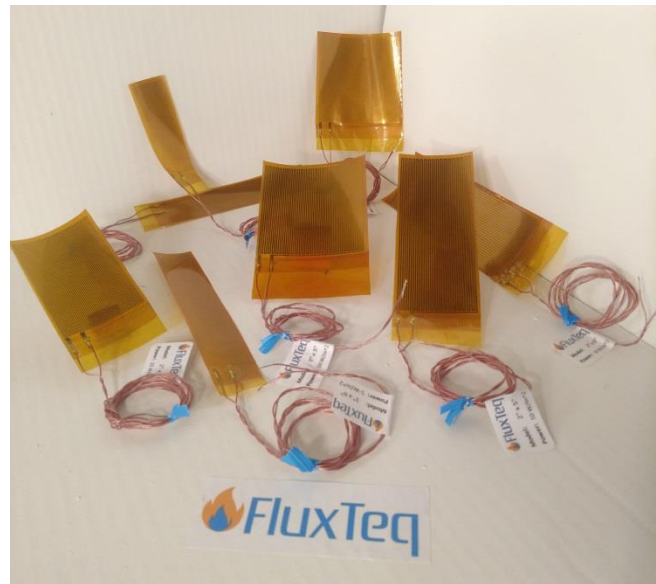


Polyimide Film Insulated Resistance Heaters

FluxTeq's FRH Flexible Resistance Heater product line includes extensive sizes and power variations so that you are able to choose the best model for your application. The thin, low-profile design allows for minimal thermal resistance and incredible flexibility while still having impressive heat output.

FRH Polyimide film resistance heaters offer an excellent heating power density within a thin and flexible package. Each heater consists of a thin metal foil trace encapsulated between two layers of polyimide film.



Heater Design Features

- Temperature Rated from 0 to 200°C (32 to 390 °F)
- Extremely Low-Profile with 4 mil (0.004") / 102 µm thickness
- Available in 2.5, 5, or 10 Watts/in² Power Densities
- 115V and 24V Design Input Voltages
- Available with or without an peel-off adhesive backing

Wire leads are designed to extend out past the heating area to avoid solder bumps within the heater. Heaters can be mechanically clamped or epoxy mounted to surfaces if desired.

Resistance Heater Specifications

Operating Temperature Range	0 to 200 °C (32 to 390 °F)
Heating Area Thickness	4 mil (0.004") or 102 µm (without adhesive) 5 mil (0.005") or 127 µm (with adhesive)
Heating Power / Watt Densities	2.5, 5.0, & 10 W/in ² (3.9, 7.75, & 15.5 kW/m ²)
Wire Leads	24 inches (0.6 m) length of Fluoropolymer Insulated 24 AWG Stranded Copper Wire
Specific Thermal Resistivity	Approx. 0.84 K/(kW/m ²)
Dielectric Strength	8,000 Volts
Encapsulation Material	Polyimide Kapton®

Rectangular Polyimide Flexible Heaters, 24 Volts

Heater Dimensions		Approx. Wattage for Heating Density (W)			Product Model Number for Ordering (Add "AD" at End for Adhesive)		
Width inch (cm)	Height inch (cm)	2.5 W/in ²	5 W/in ²	10 W/in ²	2.5 W/in ²	5 W/in ²	10 W/in ²
1 (2.5)	3 (7.6)	-	-	35	-	-	24-01X03-10
1 (2.5)	4 (10.2)	15	28	44	24-01X04-2	24-01X04-5	24-01X04-10
2 (5.1)	2 (5.1)	13	27	44	24-02X02-2	24-02X02-5	24-02X02-10
2 (5.1)	3 (7.6)	-	34	68	-	24-02X03-5	24-02X03-10
2 (5.1)	4 (10.2)	27	44	72	24-02X04-2	24-02X04-5	24-02X04-10
3 (7.6)	3 (7.6)	30	-	-	24-03X03-2	-	-
3 (7.6)	4 (10.2)	38	-	-	24-03X04-2	-	-
4 (10.2)	4 (10.2)	-	70	-	-	24-04X04-5	-

Rectangular Polyimide Flexible Heaters, 115 Volts

Heater Dimensions		Approx. Wattage for Heating Density (W)			Product Model Number for Ordering (Add "AD" at End for Adhesive)		
Width inch (cm)	Height inch (cm)	2.5 W/in ²	5 W/in ²	10 W/in ²	2.5 W/in ²	5 W/in ²	10 W/in ²
1 (2.5)	6 (15.2)	11	-	-	115-01X06-2	-	-
2 (5.1)	2 (5.1)	-	16	39	-	115-02X02-5	115-02X02-10
2 (5.1)	3 (7.6)	-	30	65	-	115-02X03-5	115-02X03-10
2 (5.1)	4 (10.2)	-	42	92	-	115-02X04-5	115-02X04-10
2 (5.1)	6 (15.2)	-	-	131	-	-	115-02X06-10
3 (7.6)	3 (7.6)	-	-	100	-	-	115-03X03-10
4 (10.2)	4 (10.2)	-	93	-	-	115-04X04-5	-
5 (12.7)	5 (12.7)	-	139	-	-	115-05X05-5	-

Product Model Number Format

Product Number = Supply Voltage - "Width"X"Height" - "Power Density" - Optional Adhesive

*In Product Model Numbers, Just Use "2" to Designate Power Density of "2.5 W/in²"

**Add the Letters "AD" on the End of the Product Number to get an Adhesive Backing on the Heater

Example: 24-01X04-2-AD is a 24V heater with Width of 1", Height of 4" and Power Density of 2.5 W/in² and has a peel-off adhesive backing.

**CUSTOM SHAPES AND SIZES ARE AVAILABLE UPON REQUEST!
MORE STANDARD SIZES AND POWER CHOICES COMING SOON!!**

For additional information about FRH flexible resistance heater specifications, applications, or general inquiries, use the following contact information or visit the FluxTeq website at www.FluxTeq.com

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