ABSTRACT

A base plate for power module, comprising an aluminum-silicon carbide composite and aluminum layers made of a metal containing aluminum as the main component formed on respective principal planes of the aluminum-silicon carbide composite, wherein the aluminum-silicon carbide composite is produced by forming or fabricating a flat plate-shaped silicon carbide porous body to have a thickness difference of at most 100 μm in the entire porous body and piling such porous bodies as they are each sandwiched between mold-releasing plates so that the fastening torque in the plane direction becomes from 1 to 20 Nm, and infiltrating a metal containing aluminum as the main component into the silicon carbide porous bodies,

wherein the aluminum layers each has an average thickness of from 10 to 150 μm, the difference between the maximum thickness and the minimum thickness of the aluminum layer in each principal plane is at most 80 μm, and the difference between average thicknesses of the aluminum layers on the respective principal planes is at most 50 μm, and wherein the shape of the silicon carbide porous body is rectangle or a rectangle from which peripheral portions encompassing holes are removed.