

Gii Micro Heater

Model: Gii_FlexHeat_V2

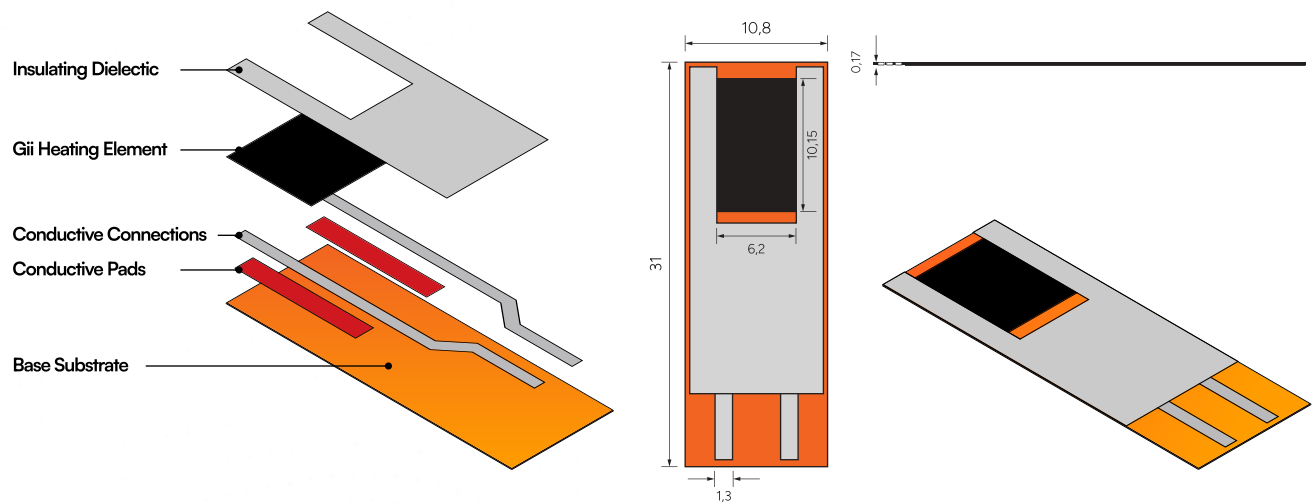
Description

The Gii_FlexHeat_V2 micro heater is a precision thermal component designed for integration into compact systems requiring localized heat control. Fabricated on a flexible polyimide substrate, the heater is optimized for uniform temperature distribution and low power operation.

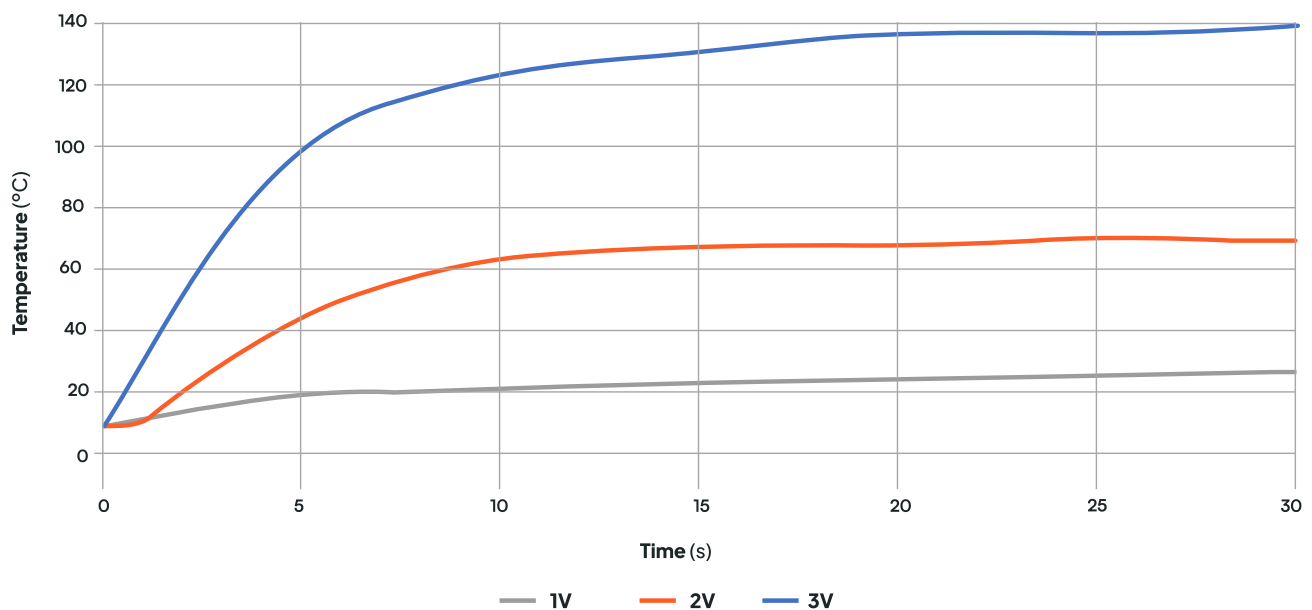
Features

- Ultra-thin profile: 0.17 mm
- Operating voltage range: 3.5 V
- Low thermal mass for rapid heating
- Uniform surface temperature
- Customisable geometry on request
- RoHS compliant

Details



Temperature (°C) V Time (s)



Physical Characteristics

Parameter	Value	Units	Notes
Device Dimensions	10.8 × 31	mm	W × L
Heating Element Dimensions	6.2 × 10.15	mm	W × L
Device Thickness (Total)	0.17	mm	Including substrate
Substrate Material	Kapton 500HN	—	DuPont's Polyimide
Resistive Heating Material	Gii	—	IGii's proprietary 3D carbon foam
Connection Type	0.25mm EC11010 Ag Ink	—	Screen printed
Weight	<1g	g	—

Electrical Characteristics

Parameter	Value	Units	Notes
Resistance @ RT°C	15	Ω	±1.5% tolerance
Max Rated Voltage	3.5	V	Continuous operation
Max Rated Current	0.5	A	—
Max Power Rating	1.25	W	Max continuous input
Temperature Coefficient	20	ppm/°C	Substrate dependent (20-200°C)
Insulation Resistance	1.0 × 10 ¹⁷	MΩ @ 3.3 VDC	Substrate isolation

Thermal Performance

Parameter	Value	Units	Notes
Max Operating Temperature	160 (200)	°C	Cont. Operating Temp. (Short Term Temp.)
Time to 100 °C @3V	4.35	seconds	—
Average Ramp Rate @3V	9.8 (0.53)	°C/sec	0-10 Seconds (10-30 Seconds)
Thermal Uniformity	±0.5	°C	Across element area

Environmental Characteristics

Parameter	Value	Units	Notes
Safe Operating Temperature	-20 to 200	°C	—
Storage Temperature	-20 to 80	°C	—