



ABSTRACT

The present invention relates to an alloy film resistor containing mainly nickel and phosphorus having an excellent fuse function and a method for producing the alloy film resistor. After the conductivity is given to the surface of an electrical insulating substrate such as ceramics by sequentially performing an etching treatment, an activating treatment and an electroless plating treatment to the electrical insulating substrate, an alloy film containing mainly nickel and phosphorus is formed by not an electroless plating process but an electrolytic plating process. By adopting the electrolytic plating process, a film thickness of the formed alloy film of the middle part on the surface of the insulating substrate is thinner than that of the alloy film of the corner or ridge parts on the surface of the insulating substrate, and the thin part of the film thickness serves as a suitable fusing start part when applying an overload.