Study on the Electrical properties of high capacitance Multilayer Ceramic Capacitor

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Abstract: High capacitance MLCC has been enabled through the use of nickel electrodes to produce thinner layers at acceptable costs. High capacitance MLCC devices offer significant advantages to electrolytics such as tantalum and aluminum. Lower ESR for high frequency applications. Non-polarized. Many process improvement have enabled this technology. Higher dielectric constants. Thinner dielectric and electrode layers through BME. More accurate layer construction. This study is high capacitance MLCC electrical properties, reliability. Analysis on DOE (Design Of Experiment) of the electrical properties.

Key Words: leakage current, degradation, reliability, DOE