



Changshu Talent Semiconductors Co.,Ltd

Tin Whisker Evaluation Result For SMD Tin Plating Device

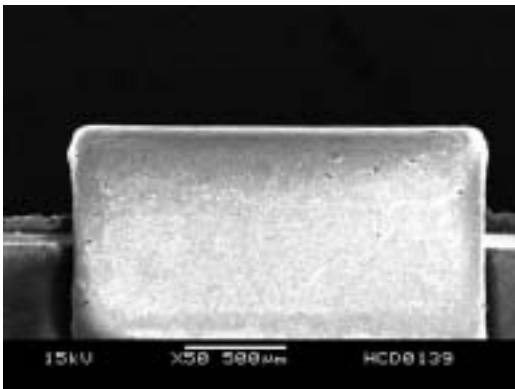
Test Equipment :

1. Programmable Temperature & Humidity Chamber
2. Thermal Shock Chamber
3. SEM(Scanning Electron Microscope)

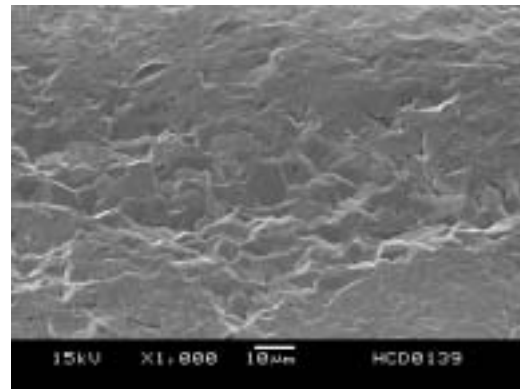
Test Method/Specification :

Room Temperature Test	25deg.c, 50%RH, 1000Hrs
Temperature Cycle Test	(-55deg.c , 10min~85deg.c, 10min)/cycle; 1000cycle
Constant Temperature&Humidity Test	60deg.c , 95%RH, 1000Hrs

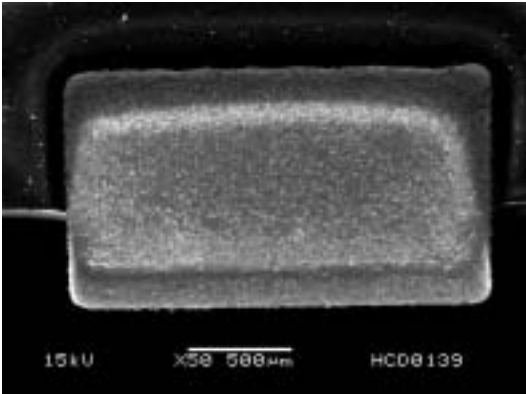
Test Result-----Pls see below Photos :



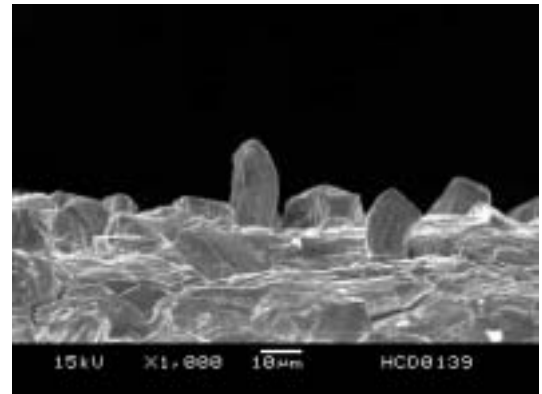
**Whisker observation by SEM--after
Room Temperature Test**



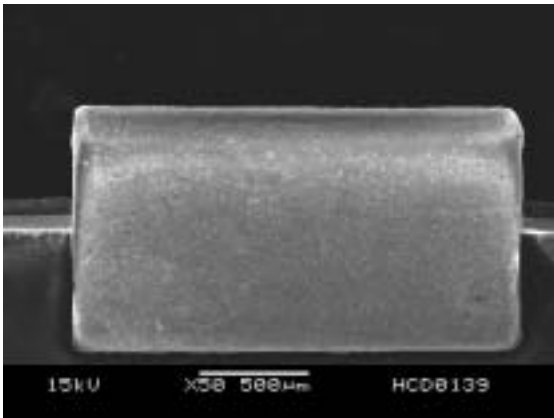
**Whisker observation by SEM--after
Room Temperature Test
Length: N/A**



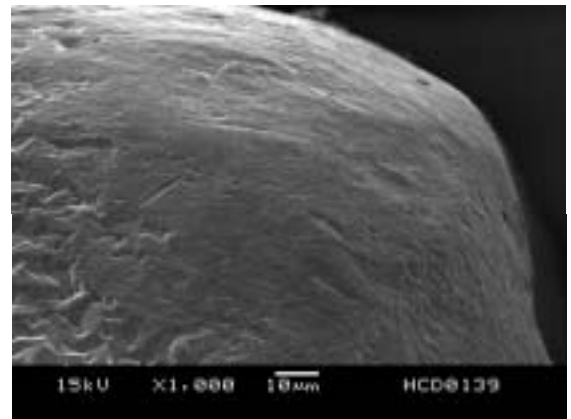
**Whisker observation by SEM--after
Temperature Cycle Test**



**Whisker observation by SEM--after
Temperature Cycle Test
Length: 22um**



**Tin Whisker Evaluation-- Constant
Temperature /Humidity Test**



**Tin Whisker Evaluation-- Constant
Temperature /Humidity Test
Length: N/A**

Date : 2005/3/1