FLEXIBLE PTC HEATERS

GGI has developed printed heaters using Positive Temperature Coefficient (PTC) ink. The heaters are lightweight, thin and produce heat rapidly in a uniform fashion while remaining inherently safe. They are designed to generate heat up to a specific self-regulating temperature. Applications include a variety of possibilities, where low temperature, uniform heating and a simple low cost solution is required. Installation is easy and the heating elements can be applied to a wide range of surfaces.

APPLICATION EXAMPLES

- Blood and IV bag heater
- Bed or seat heater
- Battery heater
- Wing heating and de-icing
SPECIFICATIONS

ELECTRICAL

Set Temperature (standalone): 45°C to 85°C (at 25°C ambient temperature)

Power Density: Up to 3000W/m²

Dielectric Strength: 60GΩ at 500VDC typ.

Electrical Interface:
- Wire leads
- 2.54mm pitch connector (with or without latch)
- ZIF termination
- Other configurations available upon request

Input Voltage: 5V to 300V (AC or DC)

Drive Current:
- Max 3A (start-up less than 1 min)
- Max 1A (steady state)

MECHANICAL

Thickness: 0.5mm typical

Flexibility (min. bend radius): 1cm

Weight: 0.6kg/m² (at thickness = 0.5mm)

ENVIRONMENTAL & CERTIFICATIONS

Operating Temperature: -45°C to 85°C

Storage Temperature: -55°C to 85°C

Humidity: 95% RH @ 40°C

Certifications: RTCA/DO-160, ASTM Section 10, certifiable to CSA

Other certifications on demand.