

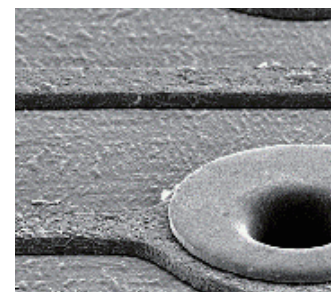
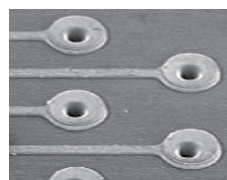
Features

Only through-hole is plated, providing pattern wiring that makes use of original thickness and characteristics of copper foil. High-precision impedance control is possible, Ideal for high-speed transmission application!

- Superior flexibility/bendability compared to panel plating method, achieving ultra-thinness!
- Enable button plating in narrow pitch pattern, which was difficult in the past.

Specification example

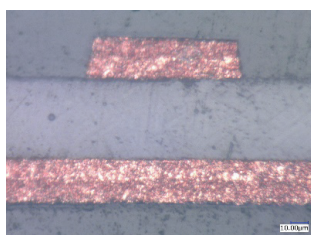
- Through-hole diameter : $\phi 100\mu\text{m}$
- Land diameter : $\phi 300\mu\text{m}$
- Button plating diameter : $\phi 240\mu\text{m}$
- Button plating thickness : $15\mu\text{m} \sim 25\mu\text{m}$
- Base material : Polyimide or Liquid crystal polymer $25\mu\text{m} \sim 50\mu\text{m}$
- Base Cu foil thickness : $18\mu\text{m}$



Comparison of conductor thickness to panel plating

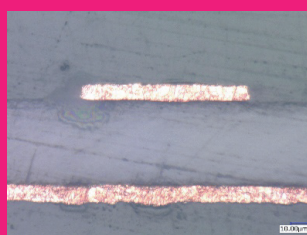
Panel-plated product

Copper thickness
(Copper foil + Copper plating)

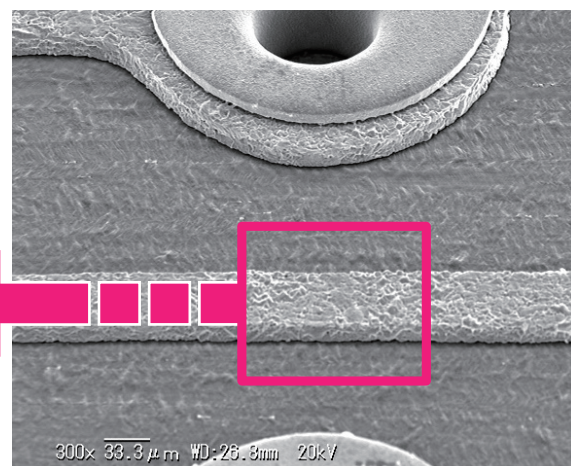


Button-plated product

Copper thickness
Copper foil only



Cross-section observation of  part



The pattern of button-plated products with red frame is not plated, and can make thinner product than panel-plated products.

Reliability evaluation

Per JIS C5016 9.2

Temperature cycle test

-65°C for 30 minutes ~ 125°C for 30 minutes 100 cycles

Achieved standard value of connection resistance within $\pm 10\%$.



YAMASHITA MATERIALS