

[Abstract]

On the surface of formed composition material (12) in which a conductive powder filler is blended and kneaded with a crystalline polymer by 35 to 60 volume percent, conductive material (13) is pressure sealed and buried so that part of the conductive material is exposed, and plated electrodes (14A) and (14B) are formed by plating treatment on formed composition material (12) with partly exposed conductive material (13). And at least one out of TiC, WC, W₂C, ZrC, VC, NbC, TaC, and Mo₂C is used as conductive powder filler. The adhesion between the PTC composition material and the electrodes becomes good, and it becomes possible to reduce contact resistance value between the two. Further a PTC element with excellent stability to repeated turning on electricity can be obtained.