

HOLLOW STRUCTURE, ELECTRONIC COMPONENT USING SAME, AND
NEGATIVE PHOTSENSITIVE RESIN COMPOSITION

ABSTRACT

The present invention provides a hollow structure having a low acid ion content and low wiring corrosion when stored in high-temperature, high-humidity conditions. The present invention relates to a hollow structure in which an organic film (I) having a film thickness of 5-30 μm as a hollow structure support material and an organic film (II) having a film thickness of 5-30 μm as a hollow structure roof material are layered in said order from the upper surface of a substrate having a metal wiring, wherein, when the organic film (I) and the organic film (II) are independently evaluated by the following method for evaluating ion elution amounts, the total of the ion elution amount of the organic film (I) and the ion elution amount of the organic film (II) is no more than 4,000 ppm. (Ion elution amount evaluation method) An organic film is placed in pure water having a mass 10 times that of the organic film and is extracted in hot water for 10-20 hours at 100-121 °C, after which the supernatant of the liquid extract is used as a sample solution. The sample solution and a target ion standard solution are introduced into an

ion chromatography device, the concentrations of formate ions, acetate ions, propionate ions, and sulfate ions in the sample solution are determined by a calibration curve method, and a value obtained by converting the total of said concentrations into the mass of eluted ions relative to the mass of the organic film is used as the ion elution amount.

Fig. 1