

## GBR-603 (PTC) Series

### Characteristic

GBR-603 series heating elements are made in a thick film technology, on stainless steel substrates. Its main feature is self-braking, which results from a very high temperature coefficient of resistance. They are applicable as heating elements to a various types of heaters, precise surface heating, and high power resistors. Heaters have outputs in the form of solder fields.

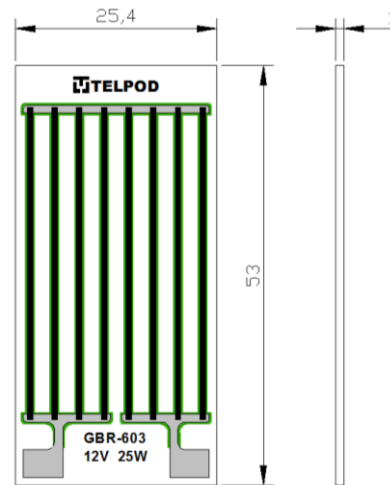


Fig. 1. Preview with dimensions [mm]

<u>Parameter</u>	<u>Value</u>
Rated power	5 - 30 W
Power tolerance	±5 %
Supply voltage	12 - 48 V
Temperature coefficient of resistance (TCR)	+1500 ppm/°C
Max. element temperature	250 °C

### Typical values

Supply voltage	Rated power
12 V	15 W
12 V	30 W
24 V	15 W
24 V	30 W
48 V	15 W
48 V	30 W

### Product marking

GBR-603 - 12 - 25 - 1			
Serie	Supply voltage 12 - 48 V	Power 5 - 30 W	Insulation 1 - not overglazed 2 - overglazed

Other values of supply voltage and rated power are available on request.

## GBR-603 (PTC) Series

### PTC heating elements

PTC (Positive Temperature Coefficient) heaters are specific elements that have a feature of self-regulation of power depending on the temperature. This attribute is result of the fact that as the temperature of an element gets higher, the resistance is also increasing, which makes the power decrease. The graphs below are exemplary performance characteristics (for heater GBR-603-12-25)

