SEMIPROBE Test • Inspect • Innovate

SUCCESSFUL APPLICATION: OPTOELECTRONICS-0319



Specific Requirements:

The customer wanted to use a semi-automatic 150 mm probe system to test light emitting diodes (LEDs) in wafer form, on 150 mm and 200 mm metal frames and plastic rings. The wafers needed to be tested from ambient to 200 °C using a thermal chuck. The LED device would be tested using probe cards and stimulated from the top and bottom. The light output would be captured by an integrating sphere (cube) mounted on multi-axis pneumatically controlled stages that allowed the integrating sphere to moved in and out of position and up and out of the way for changeovers. Customized fixturing to address all needs were required.

SemiProbe Solution:

- SA-6 Semi-automatic 150 mm probe system:
 - 150 mm programmable X, Y, Z and theta stage
 - PILOT Software Suite Navigator, Wafer Map and Autoalign
 - Vibration isolation table
- 150 mm thermal chuck operating from ambient to 200 °C
- Customized metal and plastic ring frame holders with quick disconnect hardware for easy changeovers
- Ability to test whole wafers, partial wafers, individual die and wafers sawn and stretched on rings or frames
- Integrating sphere mounted on a multi-axis stage to provide pneumatically controlled sphere movement
 - Probe card holder