



# LASER SEALING CAPABILITIES

#### **Laser Lidding**

With a new, state-of-the-art laser center,
Thunderline-Z is your total RF/Microwave
packaging solution provider. High powered
laser systems complete the packaging cycle
and offer the best solution to lidding concerns. Thunderline-Z's laser technicians are highly
skilled in delivering consistent, repeatable seals and are specialists

when your package designs incorporate posts or pedestals
for stability. Using a combination of continuously variable laser power
and pulse shaping techniques, our team achieves the most perfect welds between
lids and package housings while employing the know-how to work around critical circuit paths.

## **Component Installation**

With a second station in our laser center featuring a lower-power laser system,
Thunderline-Z can perform reliable placement and sealing of the most challenging
feedthrus and connectors. Compared to conventional solder sealing or seam sealing
approaches, Thunderline-Z's laser welding forms the most robust metal-to-metal seal
around the perimeter of a package. This maintains a higher level of hermeticity for the most
demanding environments, including Class S (space-based) applications.

## Complete in-line testing

Thunderline-Z provides products to a variety of customers in both the military and commercial marketplace. As such, we work with many standards and specifications. Our QA group also works diligently with our design and manufacturing teams to put inspection criteria into the beginning, middle and end of our entire manufacturing process. By building in quality at every step, we secure our position as the true leader in the RF/Microwave packaging business.

#### **Laser Center Features**

- State-of-the-art ND YAG lasers
- Glove box welder for hermetic packages
- Stand-alone Class IV system for component installation
- Adjustable environment
- ANSI/ESD S20.20 compliant
- Fine and gross leak testing method 112, condition C and D
- Cross-sectional analysis
- X-ray analysis

