

## GBR-619 Series

### Characteristic

GBR-619 heating elements are made in a thick film technology, on ceramic substrates ( $\text{Al}_2\text{O}_3$  - 96%). Heaters are characterized by high power at compact size. GBR-619 series elements are useful in applications, where equal dissipation of power at oblong area is desired, and as a high power resistors. Heaters have outputs in the form of solder/contact fields.

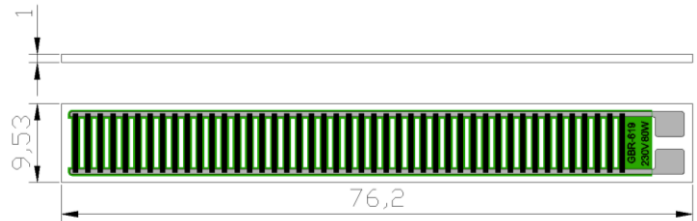


Fig. 1. Preview with dimensions [mm]

Parameter	Value
Rated power (on heatsink)	10 - 100 W
Power tolerance	±10 %
Supply voltage	12 - 230 V
Temperature coefficient of resistance	±100 ppm/°C
Max. element temperature	300 °C

### Typical values

Supply voltage	Rated power	Supply voltage	Rated power
12 V	20 W	230 V	20 W
12 V	40 W	230 V	40 W
12 V	60 W	230 V	60 W
24 V	20 W	230 V	80 W
24 V	40 W	230 V	100 W
24 V	60 W		

### Product marking

GBR-619 - 230 - 80 - 1			
Serie	Supply voltage 12 - 230 V	Power 10 - 100 W	Insulation 1 - not overglazed 2 - overglazed