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Title: Electrical Breakdown in Lightning Arrestor Connector (LAC) Devices

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Author: Hjalmarson, Harold P., Kambour, Kenneth
Sandia National Laboratories

Peneda, Andrew C.
U.S. Air Force Research Laboratory

Abstract:
Lightning arrestor connector (LAC) devices protect electronic devices by providing a conductive path to ground for electrical power surges caused by lightning. Such devices consist of an insulating material between electrodes. This insulation region is composed of an air gap and a high permittivity dielectric. In this presentation, the physics of the phenomena active in the early stages of the flow of transient electrical current will be described. The conditions that lead to thermal breakdown of the dielectric will also be discussed.