

SCANNING ACOUSTIC MICROSCOPY FOR NON-DESTRUCTIVE TESTS OF ELECTRONIC COMPONENTS

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ABSTRACT

Scanning acoustic microscopy (SAM) is an attractive tool in the non-destructive inspection of printed circuit boards, thick films, thin layers and microelectronics packages. For example it permits to detect subsurface delaminations, cracks and pores (air bubbles) for different materials: metals, plastics, ceramics or composites. The examples of different electronic components and circuits observed in SONOSCAN D-9000 ultrasonic microscope with frequencies of transducers between 10 MHz and 230 MHz are presented in this paper.