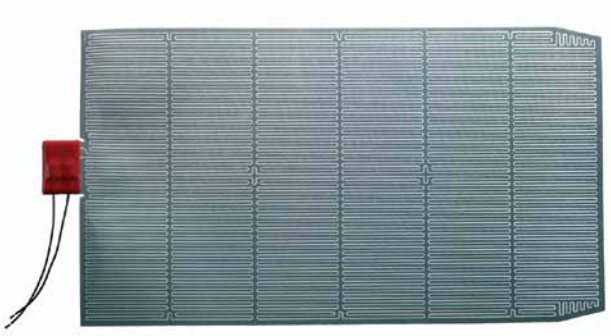
PEN **Heater**

Description

PEN is a heater similar to PET but with much better properties. PEN is a little more expensive than PET, but have higher chemical, thermal, mechanical and electrical properties. The material is common used in electronic devices.

Technical specification

Max element temp.	160°C (320°F)
Min. element temp.	-60°C (-76°F)
Dielectric strength at 20°C as per ASTM KV/mm	-
Thermal conductivity at 100 °C/m °K	
Moisture absorption as per ASTM D-570-63. (24h immersion at 23°C)	0.6
Waterproof as per IEC 335-1 sect. 15-16	yes
Constant of dielectricity at 25°C, 50Hz	3.16
Bending redius, min	1 mm
Max. element width	600 mm
Power density	0,8 W/cm²
Resistance tolerance	As standard, ±5% of nominal. Tolerance down to ±2% avaliable
Rated voltage	Up to 690 V AC/DC single or 3 phase
Approval/Standards	-



Printed **elements**

Benefits

- Possible to waveflow solder with leadfree solder
- Higher temp possible compared to PET
- Good chemical resistance
- Higher mechanical strength with 3 approx 30% compared to PET

Fields of application

- Bathroom mirror heaters
- Radiators
- DNA Analysis
- High power standard elements (more cost effective compared to polyimide elements)

Laboratory Research

CALESCO

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