QPS-31974815WE
J-STD 5-0
Total 4 pages

Date:

TO:

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

NAME : almit SRC Solder Paste

LFM-48W NH(LVA)

Item No.	Kind
	LFM-48W NH(LVA) Flux Content 11.5% Solder Powder Size: 20-38 (μm)

N I H O N A L M I T C O., L T D

Head Office : Almit Bldg., 2-14-2 Yayoicho, Nakano-ku, Tokyo,
164-8666 Japan TEL: 03-3379-2277 FAX: 03-3374-2593

Osaka Office : Ashiike Bldg. No. 2, 3-6-28, Minamisenba, Chuo-ku, Osaka,
542-0081 Japan TEL: 06-6252-5039 FAX: 06-6252-5026

Kyushu Office : KDX Hakata minami Bldg., 1-3-11, Hakataeki minami,
Hakata-ku, Fukuoka, 812-0016 Japan
TEL: 092-483-0367 FAX: 092-483-0324

1. Name :
almit SRC Solder Paste LFM-48W NH(LVA)

2. Scope :
This spec. is specified for almit solder paste LFM-48W NH(LVA) delivered by Nihon Almit Co., Ltd. to Messrs. _____ .

3 Net weight & Allowances: (g)

Net weight	500	1000
Allowance	-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 1% Larger than	90% Minimum Between	10% Maximum Less Than
Type4	40 Microns	38 Microns	38-20 Microns	20 Microns

6. Quality characteristics:

Test items	Standard	Test Methods
Solder Paste Metal Content by Weight (wt%)	88.5±1.0	IPC-TM-650 2.2.20
Copper Mirror	Pass	IPC-TM-650 2.3.32
Qualitative Halides, Silver Chromate	Pass	IPC-TM-650 2.3.33
Fluorides by Spot	Pass	IPC-TM-650 2.3.35.1
Corrosion, Flux	Pass	IPC-TM-650 2.6.15
Surface Insulation Resistance (SIR) (Ω)	$\geqq 1\times 10^{8}$	IPC-TM-650 2.6.3.3
Electrochemical Migration	Pass	IPC-TM-650 2.6.14.1
Flux Composition	RO	J-STD-004B
Flux Type	L0	IPC-TM-650 2.3.28.1

7. Physical Properties:

Metal Name	Solidus (℃)	Liquidus (℃)	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	20/38 (W)	94≦ (wt%)
4	Metal Composition	Sn	Balance (wt%)
		Ag	3.0±0.2 (wt%)
		Cu	0.5±0.1 (wt%)
5	Characteristics	Flux Content	11.5±0.5 (wt%)
6		Solder Balling Test (*Almit Method)	Comparison with Limit specimen
7		Viscosity (Spiral type, 10rpm, 25℃) (IPC-650-2.4.34.4)	180±30 (Pa・s) 180000±30000 (cp)
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
500 g	Polyethylene bottle with inner lid plastic bag	10.0 kg 20.0 kg	Cardboard box
6oz (500g) 12oz (1000g)	Cartridge for SEMCO	10 cartridges 20 cartridges	

11. Identification :

	Polyethylene bottle or Cartridge	Cardboard Box
Name	almit SRC Solder Paste LFM-48W NH(LVA)	Same as the left
Lot No.	(Ex.) 170101-1	Ditto
Solder Powder Size	20-38 μm	Ditto
Use before.	(Ex.) 17-06-30 (Indicate in the Christian era)	Ditto
Net weight	(Ex.) 500 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-48W NH(LVA)≫

1. Storage:
   - Hold in a refrigerator. (0-10℃)
   - 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.
   - 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 printing the solder paste, mount components immediately and let it pass through reflow furnace.
   - Slowly heat the reflow furnace at 1.0 to 2.0℃/sec till reaching 120℃. Set peak temperature at 170 to 190℃ during pre-heating and 230 to 250℃ 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.
   - Solder paste must be wiped off from metal mask, squeegee and spatula by applying solvent such as alcohol immediately after use.

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 Dec.20.2017

Approved	Confirm	Prepared
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