

Date:

TO:

S P E C I F I C A T I O N

NAME : almit SRC Solder Paste

LFM-48U MDA-5

Item No.	Kind
	LFM-48U MDA-5 Flux Content 15.0% Solder Powder Size: 10-28 (μ m)

NIHON ALMIT CO., LTD

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TEL: 092-483-0367 FAX: 092-483-0324

1. Name :
almit SRC Solder Paste LFM-48U MDA-5

2. Scope :
This spec. is specified for almit solder paste LFM-48U MDA-5 delivered by Nihon Almit Co., Ltd. to Messrs. _____.

3 Net weight & Allowances: (g)

Net weight	250	100
Allowance	-0, +10	-0, +10

4. Chemical Composition : (wt%)

Chemical element	Main constituents			Impurities				
	Sn	Ag	Cu	Pb	Sb	Bi	Au	In
Standard	Remainder	3.0±0.2	0.5±0.1	<0.05	≤0.10	≤0.05	≤0.05	≤0.10
Chemical element	Impurities							
	Al	As	Cd	Fe	Ni	Zn		
Standard	≤0.001	≤0.03	≤0.002	≤0.02	≤0.01	≤0.001		

5. Solder Powder Size & Distribution
% of Sample by Weight – Nominal Size

Type	None Larger Than	Less Than 2% Larger than	90% Minimum Between	8% Maximum Less Than
U	-	28 Microns	28-10 Microns	10 Microns

6. Quality characteristics:

Test items	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 ⁸	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
LFM-48	217	220	7.4

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

9. Product 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 (U)	90 ≤ (wt%)
4	Metal Composition	Sn	Balance (wt%)
		Ag	3.0 ± 0.2 (wt%)
		Cu	0.5 ± 0.1 (wt%)
5	Characteristics	Flux Content	15.0 ± 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 ± 30 (Pa·s)
			100000 ± 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 250g	Polyethylene cartridge	—	Cardboard box

11. Identification :

	Polyethylene Bottle	Cardboard Box
Name	almit SRC Solder Paste LFM-48U MDA-5	Same as the left
Lot No.	(Ex.) 080101-1	Ditto
Solder Powder Size	10-28 μm	Ditto
Use before.	(Ex.) 08-06-30 (Indicate in the Christian era)	Ditto
Net weight	(Ex.) 100 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 LFM-48U MDA-5》

1. Storage:

- Hold in a refrigerator. (0-10°C)
- It is recommended to use within 6 months from manufacturing date.
- The solder paste should be used as quickly as possible once lid has been opened.

2. How to Use:

- Prior to usage, solder paste should be removed from refrigeration for over 2 hours until it reaches room temperature.
- After shooting the solder paste, we recommend mounting the components at once and letting it pass through the reflow furnace immediately. (available time of solder paste after shooting : 12hr)
- Slowly heat the reflow furnace at 1.0 to 2.0°C/second till reaching 120 to 170°C. Set peak temperature at 170 to 190°C during pre-heating and 230 to 250°C during reflow.
- 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.

Issue date Apr.8.2008

Approved	Confirm	Prepared
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