# **Bonding Methods**

### **Factory Vulcanization**

As part of the manufacturing process, the heater is vulcanized directly to your part. This produces a very strong void-free bond between heater and part, for the best possible heat transfer and extended heater life. When other methods of bonding have caused heater failure, factory vulcanizing can solve the problem. Also, maximum watt densities can be utilized to reduce heater size, thereby lowering cost.

#### Silicone Rubber Adhesive (RTV)

For a strong permanent bond, a room temperature vulcanizing (RTV) silicone rubber adhesive is used. Heaters can be bonded to your parts at our factory, or we will supply recommendations for proper application.

#### Pressure Sensitive Adhesive (PSA) - Polyester

The maximum service temperature of this adhesive is 250°F (121°C). This adhesive is only used on polyester heaters. Bond strength is improved if a dwell time of 12 hrs. is observed before operation of the heater.

## Pressure Sensitive Adhesive (PSA) – High Temperature Silicone

The maximum service temperature of this adhesive is 500°F (260°C). This adhesive is used on silicone rubber heaters and Kapton® polyimide heaters. Bond strength is improved if a dwell time of 12 hrs. is observed before heater operation.