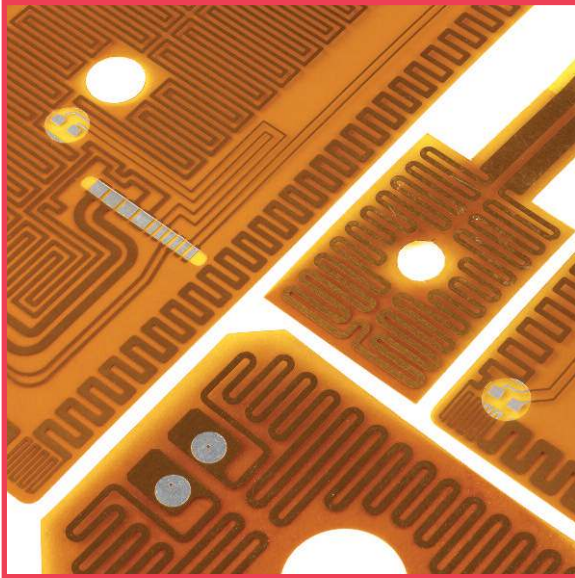




THORNE &  
**DERRICK**  
INTERNATIONAL

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## Kapton™ Insulated Heaters



- Thin and Lightweight
- Minimal Thermal Mass
- Superb Electrical Insulating Properties
- Excellent Chemical Resistance
- High Power Densities
- Fast Efficient Thermal Transfer
- Weather Resistant
- Ozone Resistant
- Fungus and Bacteria Resistant
- Good Resistance to Radiation
- 3-5 Day Delivery

### Applications:

Military/aerospace, where low outgassing properties are required  
Medical, where thorough cleaning or sterilization is needed  
Laboratory research  
Photographic equipment  
Optical equipment  
LCD displays  
Computer equipment

### Construction:

Polyimide (Kapton™) is a semitransparent, organic polymer film, ideally suited for the manufacture of etch foil heater mats. With its low thermal mass, superb electrical insulating properties and excellent resistance to most chemicals, it allows high power densities with fast and efficient thermal transfer. Being thin and lightweight with a wide temperature range polyimide heaters have a distinct advantage over other forms of heating elements. Where fast response, chemical resistance and a low profile is required polyimide heaters offer the ideal solution.

The mechanical properties of polyimide provide excellent tensile strength, tear resistance and dimensional stability. Polyimide heaters are ideal for applications requiring low outgassing in a vacuum, or resistance to radiation, fungus and chemicals. Polyimide is also very resistant to solvents.

### Thermal Control:

An extensive range of thermal control devices can be incorporated onto the heaters, these include thermocouples, platinum sensors and limit switches. Pockets and housings can also be applied enabling the client to install their own control devices such as PT100's and capillary thermostats.

### Health & Safety:

The heaters are intended for use in industrial electric heating apparatus. They correspond to the BE EN 60335-1:2012. The heater has to be operated in accordance with these standards and regulations. The heater should be installed on an electrical system protected by a residual current circuit breaker.



ISO 9001:2008  
FM 558985