

Cross-sectional sample preparation

Preparation of cross sectional samples for analysis, observation, and display

Observation + cross-sectional polishing + ion milling finish

Observing cross section enables to examine in more detail such as identifying the failure cause or evaluating the reliability. Internal defects that are not visible from the surface get to be visualized.

1 Observation

Check the observation object and adjust the size so that the cross-section can be easily polished.

By narrowing down the observation area, it is possible to shorten the time required for cross-sectional polishing.

■ Example: resin embedding



2 Resin embedding

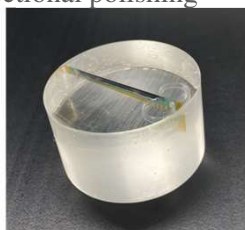
When polishing the cross section while maintaining the specimen condition, embed the specimen in resin.

3 Cross-section grinder

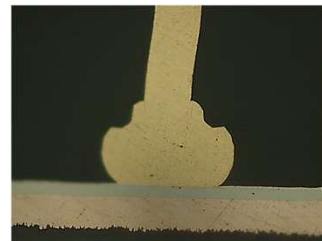
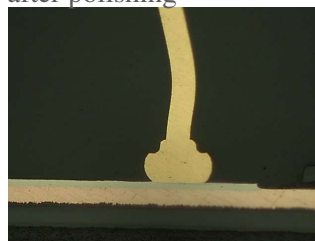


Cut and polish the specimen to make the cross-sectional part visible.

■ Example: cross-sectional polishing



■ Example: Optical microscope observation image after polishing

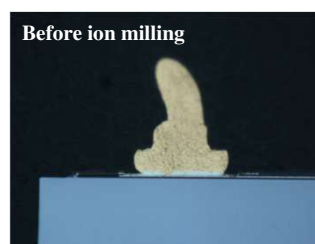


4 Ion milling finish

Irradiate Argon ion beam to the surface of the sample to etch.

Cleaner and less distorted cross section sample than by mechanical polishing can be made.

■ Example ion milling finish



We pay close attention to the details of consultations and requests with the first priority on strict adherence. In particular, a confidentiality agreement shall be entered into in the event of a request.