

# ISA-PLAN® Precision Resistor Type R-Z

Spec Sheet R201 1/1 July 97

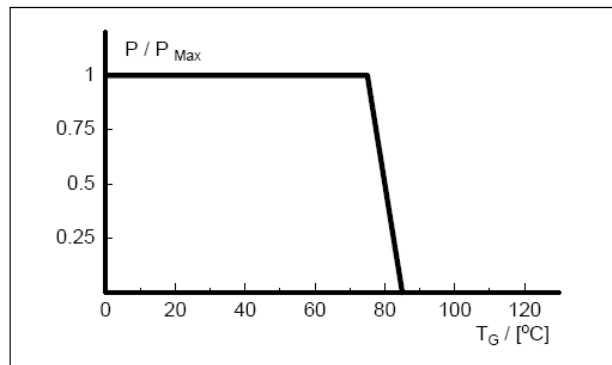
Technical data	
Resistance range	0.5 / 1 / 5 / 10 mOhm
Tolerance	0.1%, 0.5 %
Temperature coefficient (TCR)	3 / 5 / 10 ppm/K (20 °C - 60 °C)
Applicable temperature range	0 °C to +85 °C
Load capacity	500 W
Single pulse power load	200 J ( tp < 10 msec )
Maximum continuous current	700 A
Thermal resistance to copper base plate	Rthi < 0,02 K/W
Inductance	< 3 nH
Dielectric withstanding voltage	500 VAC
Stability ( nominal load at 75 °C )	deviation < 0,1 % after 2000 h

Precision resistors of type **R-Z**, designed in four-terminal technique, are distinguished by their extremely compact and serviceable assembly and feature a high load capacity as well as excellent accuracy.

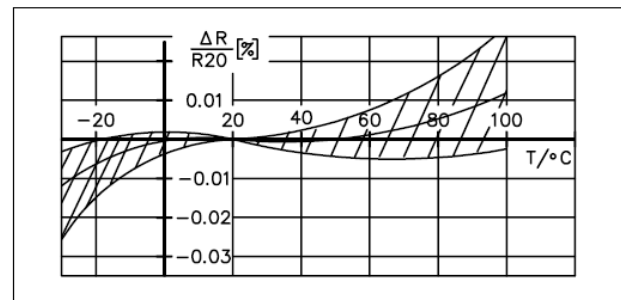
The resistance element is produced by etching a special and carefully aged **ZERANIN®** foil; for an optimum heat dissipation the foil is mounted to a 6 mm copper plate with a highly heat resistant adhesive.

The thermal resistance is rated to be less than 0.1 K/W. With the aid of four mounting bores at the corners, the resistor may be fastened to a heatsink, the thermal resistivity of which should not exceed 0.1 K/W.

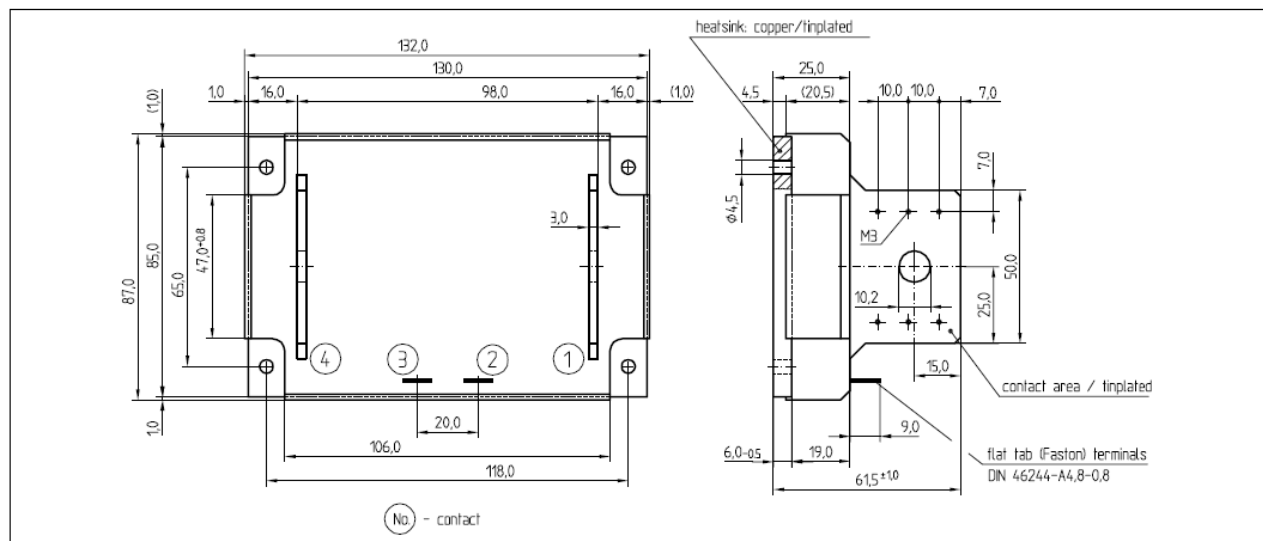
Connections consist of a 3 mm copper plate with a width of 50 mm. They warrant for a very low feed resistance and an uniform current density inside the resistor. Potential connections are provisioned as AMP plain connectors ( 6.3 mm width ) permitting a simple and quick assembly.



power derating curve



Temperature dependence of the electrical resistance of ISA-PLAN Resistors



dimensions ( mm )

( Technical modifications reserved )