die attach film can be used without particular limitation.

Examples of the inorganic filler (D) include each inorganic powder made of ceramics, such as silica, clay, gypsum, calcium carbonate, barium sulfate, alumina (aluminum oxide), beryllium oxide, magnesium oxide, silicon carbide, silicon nitride, aluminum nitride, boron nitride; a metal or alloys, such as aluminum, copper, silver, gold, nickel, chromium, lead, tin, zinc, palladium, solder; and carbons, such as carbon nanotube, graphene.

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The average particle diameter (d50) of the inorganic filler (D) is not particularly limited, and is preferably from 0.01 to 6.0 μm, preferably from 0.01 to 5.0 μm, and more preferably from 0.1 to 3.5 μm from the viewpoint of enhancing the die attach performance while suppressing the formation of any jig mark. The average particle diameter (d50) is a so-called median diameter, and refers to a particle diameter at which the cumulative volume is 50% when the particle size distribution is measured by the laser diffraction scattering method and the total volume of the particles is defined as 100% in the cumulative distribution. In one embodiment of the die attach film, an inorganic filler having an average particle diameter (d50) of 0.1 to 3.5 μm is included when attention is paid to the inorganic filler (D). In another preferable embodiment, it is possible to include an inorganic filler having an average particle diameter (d50) of more than 3.5 μm.

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The Mohs hardness of the inorganic filler is not particularly limited, and is preferably 2 or more and more preferably from 2 to 9 from the viewpoint of enhancing the die attach performance while suppressing the occurrence of any jig mark. The Mohs hardness can be measured with a Mohs hardness meter.

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The inorganic filler (D) may contain a thermally conductive inorganic filler (inorganic filler having a thermal conductivity of 12 W/m·K or more) in an