

To. _____

Specification

Product	Lead-free Solder Bar LLS219AL-B18
---------	---



Established ☐ 01,01,2005

A c c e p t a n c e					
Date ☐					
Agency					

☐☐☐☐☐☐				
Supplier				
Maker 75-1 choda narumi-☐☐☐ midori-ku nagoya-shi aichi Japan Soldercoat Co.,Ltd.				

specification name

Lead-free Solder Bar "LLS219AL-B18"

1 . Application Extent

This specification stipulated for the lead-free solder bar “LLS219AL-B18” manufactured in SOLDERCOAT Co.,Ltd.

2 . Quality

2 . 1 Chemical composition and a kind of solder alloy

The kind of alloy of this product is “Sn-Ag-Ni”, the composition shows on (table1), the impurities shows on (table2).

table 1 Composition

Alloy	Composition(mass %)			Melting temperature(°C)	
	Sn	Ag	Ni	Solidus Line	Liquidus Line
Sn-Ag-Ni type	97.0±1.0	3.0±0.3	0.01±0.1	221	222

table 2 Impurities

Unit:mass%							
Pb	Fe	Bi	Zn	As	Sb	Cu	Ca
<0.05	< 0.12	< 0.10	< 0.002	<0.02	< 0.002	< 0.03	< 0.002

3. Appearance

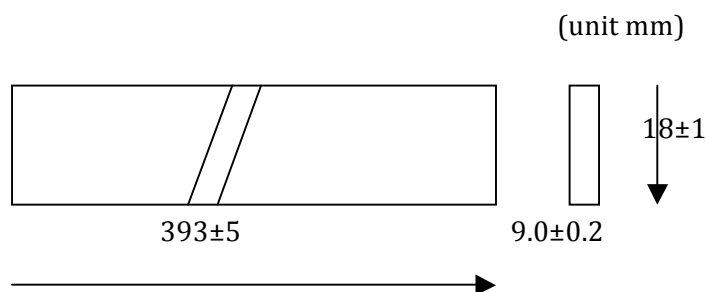
The surface should be smooth and good finished, and be uniform product with free from faults as table 3.

table 3 Appearance

Item	Properties
S u r f a c e	No striking rough skin.
B u b b l e	Pass for a level of a grain of millet.
Indication/carved seal	Read clearly

4.Shape ,Size and Mass

Figure 1 Shape and Size



specification name	Lead-free Solder Bar “LLS219AL-B18”
--------------------	-------------------------------------

Table 4 Mass

Net Weight in a box(Kg)	Mass of one bar(g)
20+0.1 -0	501± 5

5. Chemical Analysis Test

Chemical Analysis test is based on JIS Z 3910 “Methods for Chemical Analysis of Solder”.

6 Test and Inspection

It should be tested and inspected the appearance, size and mass, and passed the regulations for the chemical composition.

7. Reacted RoHS

It is adapted to RoHS restrained as table 5.

Table 5 RoHS restricted harmful substances

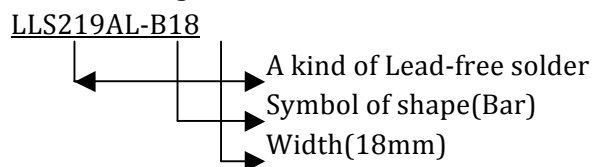
ANALYSIS ELEMENT	RoHS Target Value(ppm)	DETERMINATION(ppm)	NOTES
Pb	1,000	≤500	
Cd	100	≤20	
Hg	1,000	<20	
Cr	1,000	<20	
PBB,PBDE	Our concerned products are not contained these chemical substances as PBB and PBDE, and also not alloyed.		

8. Inspection Certificate

If supplier require, the inspection certificate should be submitted as soon as possible.

9. Naming of Product

Naming of product is as following,



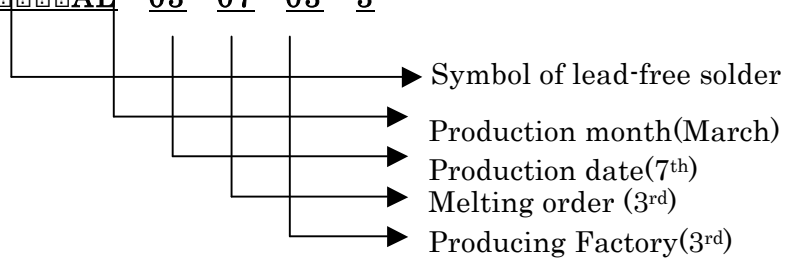
specification	n a m e	Lead-free Solder Bar “LLS219AL-B18”
---------------	---------	-------------------------------------

10. Constitution of Lot. No.

Write in addition the Lot. No. showed the producing career.

Example

AL 03 07 03 - 3



11. Packaging

The product is packed in a corrugated paper box every 20Kg.

12. Keeping Way

1. Store out of rain and dust.
2. Don't keep with the chemicals that are possibly corroded this product.(nitric acid etc.)

13. Period of Using

The period of using this product is 3years from production date.

14. Marking

Mark the following items on each one roll.

- (1) Symbol of alloy
- (2) Symbol of shape and size
- (3) Net weight
- (4) Producer
- (5) Lot No.

15. For Environment and Safety

- 15.1 Put on the safety shoes in handling, because the solder has heavy weight.
- 15.2 As long as normal handling, there are no problem for the environment and safety.

16. Deal with a Doubt

When a doubt is caused on mentioned item, we both talk with over and have to correct and take steps quickly.

17. Handling this specification

After deliberation about this specification, if no doubt, return us with your sign. If no return over 1month after your acceptance, we consider you approved.