

ISA-PLAN® // PRECISION RESISTORS



A-H



Features

- Up to 10 W permanent power
- Max. permanent current: 81 A
- Very high precision of tolerance and TCR
- 4-terminal connection
- Low self-heating
- RoHS 2011/65/EU compliant



Applications

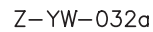
- Measurement equipment
- Reference resistors in laboratories
- Current sources
- Laboratory power supplies

Technical data

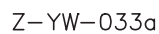
Resistance values *	mOhm	1 to 500
	Ohm	1 to 100
Tolerance	%	0.1 / 1
Temperature coefficient (20-60 °C)	ppm/K	<30
Applicable temperature range	°C	-55 to +140
Power rating	W	3 / 10 (on a heatsink)
Thermal resistance to ambient (R _{th})	K/W	<15
Thermal resistance to aluminium substrat (R _{thi})	K/W	<3
Dielectric withstanding voltage	V AC/DC	500
Inductance	nH	<10
Stability (Nominal load) deviation after 2000h		<0.1 % (T _K = 80 °C with heatsink),
T _K = Terminal temperature		<0.2 % (T _K = 95 °C with heatsink)

* See all standard values on page 4

Version A-**H1** with standard terminal F1-K2



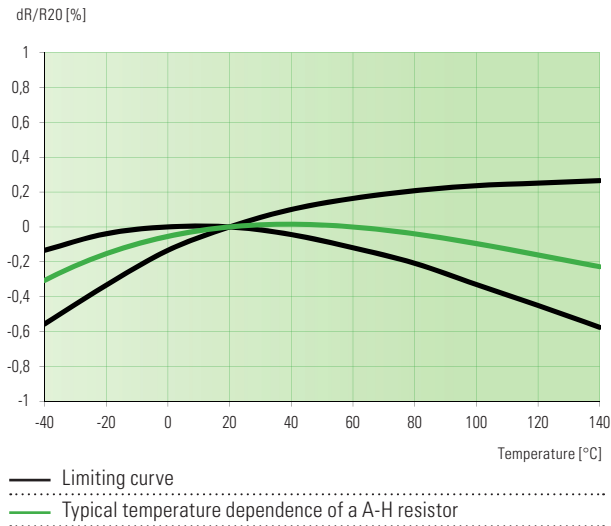
Version A-**H2** with standard terminal F1-K2



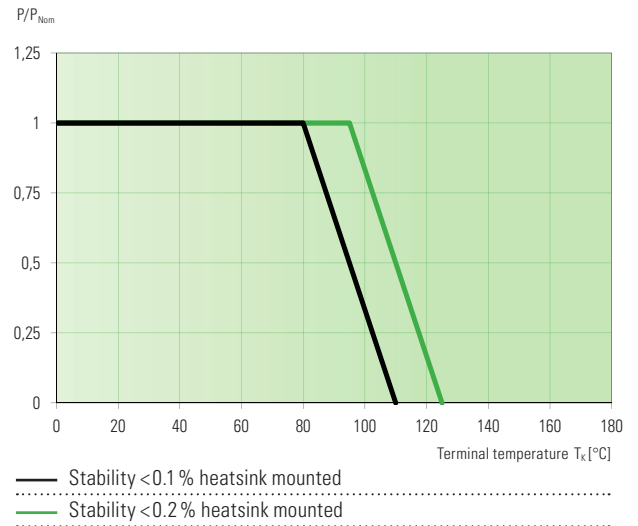


A-H

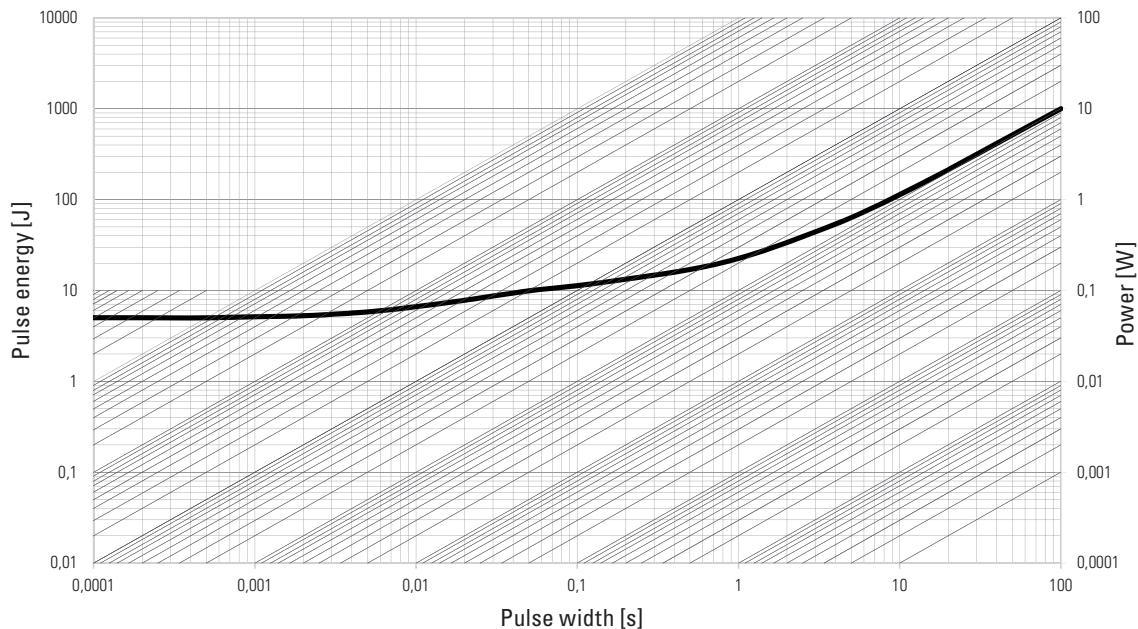
Temperature dependence of the electrical resistance of A-H resistors



Power derating curve



Maximum pulse energy respectively pulse power for permanent operation



This curve is only valid for the resistance value R005. The progression of the curve in the lower range could be different for other resistance values. Therefore a separate qualification should be made in thresholds.



A-H

Available standard resistance values and tolerances*

Resistance values A-H1	Tolerance	
	0.1	1.0
R001	✓	✓
R005		✓
R010	✓	
R020	✓	
R050	✓	
R100	✓	
R200	✓	
R250	✓	
R300	✓	
R500	✓	
1R00	✓	
5R00	✓	
33R0	✓	
100R	✓	

* Further values and tolerances on request

✓ = available

Resistance values A-H2	Tolerance	
	0.1	1.0
R001	✓	
R002	✓	✓
R005	✓	✓
R010	✓	
R020	✓	
R050	✓	
R100	✓	✓
R200	✓	
R500	✓	✓
1R00	✓	
2R00	✓	
5R00	✓	
10R0	✓	
20R0	✓	
100R	✓	

Ordering code

A-H1 - R005 - F1-K2 - 1.0

.....	Tolerance
.....	Terminal
.....	Resistance value [Ohm] / „R“ represents decimal point
.....	Type

Packaging Information

Tray

Parts per tray A-H1	40
Parts per tray A-H2	50

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