Flexible Heaters

Mounting Methods

Flexible Heater Pressure Sensitive Adhesive (PSA)

PSA
For ease of attachment specify PSA. Installation is simple; just peel off the protective liner and apply. It will adhere to most clean smooth surfaces. Care must be taken when installing to attain a smooth, consistent, uniform bond to achieve maximum results.

**Maximum Temperature:**
- Continuous – 300°F (149°C)
- Intermittent – 500°F (260°C)

**Recommended Watt Density:**
Under 5 W/in² (0.78 W/cm²)

PSA Plus
A layer of aluminum foil is vulcanized to the back of the heater for added heat dissipation prior to the application of PSA.

Flexible Heater Factory Vulcanizing to Metal Component

Factory Vulcanizing
Flexible heaters can be factory vulcanized to bare or anodized aluminum, Stainless Steel, Marble, or other hard surfaces for permanent attachment and excellent heat transfer.

The uncured silicone rubber heater is placed on the metal part and placed in the vacuum oven where the heater vulcanizes and adheres to the part in one operation. This procedure forms an extremely strong permanent bond with most metals due to the fact that the silicone rubber flows into and fills the micro structure in the surface of the metal. The metal part can be manufactured by Tempco or supplied by the customer. Consult Tempco for other materials including granite.

Flexible Heater Magnetic Mounting

Magnetic Mounting
A flexible magnetic material can be attached to the back of a silicone rubber flexible heater. Will adhere to many varieties of steel. Ideal for those situations were you need to “Slap On” some heat! Specify when requesting a quote.

**Maximum Temperature:** 200°F / 93°C

**Maximum Watt Density:** 1 W/in² (0.16 W/cm²)

**Maximum Width:** 24” (610 mm)

Flexible Heater Field Applied Adhesive

Field Applied Adhesive
For a field applied permanent bond, a room temperature and ambient humidity curing silicone rubber adhesive is recommended. Tempco offers two types:

Both RTV106 and RTV116 will retain physical and electrical properties up to 500°F (260°C).

When using RTV adhesive, cover the heater completely with a thin layer of RTV, position the heater in place, and use a small roller to remove air bubbles, which could cause hot spots and lead to premature failure of the heater.

**RTV106** — a red, paste consistency, high-temperature resistant adhesive sealant.
- Part Number: SEA-102-109 10.1 ounces
- Part Number: SEA-102-105 2.8 ounces

**RTV116** — a red, pourable, high-temperature resistant adhesive sealant that will flow or self-level on a surface.
- Part Number: SEA-102-102 9.5 ounces

Note: To obtain the expected life of Silicone Rubber or Kapton® heaters, care must be taken to mount correctly. Regardless of the mounting technique used, do not trap any air under the heater; this can cause hot spots and possible premature heater failure. Use a rubber roller over the heater surface to assure good adhesion.