



BACKER  
CALESCO

# POLYIMIDE HEATERS

## Description

Polyimide is a thin, semitransparent material with excellent dielectric strength. It is also resistant to most chemicals, acid and basis. The temperature range is between as low as -271°C (liquid helium) and as high as 200°C. If requested we have the possibility to add components such as thermistors, sensors and IC circuits, by soldering them to the element.

## Technical specification

Max element temp.	200 °C (392 °F)
Min. element temp.	-60 °C (-76 °F)
Dielectric strength at 20°C AS per ASTM KV/mm	205
Thermal conductivity at 100 °C W/(m•K)	0.17
Moisture absorption as per ASTM D-570-63. (24h immersion at 23°C)	2.9 %
Waterproof as per IEC 335-1 sect. 15-16	No
Constant of dielectricity at 25°C, 50Hz	3.5
Bending radius, min	1 mm
Max. element width	600 mm
Power density	1,3 W/cm <sup>2</sup>
Resistance tolerance	As standard, ±10% of nominal. Tolerance down to ±2% available
Rated voltage	Up to 1000 V AC/DC single or 3 phase

## Benefits & Fields of Application

### BENEFITS

- High and low temperature range
- Excellent dielectric strength
- Good chemical resistance
- Soldered components possible

### FIELDS OF APPLICATION

- Military/aerospace, where low outgassing properties are required
- Medical diagnostic instruments, where autoclave cleaning or sterilization is needed
- Photographic equipment
- LCD displays
- Laboratory research



Product photo



Application photo