

METHOD OF MANUFACTURING ZINC OXIDE SINTERED COMPACT BODY

ABSTRACT OF THE DISCLOSURE

By performing a debinder process before or at the time of firing, and by enhancing a programming rate in the temperature range of 650~950°C, the size of particles shows less distribution. Also, when the temperature comprising the particle growth range of 1025~1200°C is maintained for many hours, a zinc oxide varistor having relatively large and uniformly formed particles can be provided. When a zinc oxide varistor compound is fired, a solid solution of zinc oxide spinel is fired at the programming rate of 175 to 500°C/hr in the temperature range comprising the primary phase of from 650 to 950°C, and at the programming rate of 30 to 500°C/hr in the range of from 1250 to 1300°C. Accordingly, a zinc oxide varistor having comparatively large and uniformed formed particles can be obtained. Sintered products obtained in this way show less distribution in operating voltage.

FIGURE 1