PDP용 Ag 전도성 후막의 열적거동

황성진, 이상욱, 김형순 인하대학교, 신소재공학과

Thermal Behaviors of Ag Conductive Thick Film with Firing Temperature for Plasma Display Panel

Hwang Seongjin, Lee Sangwook, Kim Hyungsun School of Materials Engineering, Inha University

Abstract: Ag conductive thick film has been used in bus and address electrodes of PDP (Plasma display panel). In PDP fabrication, the firing temperature of electrode is normally 550~580°C. For the application of PDP industry, we investigated an Ag conductive thick film with firing temperature. Low melting glass frit was used in the conductive thick film. The thermal properties of Ag and frit were determined by a hot stage microscopy. Based on the our results, we suggest that the Ag conductive thick film should be considered of the firing temperature which is correlated to the shrinkage, conductivity, and shape of thick film.

Key Words: Silver paste, Frit, Hot stage microscope, Resistance, Shrinkage