

ABSTRACT

Spherical silica particles suitable for an application as a filler for semiconductor encapsulation use having an excellent dielectric property in the millimeter wave band, that is, spherical crystalline silica particles with contents of alkali metals and alkali earth methods kept low while having a high degree of crystallinity and high ratio of quartz, and a method of producing the same. That is, spherical crystalline silica particles having a degree of roundness of 0.80 or more, containing lithium in 0.02 mass% or more and less than 0.40 mass% by oxide conversion, containing calcium in 0.004 mass% or more and less than 1.0 mass% by oxide conversion, and containing phases of crystalline silica, in which spherical crystalline silica particles, the degree of crystallinity in the spherical crystalline silica particles is 40.0% or more and the ratio of quartz in the phases of crystalline silica is 80.0 mass% or more.

FIG. 1