

## Curing Epoxy On A Laser Diode Assembly

**Objective** To heat epoxy on a laser diode assembly to 250°F within 5 seconds for a curing application

**Material** Laser diode assembly, aluminum housing, epoxy

**Temperature** 250°F

**Frequency** 350 kHz

**Equipment** Ameritherm HOTSHOT 1 kW RF power supply with a specially-designed induction coil.

**Process** A 4-turn induction coil was used to provide uniform heating to the aluminum housing. The coil was specially designed to allow room for the addition of a protective refractory shield between the coil and aluminum. A thermocouple was attached to the part to record temperature changes. A 5 second heat cycle (2.5 seconds initial heat up followed by 2.5 second heat dwell) was used to heat the entire aluminum housing to 250°F.

**Results** Consistent and repeatable results were achieved using the HOTSHOT 1 kW power supply and induction coil.

