

Polyimide Kapton Flexible Film Heaters Specification

Polyimide flexible film heaters, or Kapton flexible film heaters, Polyimide Kapton Flexible Film Heaters, Polyimide Pad Heaters, Kapton flexible pad heaters, Polyimide flexible mat heaters Kapton flexible mat heaters ,polyimide blanket heaters kapton blanket heaters polyimide heating pad kapton heating pad ,polyimide heating mat kapton heating mats polyimide heating sheets kapton heating sheets are ideal for applications with space and weight limitations, or where the heater will be exposed to vacuum, oil, or chemicals. These thin, flexible heaters are rugged, accurate and reliable.

Benefits of Polyimide Flexible Heaters:

- Thin, lightweight heaters allow you to apply heat where it's needed, reducing operating costs
- Etched-foil heating technology provides fast and efficient thermal transfer for increased throughput
- Customized options (i.e. SMT components, flex leads and connectors) offer turnkey solutions to drastically reduce assembly time and increase productivity
- Custom profiling gives uniform thermal performance of the heating output to improve processing yields and Productivity
- Heating evenly, accurate and adjustable
- various shapes, holes, cutouts, profiled watt densities and multiple voltages
- Put heat exactly where it is required
- High dielectric strength, flexibility, bendable and cost effectiveness.
- Resistance to temperature extremes, moisture, weathering, radiation, fungus and chemical attack
- Heat can be applied to the most complex shapes, geometries, curves and pipes conceivable without sacrificing efficiency or dependability.
- Easily bonded and/or mechanically mounted, even onto the curving surface.

Features of Polyimide/Kapton Flexible Heaters:

- FEP internal adhesive for use to 200°C (392°F)
- UL component recognition available
- Suitable for vacuum environments (NASA-RP-1061)
- NASA approved materials for space applications (S-311-P-079)
- Resistant to most chemicals: acids and solvents
- Radiation resistant to 10⁶ rads (custom option)
- Very small sizes available
- Fluid immersible designs available (not standard)

Technical specifications:

Temperature range: -100~200C, Upper limit with 0.003 inch (0.08mm) foil backing is 150C.

Material:0.002 inch polyimide /0.05mm
 Resistance tolerance: +/-10%
 Dielectric strength: 1000VRMS
 Minimum bend radius: 0.03 inch (0.8mm)
 Lead wire: PTFE insulated,stranded,
 Currency capacity (based on 100C max ambient temperature):
 AWG 30-3.0 A; AWG 26-5.0 A; AWG 24-7.5 A; AWG 20-13.5 A.
 Maximum thickness of heater: 0.012 inch/0.3mm
 Standard thickness: 0.1~0.2mm
 Configuration: PSA backing

APPLICATION:

- 1) Thermal developing in graphic imaging or heating transfer printing equipment;
- 2) Prevent condensation in motors or instrument cabinets;
- 3) Freeze or condensation prevention in housings containing electronic equipment, for examples: liquid battery,traffic signal boxes, automatic teller machines, temperature control panels, gas or liquid control valve housings
- 4) Composite bonding processes
- 5) Semiconductor process heating
- 6) Food service equipment
- 7) Airplane engine heaters and aerospace industry
- 8) Medical equipment such as blood analyzers, medical respirators, test tube heaters, etc.
- 9) Curing of plastic laminates
- 10) Computer peripherals such as laser printers, duplicating machines

Notes: Voltage,wattage,size and shape can be customized.(as cone,ellipse shape etc.)

Polyimide Kapton Flexible Film Heaters by pictures show:



Polyimide Kapton Flexible Film Heaters



Abnormal flat shape flexible film polyimide kapton heaters



