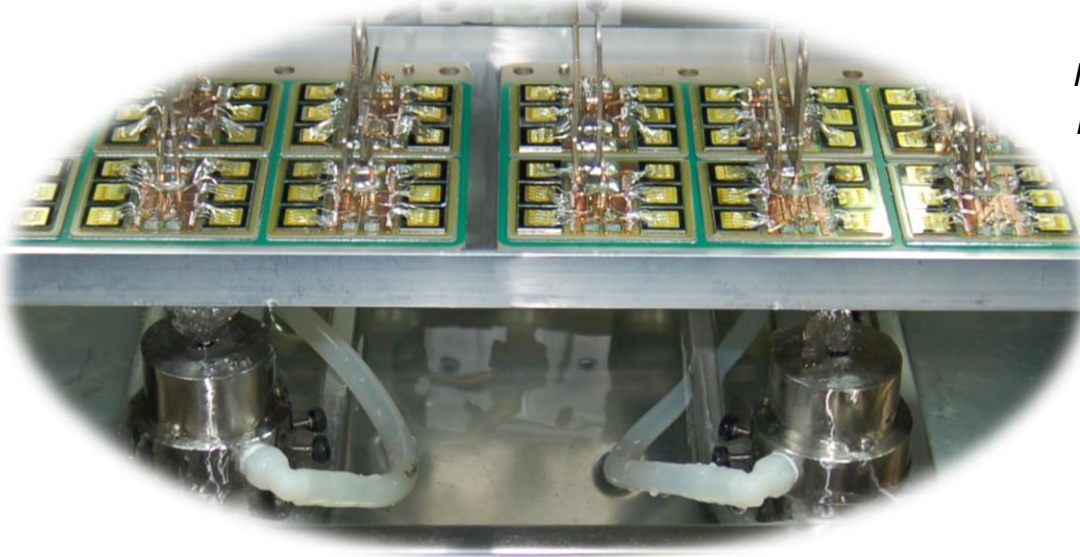


## **D9600Z™ C-SAM<sup>®</sup>**

### ***The IGBT Power Module Inspection Solution!***



Featuring **WaterPlume™**  
*Inverted scanning keeps the top surface dry and contaminant free.*

### **Maximum Flexibility for Detailed C-SAM<sup>®</sup> Inspections of Power Modules**

The D9600Z incorporates the latest C-SAM<sup>®</sup> (C-Mode Scanning Acoustic Microscope) technology with enhanced features to accommodate the testing of Power Modules as well as to performing standard C-SAM operations. This new system configuration is optimized for inspection of heatsink bond integrity, thickness of bond layer and wire bond welds. Powered by our Sonolytics™ software platform with Polygate™ technology, the D9600Z™ is ideal for failure analysis, process development and QC screening in low-volume production environments.

#### **Features:**

- **WaterPlume™** configuration scans from underneath, keeping the top surface of the power module dry.
- Available in Dual and Single WaterPlume configurations.
- Completely automated, including integrated drying of the module's bottom surface after testing.
- Visual PolyGate™ technology with Multi-Gate™ and Probing-Gate™ functions to detect:
  - Voids in the die attach, between the die and a ceramic insulator
  - Voids between the ceramic substrate and the base plate
  - Thickness of the bond layer
  - Cracks, chips and other defects in the copper clad ceramic substrate
  - Planarity of the die, insulator (raft) and base plate (heat sink) relative to each other



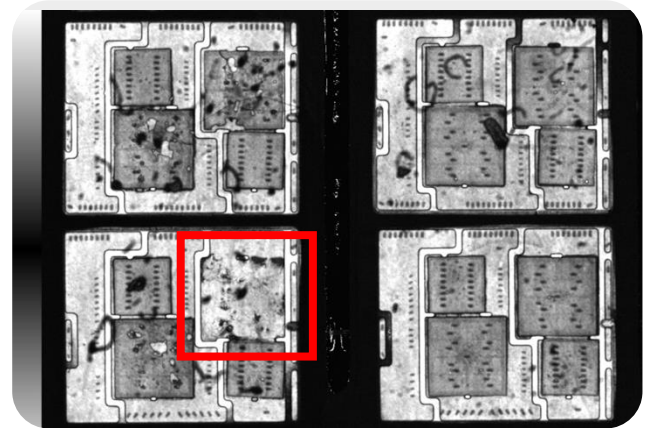
**D9600Z**



# D9600Z™ C-SAM®



The D9600Z™ is a new innovation in Acoustic Microscopy (AM) especially equipped for the testing of IGBT Power Modules. Operational in WaterPlume™, WaterFall™, standard reflection and transmission modes, the D9600Z provides a flexible and robust solution that will meet your inspection needs. WaterPlume scans from underneath, keeping the top surface of the power module dry and contaminant free.



Die detached from Power Module

Advanced Sonoscan® capabilities such as Visual PolyGate™, Movement Map™, AutoScan™ and Pixel Pitch™ add value and convenience. D9600Z has the capability to efficiently scan a single Power Module or two Power Modules at the same time.

In addition to including the leading Sonoscan innovations, the D9600Z was carefully designed with the user in mind. Common sized power module fixtures have been ergonomically designed for efficiency and operator convenience.

A one step start feature allows the Sonolytics™ software to completely test, analyze and dry the power modules maximizing results while saving operator time. The D9600Z is truly a new innovation in AM, delivering a package of technology, ergonomics and advanced Sonoscan-developed features not found anywhere else for Power Module Inspection.



**WaterPlume™** ensures the power module's top surface remains dry.



**Sonoscan®**  
Sound Technology With Vision

## Leaders in Nondestructive Internal Inspection

Since its inception, Sonoscan has focused on developing superior Acoustic Micro Imaging (AMI) technologies to help our customers build higher quality products. Sonoscan remains the most trusted authority on the application of AMI for nondestructive internal inspection and analysis. Sonoscan patented systems span the laboratory and production environments and are regarded as the standard for accuracy and throughput.

### Sonoscan Delivers:

- **Superior Image Quality** ensured by the designs originating from our own transducer/lens development lab and fabrication facility
- **Extraordinary Data Accuracy** through our proprietary signal-processing algorithms, analysis functions and digital image/data formats
- **High Throughput Rates** by developing the most advanced integrated features, automation and analysis functions within our instruments
- **Unsurpassed Technical Expertise** with more than 20 dedicated and highly experienced AMI applications engineers on staff

For a complete list of Sonoscan's products, please contact Sonoscan at 847.437.6400 or visit our website ([www.sonoscan.com](http://www.sonoscan.com)).