

ELECTRIC CONDUCTIVITY OF PTCR
POLYETHYLENE-GRAPHITE COMPOSITES

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S u m m a r y

The paper presents the results of investigations of polyethylene-graphite composites which imply that the decisive contribution to the total conductivity belongs to the electron transfer through a polyethylene layer between graphite particles. It is shown that the model of electron tunneling with the participation of localized states in the polyethylene layer, which takes the layer expansion with increase in temperature into account, satisfactorily describes the static current-voltage characteristics of such composite materials.