



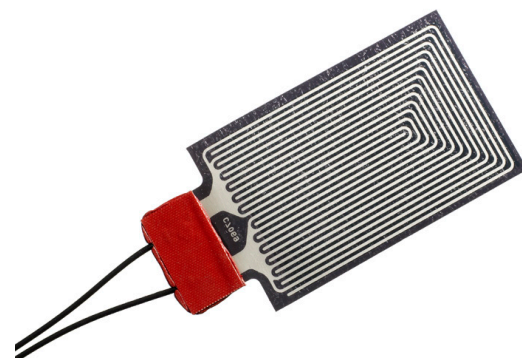
BACKER
CALESCO

PRINTED POLYMER HEATERS PTC

Description

Printed Polymer heaters are based on low resistance printed silver as electrode. The heat is generated by a number of parallel connected polymer resistors with PTC characteristics (Positive Temperature Coefficient).

In most cases the polymer resistor is covering the heater completely and hence gives a very even temperature distribution. The PTC effect makes the heater self limiting and therefore hot and cold spots are avoided as the power is generated where you need it. The polymer heater is also very corrosion resistant compared to metal heaters.



Technical specification

Max element temp. 70 °C (158°F)

Min. element temp. -50°C (-58°F)

Dielectric strength at 20°C AS per ASTM KV/mm 175

Thermal conductivity at 100 °C W/(m•K) 0.16

Moisture absorption as per ASTM D-570-63. (24h immersion at 23°C) 0.8 %

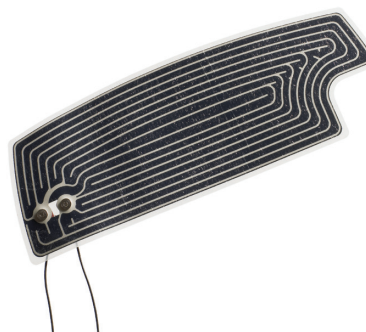
Constant of dielectricity at 25°C, 50Hz 3.3 (PET)

Power density at -40°C 0.3 W/cm²

Resistance tolerance ±20%

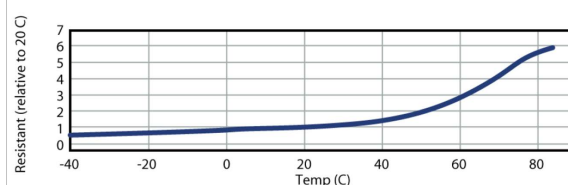
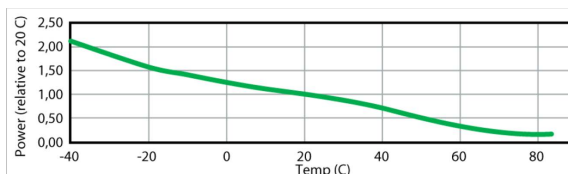
Rated voltage 800 V

Other Possible substrates: PET



Product photos

Characteristics of Calesco PTC Heating Element



Benefits & Fields of Application

BENEFITS

- Self regulation
- Robust design insensitive to small damages
- Corrosion resistant
- Cost effective at low power and high voltage

FIELDS OF APPLICATION

- Rear view & wing mirror heaters
- Lens heaters
- Waterbed heaters
- Low temperature applications
- De-icing



Application photo