machine before use it. When stir by a spatula, open the jar after the solder paste is warmed up to room temperature and stir slowly to make the paste homogeneous. Caution must be taken not to mix in air.
- After shooting the solder paste, mount components immediately and let it pass through reflow furnace.
- Slowly heat the reflow furnace at 1.0 to 2.5°C/second till reaching 120 to 170°C. Set peak temperature at 160 to 170°C during pre-heating and 205 to 230°C during reflow. (Refer to next page.)
- This solder paste corresponds to No-Clean process, however confirmation may be required whether No-Clean process is applicable under user's expectancy.
- White residue (insulator) may appear after cleaning.

3. Caution:

- The solder paste is not edible.
- The solder paste is for the industrial use only.
- Avoid contact with eyes and skin.
- Avoid inhalation of gases emitted by solder paste during use.
- Provide proper ventilation.

4. Notice:

- If contact with skin, wiped off with like alcohol and wash with soap and water, immediately.
- Use rubber gloves and protective glasses, if necessary.

5. Delivery:

- Usually 2 weeks from acceptance of order.

Approved	Prepared
Hideto Takayama	Shinichi Usukura

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