

Prognostics Methods and Reliability of Electrolytic Capacitors

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Abstract

The paper takes a fresh look at new studies, and results obtained, lessons learned and where things stand today. The industry applications are currently at a much more vulnerable position than it appears, regardless of how wonderful its future may look like. A full understanding of the physics and statistics of the defect generation is required to investigate the ultimate reliability limitations for electrolytic capacitors. Reliability and lifetime have to fulfil strong demands.

Keywords: electrolytic capacitors, metallized polymeric film, accelerated aging, failure mechanisms, health monitoring, reliability

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