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CAF Testing (Conductive Anodic Filament Testing) | NTS

Conductive anodic filament - Wikipedia

Conductive anodic filament, also called CAF, is a metallic filament that forms from an electrochemical migration process and is known to cause printed circuit board (PCB) failures.

The CAF Mechanism

Conductive Anodic Filament (CAF) testing helps to determine the reliability of a printed circuit board (PCB) laminate material or a finished product. With conductor spacing and overall part sizes getting smaller and smaller, the necessity for this test is increasing.

Conductive anodic filament (CAF) failure is copper corrosion within a printed board. It is electro-migration of the copper from anode to cathode between two conductors of different potential. A combination of bias voltage and high humidity enhances CAF failures. When a filament grows between electrically isolated nets, electrical failure results.

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Conductive Anodic Filament Failure: A Materials Perspective

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CALCE Researches Solutions for CAF Formation | Center for ...

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