Electrical and Adhesion Properties of Photoimageable Silver Paste with Glass Addtion

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Abstract: Micro patterning of conductor line/space on LTCC green sheet in the LTCC module is an important process for miniaturization in 3D integrated circuits. This work presented the effect of inorganic binders on the microstructure, adhesion, electrical resistivity, shrinkage and line/space resolution, which is a part of study in photoimageable conductor paste. The photoimageable conductor paste contains silver powder, polymer binder, monomer, photo-initiator, UV absorber, and solvent. The inorganic binders were furnished with varied weight percentage of anorthite, diopside and MLS-62 glass frits from 0% to 7%. The Line/space sizes thus obtained was under 25 micron.