

Anodically Bondable LTCC with Electrical Feedthrough

(Nikko)

1. Green sheet



2. Punching



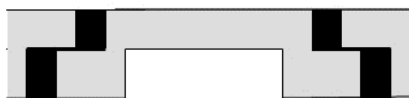
3. Plugging holes with Au paste



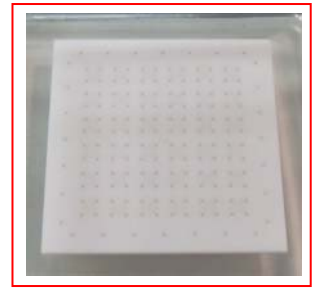
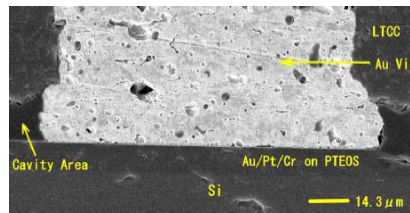
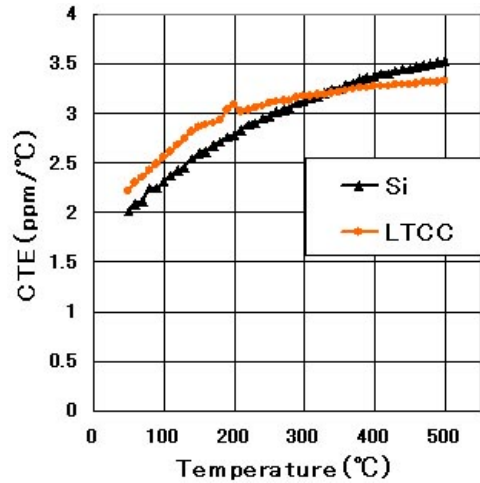
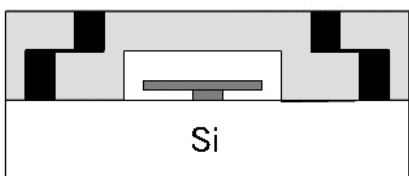
4. Laminating



5. Sintering



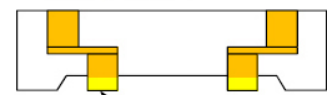
6. Anodic bonding



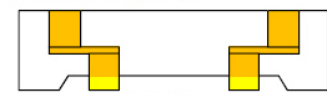
1. Production of LTCC wafer



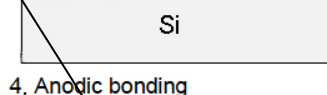
2. Wet etching of LTCC wafer



3. Wafer alignment

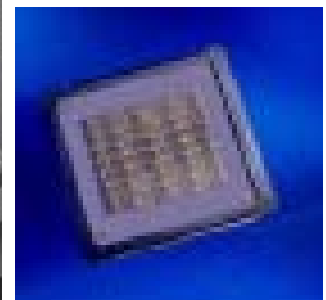
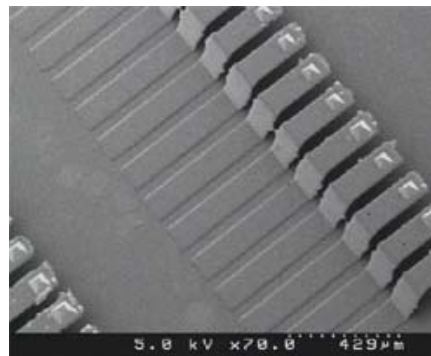
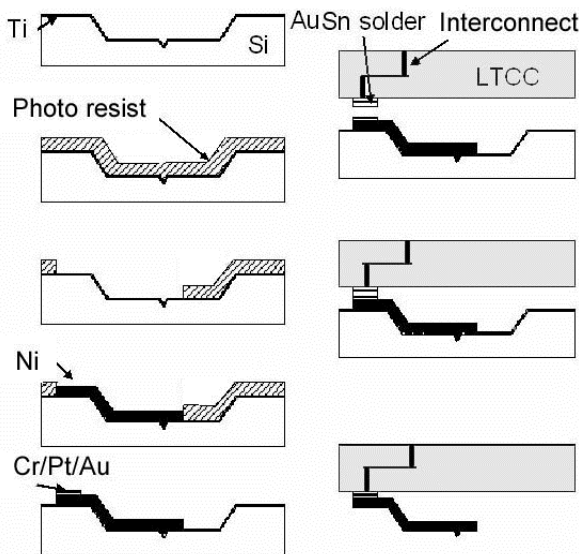


4. Anodic bonding



Anodically bondable LTCC with electrical feedthrough and electrical interconnection using porous gold (Nikko – Tohoku Univ.)

Reference : M.Mohri, A.Okada, H.Fukushi, M.Esashi and S.Tanaka, Packaging Technology for Hermetic Sealing with Electrical Connection Using Anodically-Bondable LTCC Substrate with Etched Cavities, The 28th Sensor Symposium on Sensors, Micromachines and Applied Systems (2011) p.62



Probe card using LTCC for wafer-level burn-in test

Reference : S.-H.Choe, S.Tanaka and M.Esashi, A Matched Expansion MEMS Probe Card with Low CTE LTCC Substrate, IEEE International Test Conference 2007 (2007) Paper 20.2