

ABSTRACT

CERAMIC, PROBE GUIDING MEMBER, PROBE CARD, AND SOCKET FOR PACKAGE INSPECTION

A ceramic contains, in mass percent: Si_3N_4 : 20.0 to 60.0%, ZrO_2 : 25.0 to 70.0%, and one or more oxides selected from MgO , Y_2O_3 , CeO_2 , CaO , HfO_2 , TiO_2 , Al_2O_3 , SiO_2 , MoO_3 , CrO , CoO , ZnO , Ga_2O_3 , Ta_2O_5 , NiO , and V_2O_5 : 5.0 to 15.0%. The ceramic has a coefficient of thermal expansion as high as that of silicon and an excellent mechanical strength, allows fine machining with high precision, and prevents particles from being produced.

Figure 1