

NIPPON MICROMETAL CORPORATION PHILIPPINES

First Philippine Industrial Park

Brgy. Sta. Anastacia, Sto. Tomas, Batangas 4234 Philippines

TEL:63-43-4057241 to 45

Inspection Certificate of Copper Bonding Wire

Report No.: C239638

September 27,2023

1. Customer : ATX Semiconductor (Kunshan) Co., Ltd.

2. Order No. : 4800085925

3. Lot No. : 390SS

4. Quantity : 2,000m

Start tape color : Green

End tape color : Red

5. Product Specifications

Commodity	Specification	Diameter	Length	Spool
1-CW-01-0000047	EX1p plus	0.8MIL(S)	2,000m	WN-8

6. Chemical Analysis

6-1. Concentration of Pd (unit;wt%) 6-2. Purity of core Cu (unit;wt%) 6-3. Concentration of Au (unit;wt%)

Element	Pd	Element	Cu	Element	Au
Specification	$1.0 \leq, \leq 1.8$	Specification	≥ 99.99	Specification	$0.02 \leq, \leq 0.18$
Concentration	1.5	Concentration	99.99	Concentration	0.08

6-4. Impurity in core Cu

(unit;ppm)

Element	Ag	Ni	As	Cd	Cr
Specification	≤ 25	≤ 5	≤ 1	≤ 0.1	≤ 1
Concentration	0.1	0.002	<0.01	<0.01	0.002

7. Mechanical Property(Room Temp.)

No.	Breaking Load (g)	Elongation (%)	Diameter (mil)	Reference
Specification	4.8 ~ 9.8	8.0 ~ 14.0	0.71 ~ 0.79	Gauge Length 100mm Drawing speed 40mm/min
1	7.0	11.7	0.75	
2	6.9	11.2	0.74	
3	7.0	11.9	0.74	
4	7.0	11.3	0.74	
5	7.0	11.5	0.74	
AVG	6.98	11.52	0.742	
R	0.1	0.7	-	

8. MG Value (mg/200mm)

MG Value	0.51
Specification	0.46 ~ 0.56

9. Manufacturing Date

2023/08/30

10. Expiration date

2024/02/25

11. Packing

Individual packing formula: Pass

The product is enclosed with the barrier bag.

Declaration: Our company hereby warrants and guarantees that all of products delivered to ASE company are free from any of hazardous substances which is banned immediately.

NIPPON MICROMETAL CORPORATION hereby certifies that the above product has been manufactured under proper condition and passed in conformance with company standard.

Authorized Signature
Quality Assurance Section