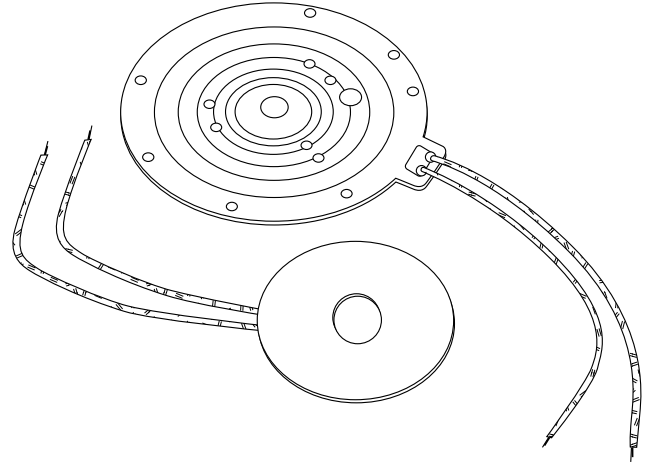


High Temperature Etched Foil Heater



This high temperature etched foil heater from Watlow is designed for demanding applications requiring operating temperatures up to 1100°F (595°C). The heater, only 0.030 inch (0.76 mm) thick, is insulated with a mica sheet. The heater is fairly rigid and must be securely and uniformly clamped for support and good heat transfer during operation.

Performance Capabilities

- Operating temperatures to 1100°F (595°C)
- Watt densities to 110 W/in² (17 W/cm²) when operating at 500°F (260°C)

Applications

- Semiconductor industry: wafer processing equipment
- High temperature platens for laminating presses

Installation and Mounting

The HT Foil heater is designed to be permanently clamped. If the lead connection points are within the clamped area, a relief in one of the clamped surfaces is required to allow adequate clamping of the active heater area.

General Specifications

Although Watlow doesn't stock HT Foil heaters, there are several specifications common to most of the custom designs. They include:

- Thickness over heated area: 0.030 inch (0.76 mm)
- Thickness over lead connection area: 0.200 inch (5 mm)
- Dielectric strength - volts AC, minimum: 1000V~(ac)
- Maximum operating temperature: 1100°F (593°C)
- Maximum allowable watt density at various temperatures:

1000°F (540°C)	20 W/in ² (3.1 W/cm ²)
900°F (480°C)	40 W/in ² (6.2 W/cm ²)
800°F (425°C)	60 W/in ² (9.3 W/cm ²)
700°F (370°C)	75 W/in ² (11.6 W/cm ²)
600°F (315°C)	90 W/in ² (14 W/cm ²)
500°F (260°C)	110 W/in ² (17 W/cm ²)
- Lead wire - Type MGT 600 volt with Nickel clad Cu conductor: 840°F (450°C)

The following options are possible with HT Foil heaters from Watlow:

- Holes, cutouts, and notches
- Zoned wattages

Features

- High temperatures and watt densities
- Fast heat-up
- Easy to design
- More uniform part temperatures

Benefits

- Ideal for more demanding applications
- Due to thin construction and low mass design
- Available in circular or complex two-dimensional shapes
- Possible with etched foil zoned heating

How to Order:

All HT Foil heaters from Watlow are Made-to-Order. Please provide the following application information to place an order or request a quote:

- Size (dimensions)
- Voltage
- Wattage/watt density
- Operating temperature
- Options (holes, zoned wattage)
- Quantity

Availability

Consult factory



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