

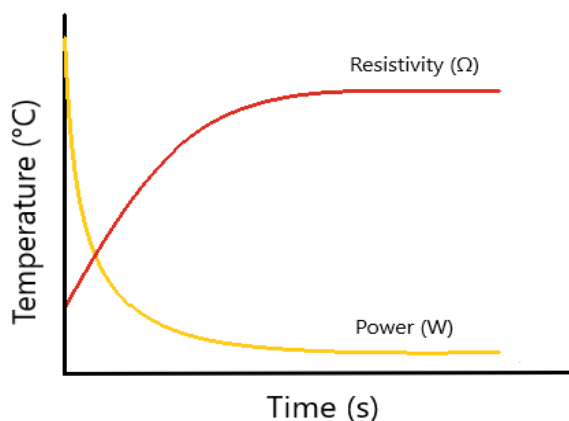


THIN AND FLEXIBLE HEATING RESISTANCE WITH PTC “SELF-LIMITING” INK

Alper s.r.l. presents high PTC (Positive Temperature Coefficient) effect film heaters. A special carbon ink with high PTC effect is printed by screen-printing production process on a flexible and thin PET substrate. The heater in its application can be defined as “self-limiting” thanks to the fact that the thermal equilibrium is reached at lower temperatures. When the temperature of the system increases, the PTC heater increases its resistivity with the consequent decrease in its power. This peculiarity, which distinguishes these heaters, makes them suitable even for the most particular and delicate applications, such as those that come into contact with skin and textiles. PTC ink heaters can be used without any accessory temperature limiters. In this way, the heater is thin as a foil ready to integration; production costs are reduced since temperature cut outs can be avoided. On request, the product can be adhesive (even in part) and can be completed with any type of cables and connectors. The continuous search for new materials has allowed Alper s.r.l. to make its heaters “self-regulating”, providing uniform surface heating and avoid overheating. Alper s.r.l. uses additive manufacturing processes that guarantee high quality standards and high production capacity. We generate environmentally responsible, non-harmful by-products for both people and the planet.

CHARACTERISTICS:

- Maximum foil dimensions: 1000x600mm (customized sizes available on request)
- Heat uniformity. High thermal and power stability
- Fast reaching of the temperature
- Wide range of double-sided adhesives specific for each use
- Design and wiring to customer specification
- No external temperature limiter needed
- Safe. For applications that come into contact with skin and textiles
- Up to 15% energy savings compared to non-PTC heaters
- “Self-limiting” features:
 - approx. 55°C (3V – 230V)
 - approx. 85°C (3V – 230V)
- Europe Directive 2014/35/UE
EN 60335-1
EN 50106
- S.I. 2016 No. 1101 (Electrical Equipment (Safety) Regulations 2016)
BS EN 60335-1
BS EN 50106



Certified organization TUV AUSTRIA ITALIA S.P.A.
• ISO 9001:2015 with certificate n°Q-2523-17
• ISO 45001:2018 with certificate n°S-2523-19
• ISO 14001:2015 with certificate n°A-2523-24

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