ISA-PLAN® - Präzisionswiderstände
precision resistors
Typ / type A-H

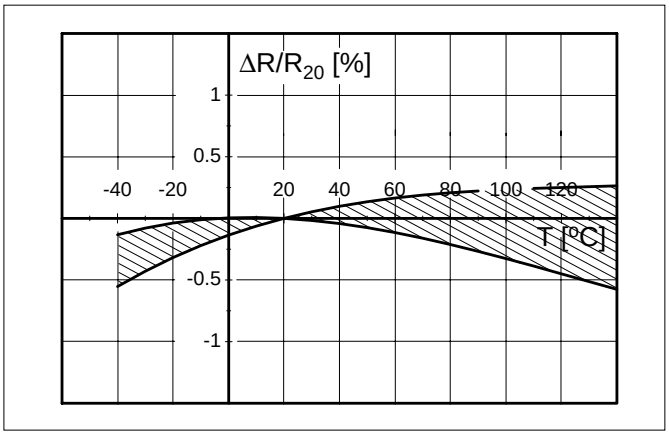
Technical data

available resistance values version A-H1	(1,2,5,10, 22,50,100,200 ,500) mOhm (1, 2, 5, 10, 20,100) Ohm
tolerances	0.1%, 0.5%, 1%
temperature coefficient tcr (R > 20mOhm)	< ±10ppm/K (20°C to 60°C)
applicable temperature range	-55°C to +125°C
load capacity	10W with heatsink provided
thermal resistance to aluminium base plate	Rth < 3K/W
thermal resistance to ambience	15K/W
dielectric withstanding voltage	500VAC
inductance (R = 10mOhm)	< 10nH
stability (at 125°Cfoil temperature)	deviation <0.1% after 2,000h

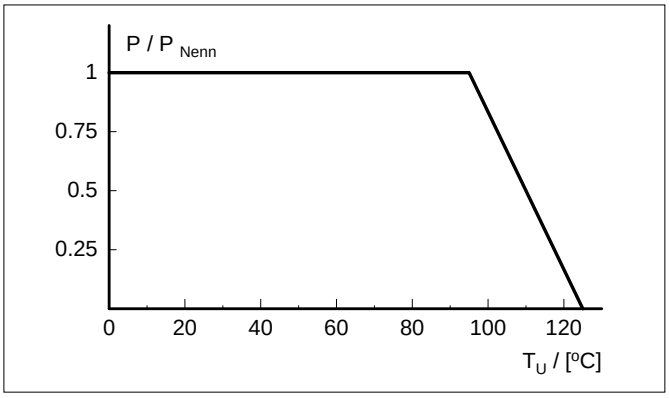
Remarks: - please note that the above standard values are available
- Tolerance 0.1% for values from 5 mOhm

The Resistor type **A-H** with its isolated current and voltage connections configured as a four-terminal resistor (i.e., Kelvin connection) is ideally suited for precise current measurement, current limitation or regulation in power units, current sources, and electronic loads. It is also applied for current measurements in pulse width modulated (PWM) control circuits for inductive users such as servo and stepper motors and solenoid driver circuits.

Design in foil technique and application of precision resistance alloy **MANGANIN** warrants for a long-term stability. By optimization of the shape, a high load capacity was obtained while maintaining accuracy and low inductance. The low thermal resistance to the aluminum base plate of < 3 K/W permits loading up to 10 W with only little self-heating.



Temperaturabhängigkeit des elektrischen Widerstandes von MANGANIN-Widerständen
temperature dependence of the electrical resistance of MANGANIN-resistors



power derating curve

Technische Änderungen vorbehalten - technical modifications reserved

Isabellenhütte Heusler GmbH KG
Eibacher Weg 1-3 - D-35683 Dillenburg - Telefon / Phone +49 (0) 27 71 9 34 - 0 - Fax: +49 (0) 27 71 2 30 30
e-mail: info@isabellenhuette.de - Internet: www.isabellenhuette.de

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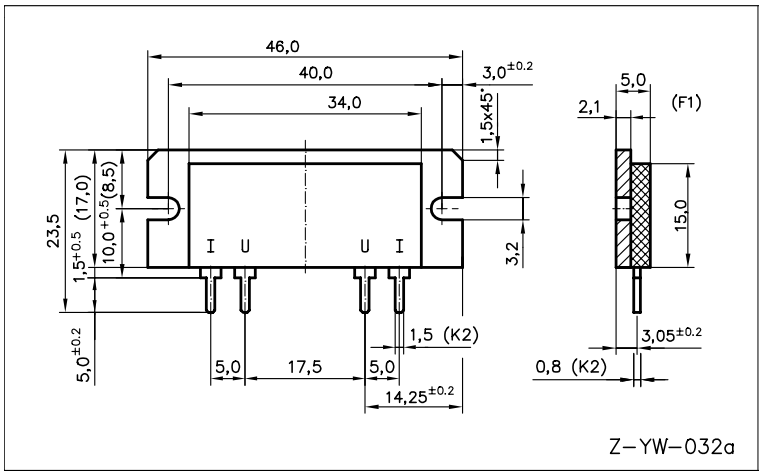
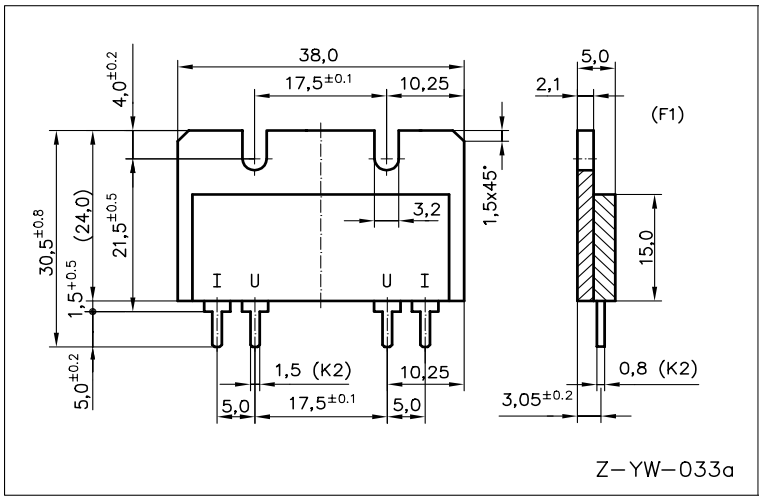


version A-H1 with standard terminal F1-K2



version A-H2 with standard terminal F1-K2

ordering code			
A-H2-R005-F1-K2-0.1			
type	resistance value	terminal	tolerance
A-H2	5 mOhm	F1-K2	0.1%

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e-mail: info@isabellenhuette.de - Internet: www.isabellenhuette.de