

**RFK— 25**

# high precision power resistor – bulk metal®



The RFK power resistor utilizes the proprietary bulk metal® element which combines accuracy, thermal and load stability with high frequency capabilities.

Mounted in a rugged, compact, heatsink housing, the RFK power resistor can withstand extreme climatic and mechanical conditions.

- **POWER RATING 2 W at 70°C**
- **VERY LOW TEMPERATURE COEFFICIENT:**  
±5 ppm/°C max. (–55°C +155°C)
- **VERY HIGH STABILITY** <25 ppm/year or  
<50 ppm/3 years (shelf life)
- **NEGLECTIBLE RISE TIME** 1 x 10<sup>-9</sup> second.

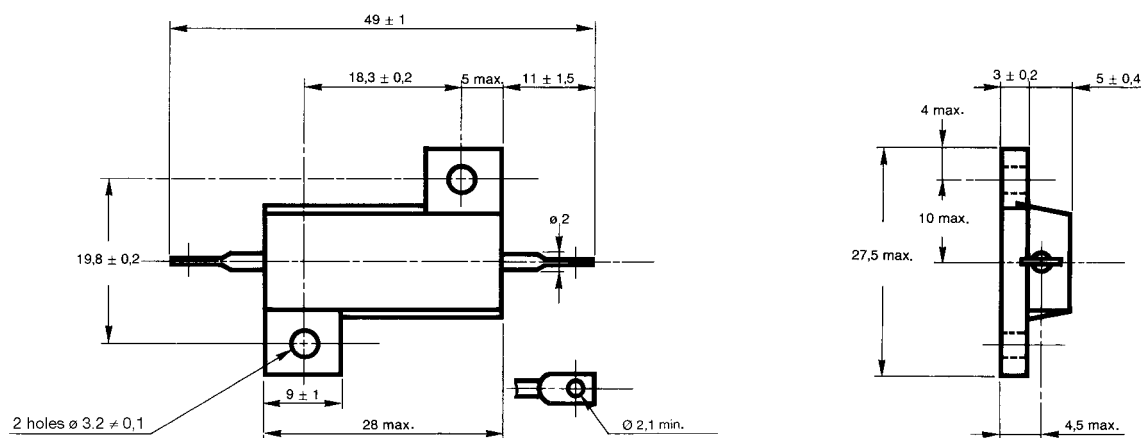
**RFK**

Fig. 1

Dimensions in mm

**SPECIFICATIONS****MECHANICAL**

MECHANICAL PROTECTION...	aluminium heatsink / insulated case
RESISTIVE ELEMENT...	nickel-chromium
TERMINAL LEADS...	copper
UNIT WEIGHT...	8 g max.

**ENVIRONMENTAL**

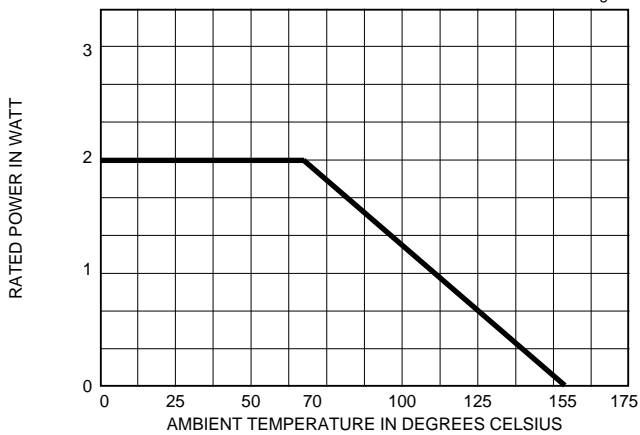
TEMPERATURE LIMITS...	–55°C +155°C
CLIMATIC CATEGORY...	55 / 155 / 56

**ELECTRICAL**

RESISTANCE VALUE RANGE	25 Ω to 80 kΩ
RESISTANCE TOLERANCE...	standard ± 0,05 % to ±1%
POWER RATING...	2 W at 70°C
TEMPERATURE COEFFICIENT	±5 ppm/°C max. (–55°C +155°C) ±1 ppm/°C typical (0°C +60°C)
DIELECTRIC VOLTAGE...	750 V
INSULATION RESISTANCE...	>10 <sup>6</sup> MΩ
LIMITING ELEMENT VOLTAGE...	300 V
CRITICAL RESISTANCE...	45 kΩ
NOISE...	non measurable
RISE TIME...	1 nanosecond

## POWER RATING CHART

Fig. 2



In order to maintain stability, the nominal power ( $P_n$ ) should be reduced in relation to the tolerance :  
 $\pm 0,05\%$  and  $\pm 0,1\%$  Power 0,25 pn.

## GENERAL APPLICATIONS

- High precision and stability power circuitry
- Circuits for analog computers
- Force transducers
- Circuits requiring negligible rise time.

## MARKING

SFERNICE trademark, series, style, nominal resistance (in  $\Omega$ ), tolerance (in %), manufacturing date.

## ORDERING PROCEDURE

SERIES	STYLE	OHMIC VALUE	TOLERANCE
RFK	25	32 k $\Omega$	$\pm 0,1\%$



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