

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)

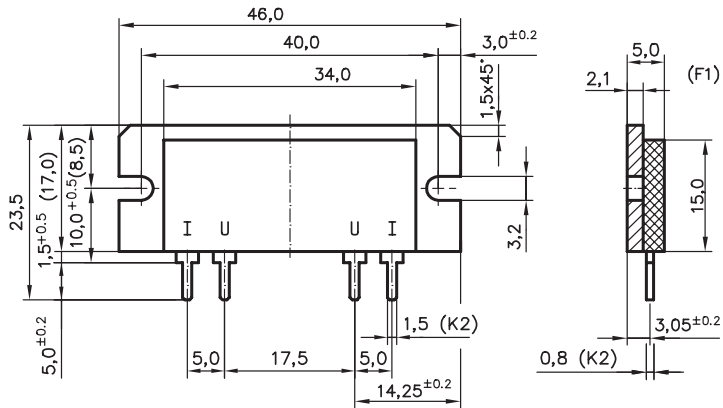
* See all standard values on page 4



A-H

Mechanical dimensions [mm]

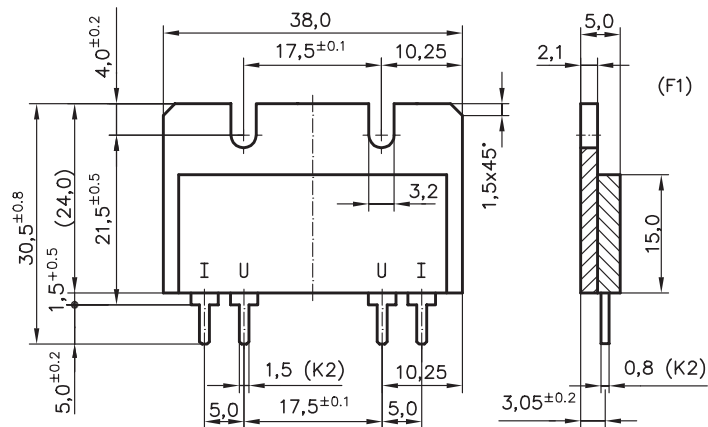
Version A-H1 with standard terminal F1-K2



Z-YW-032a

Mechanical dimensions [mm]

Version A-H2 with standard terminal F1-K2

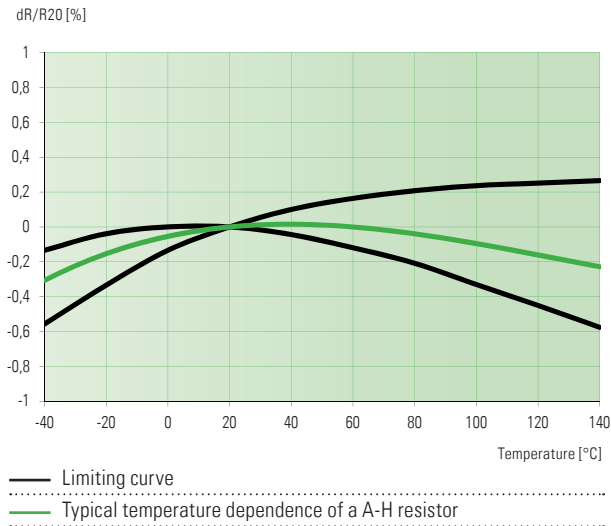


Z-YW-033a

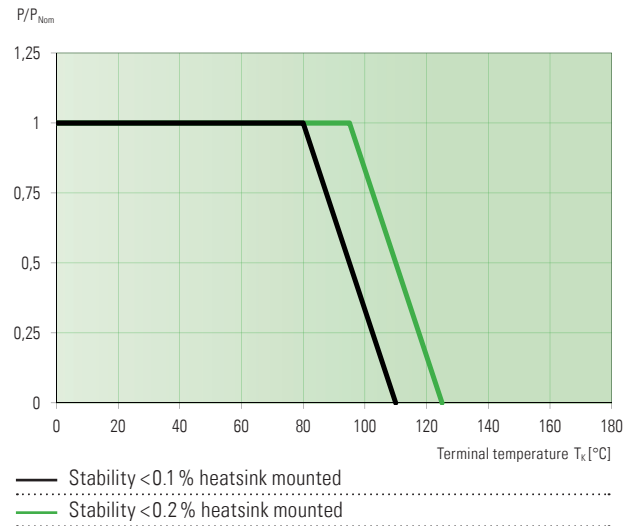


A-H

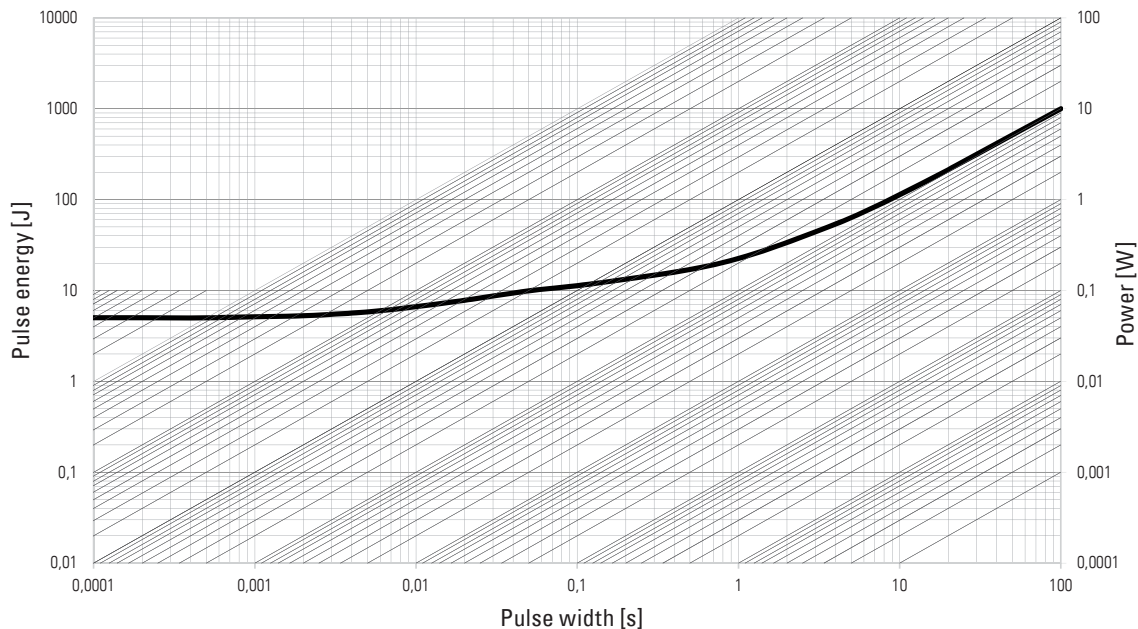
Temperature dependence of the electrical resistance of A-H resistors



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

Disclaimer // All products, product specifications and data are subject to change without notice.

The product specifications do not expand or otherwise modify Isabellenhütte's terms and conditions of sale, including but not limited to, the warranty expressed therein. Isabellenhütte makes no warranty, representation or guarantee other than as set forth in its terms and conditions of sale.

Information provided in datasheets and/or specifications may vary from actual results in different applications. Any statements made by Isabellenhütte regarding the suitability of products for certain types of applications are based on its knowledge of typical requirements that are often placed on its products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in the application intended.

No license, express or implied, or otherwise, to any intellectual property rights is granted by this document.

Any and all liability arising out of the application or use of any product shall be as set forth in Isabellenhütte's terms and conditions of sale.

