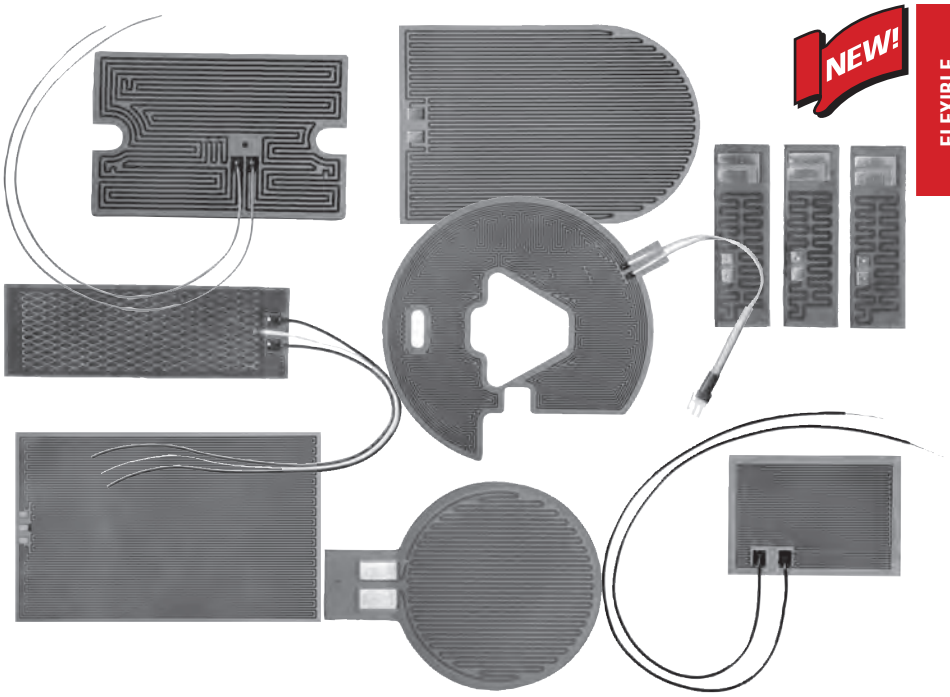
Kapton® Heaters

- **Etched Foil Elements Encapsulated on Both Sides Between Adhesive (Fep or Acrylic) and a Polyimide Film Insulation.**
- **Voltage: 24 V, 28 V, 115 V, 240 V Standard.**
- **Watt Density: 2.5 W/in2 (Slow Warming), 5 W/in2 (General Purpose Heating), 10W/in2 (Quick Warming and High Temperature Range).**
- **-328°F (-200°C) to 392°F (200°C).**
- **Bend Radius: 0.032"(0.8 mm) Minimum.**
- **Resistance Tolerances: ±10%**
- **Overall Thickness: General 0.007 in. (0.18 mm) (except at lead exit) Depending on Stack/ Configuration.**
- **Dielectric Strength: 1000 Vac**
- **Power Design Features: Distributed Wattage, Dual Voltage, Zoning, 3-Phase**
- **Sizes Up to 12" x 18" (300 mm x 450 mm)**



Description

Kapton®, a polyimide material that has high dielectric strength, allowing for a very thin heater construction. Chromalox uses Kapton® with two types of bonding systems; FEP Teflon® Thermo-flow polymer 392°F (200°C), and Acrylic Thermo-flow 250°F (121°C). Kapton® heaters have superior dimensional stability, light weight, and flexibility.

Applications

Medical:
- Life support
- Sterilization
- Blood Analyzer
- Sleep Apnea, Dialysis

Analytical Instruments:
- Diagnostic
- DNA
- Tissue processors
- Chromatographs

Semiconductor:
- Wafer processing baths
- Chucks

Aerospace, Avionics:
- Instrumentation
- Devices

Electronics:
- Photocopiers
- Flat panel displays
- Semicon vacuum
- Computers

Advantages

- Thin, lightweight, low out gassing
- UL: Optional
- Bend Radius: 0.032" (0.8 mm) minimum
- Resistance to most solvents and acids and radiation to 10^6 rads
- Ability to place heat where it is needed, even controlled heat profiles
- Thin construction means fast thermal transfers which equates to quick heat up
- Very small sizes

Ordering Information

Please contact your Chromalox representative for a quotations. In order to better assist you, please be prepared with the following information:

- Length/Width or Diameter
- Wattage, Voltage
- Lead – length and position
- Operating Temperature
- Sensors
- Special Features (e.g., cutout)