●技術論文

多層回路板製造工程におけるビアホールの3次元形状計測

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Three Dimensional Shape Measurement of Via-Holes for the Production of Multi-Layers Circuit Boards

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Abstract

In multi-layer printed circuit boards, many through-holes and via-holes coexist for electrical connection. This paper considers the three dimensional shape measurement of a via-hole and its environmental surface by using a laser displacement meter. The dispersion of the obtained data is caused by the affection of measuring surface. We make smoothing of the measurement data by the two methods of moving average and polynomial approximation. The usefulness of our approach is verified by experiment results.

Key Words: *Shape Measurement, Via-Holes, Printed Circuit Boards, Laser Measurement*