RECOVERY OF THE NON-OHMIC PROPERTIES OF DEGRADED HIGH VOLTAGE COMMERCIAL ZnO-BASED VARISTOR.

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Abstract

The purpose of this work is to evaluate two different methodologies to re-establish non-ohmic properties of high voltage commercial ZnO based varistors after degradation with long duration (2000 ms) and short duration (8/20 μs) pulses. The main procedure is based on submit ZnO-based varistor devices at different thermal treatments in oxygen enriched atmosphere. The thermal treatment at 900°C for 2 hours with oxygen flow of 15 L/h showed h better non-ohmic electrical properties when compared to the standard samples.

Keywords: E. Varistors, C. Electrical properties, B. Electron microscopy.