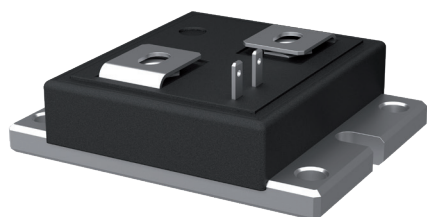


ISA-PLAN® // PRECISION RESISTORS



RUG-Z



Features

- 250 W permanent power at 85 °C
- 50 J pulse power for 10 ms
- Extremely low resistance values from 0.5 mOhm
- TCR-values from 1 ppm/K
- Max. current limit 387 A



Applications

- High current sensing
- Measurement equipment
- Reference resistors in laboratories
- Current sources
- Laboratory power supply
- DKD calibration upon request

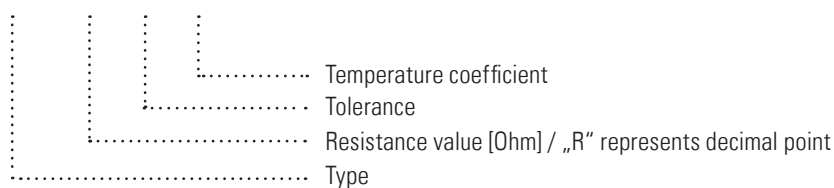
Technical data

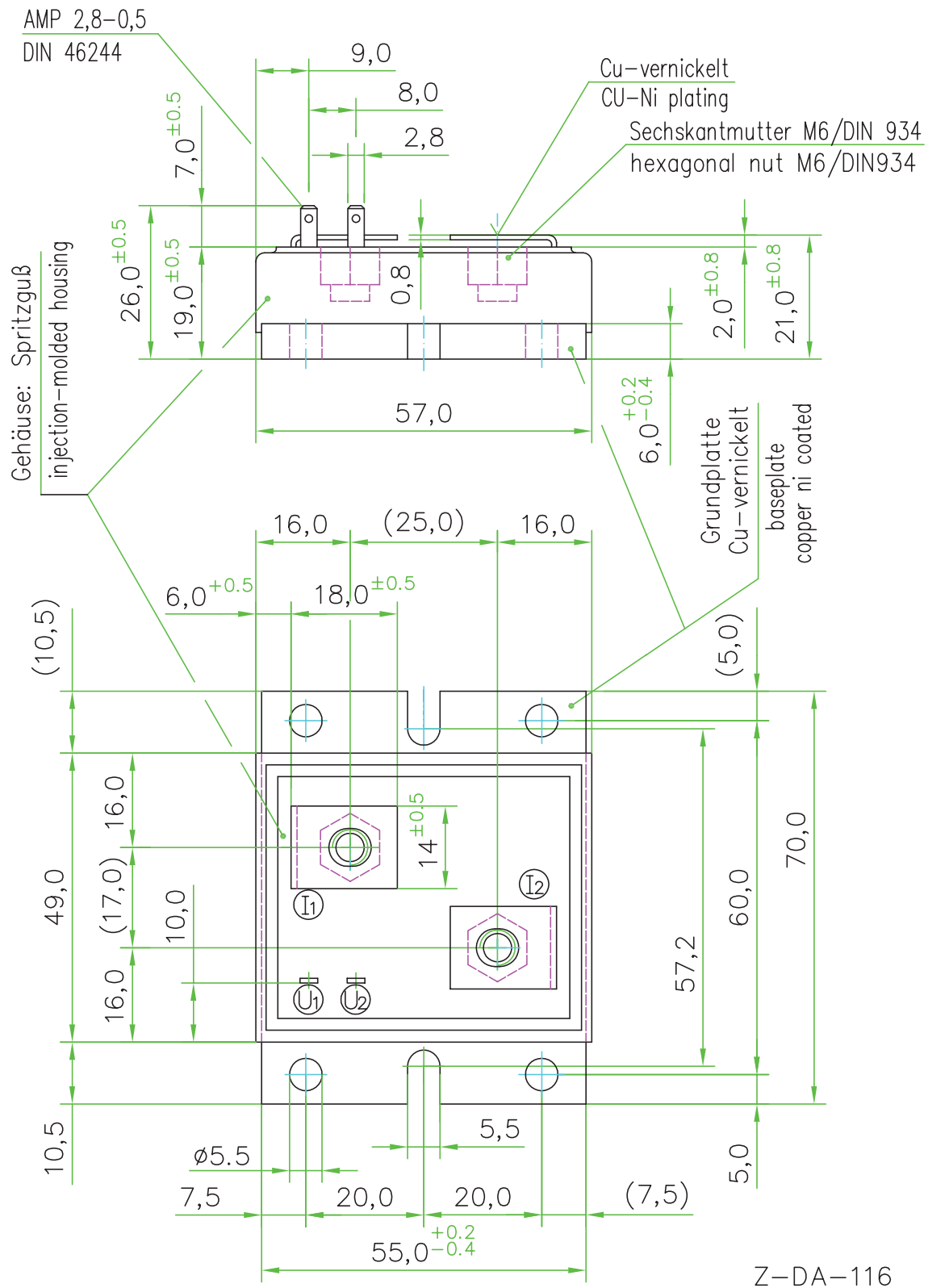
Resistance values	Ohm	0.0005 to 100
Tolerance	%	0.1 / 1
Temperature coefficient (20-60 °C)	ppm/K	< 1 / 3 / 10
Applicable temperature range	°C	-55 to +110
Power rating	W	250
Single pulse power load	J	50 (tp < 10 ms)
Thermal resistance to copper base plate (R _{thi})	K/W	< 0.1
Dielectric withstanding voltage	VAC	500
Inductance	nH	< 10
Stability (Nominal load) deviation after 2,000 h T _K = Terminal temperature	%	< 0.2 (T _K = 85 °C)

* for detailed information see table on page 3

Ordering code

RUG-Z - R001 - 0.1 - TK10

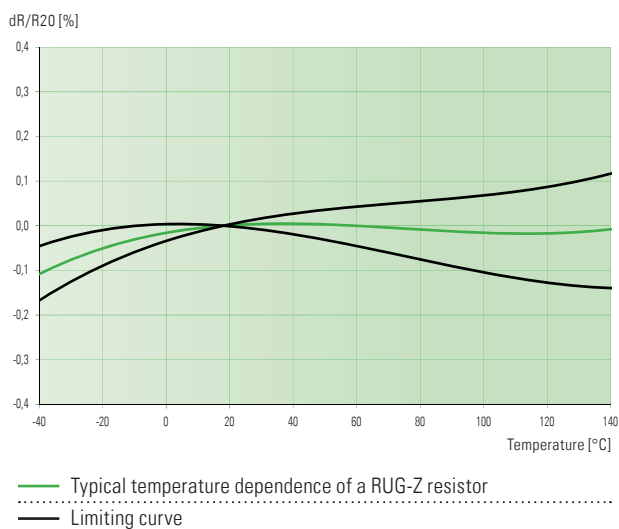




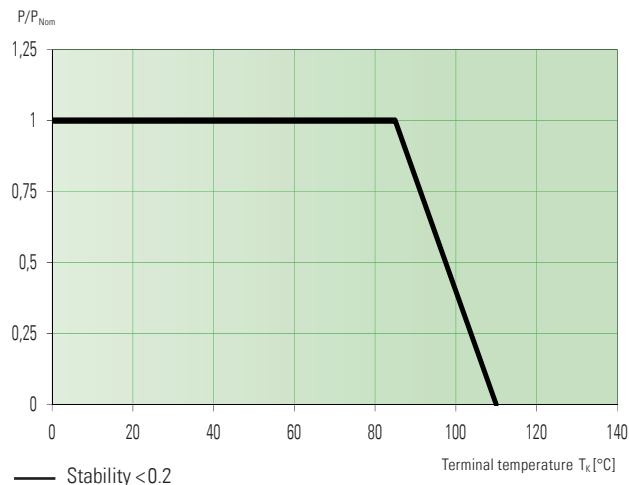


RUG-Z

Temperature dependence of the electrical resistance



Power derating curve



Available standard resistance values and tolerances*

Resistance values	Tolerance		Temperature coefficient		
	0.1	1.0	TK10	TK3	TK1
R0005	✓			✓	
R001	✓	✓	✓	✓	✓
R00105		✓	✓		
R002	✓			✓	✓
R003	✓				✓
R005	✓			✓	✓
R008	✓				✓
R008		✓		✓	
R010	✓			✓	✓
R010		✓			✓
R0105		✓	✓		
R020	✓			✓	✓
R050	✓	✓			✓
R100	✓			✓	✓
R200	✓			✓	
R500	✓				✓
1R00	✓			✓	✓
2R00	✓				✓
4R70	✓	✓			✓
5R00	✓				✓
10R0	✓		✓	✓	✓
100R	✓		✓		

✓ = available

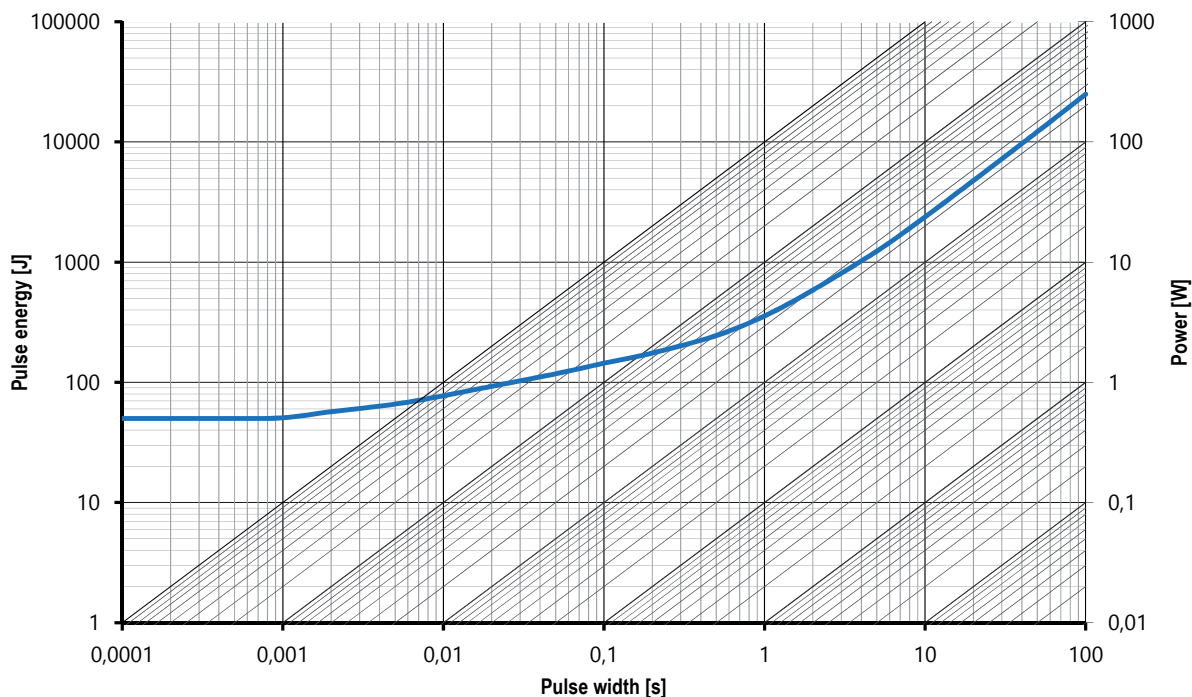
* Further values and tolerances on request



RUG-Z

Maximum pulse energy respectively pulse power for permanent operation

RUG-Z-R001

Maximum pulse energy / power continuous operation ($T_K = 85^\circ\text{C}$)

This curve is only valid for the resistance value R001. The shape of the curve will be different for other resistance values. Therefore a separate qualification should be made for pulse power close to the above curve.

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