



Dielectric Estimation Laminate Assessment Method

PWB Interconnect Solutions Inc. has developed and manufactured an innovative tool that automatically electrically pre-screens the critical features incorporated into IST test coupon designs. The test system measures and analyzes changes in resistance and capacitance that determine processing variability associated to inner layer movement (registration), predicted and relative changes in the thickness of dielectric materials, copper foils and electrolytic plating. Specifications and tolerances are applied to the material properties that signify whether damage was created by exposure to the elevated temperatures associated with component assembly and possible rework environments. This technology is unique to PWB Inc. and complements their IST reliability testing capability. The principles used by this tool have proven to be an effective methodology for establishing a baseline/reference for determining whether the PWB manufacturing/processing conditions are consistent panel to panel/lot to lot (under control) and that the specified materials used in printed wiring boards are capable of withstanding the cyclic exposure to temperatures that exceed the materials inherent robustness.



The test system incorporates high precision measurement systems which are interfaced to a user friendly application software, that automatically measures, records, analyzes various types of data with displays and reports that simplify the understanding of various levels of product construction and processing information.

