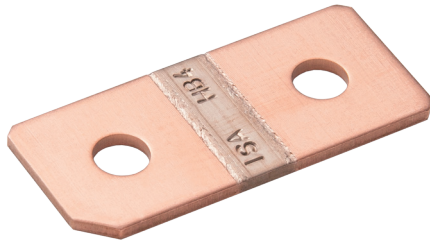




## ISA-WELD® // PRECISION RESISTORS FOR HIGH CURRENT APPLICATIONS



### KVM



#### Features

- 7 W power rating
- Continuous current load up to 250 A
- Heavy copper connectors
- Excellent long-term stability
- Low inductance value
- Max. solder temperature up to 350 °C / 30 sec or 250 °C / 10 min
- RoHS 2011/65/EU compliant
- AEC-Q200 qualification

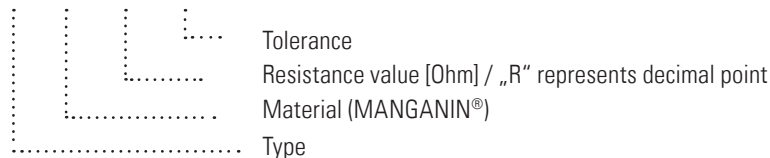


#### Technical data

Resistance values	<b>mOhm</b>	<b>0.1</b>
Tolerance	<b>%</b>	<b>5</b>
Temperature coefficient (20-60 °C)	<b>ppm/K</b>	<b>&lt;50</b>
Applicable temperature range	<b>°C</b>	<b>-55 to +170</b>
Power rating <b>P<sub>120 °C</sub></b>	<b>W</b>	<b>5</b>
Power rating <b>P<sub>110 °C</sub></b>	<b>W</b>	<b>7</b>
Internal heat resistance (R <sub>thi</sub> )	<b>K/W</b>	<b>&lt;4</b>
Inductance	<b>nH</b>	<b>&lt;5</b>
Stability (at rated power) deviation after 2000h, T <sub>K</sub> = Terminal temperature		<b>&lt;0.5% (T<sub>K</sub>=120 °C)</b>
Packaging		Stack tubes, quantity/tube to be decided. Plastic bag sealed and filled with dry nitrogen.

#### Ordering code

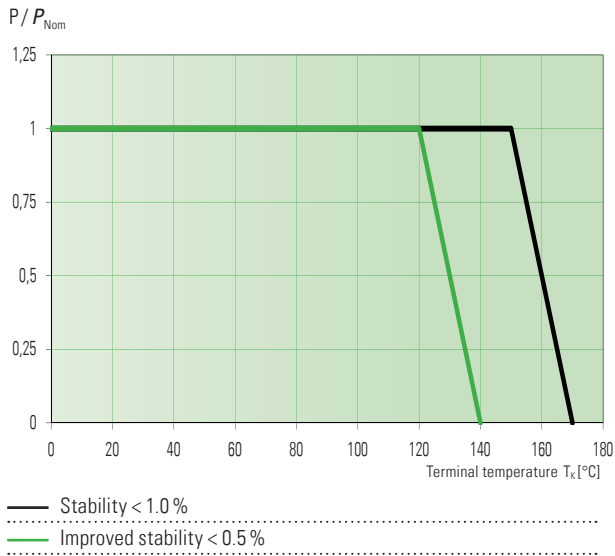
KVM - M - R0001 - 5.0



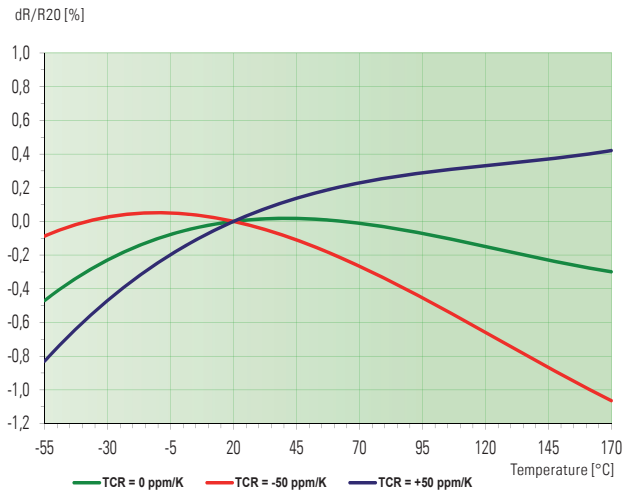


# KVM

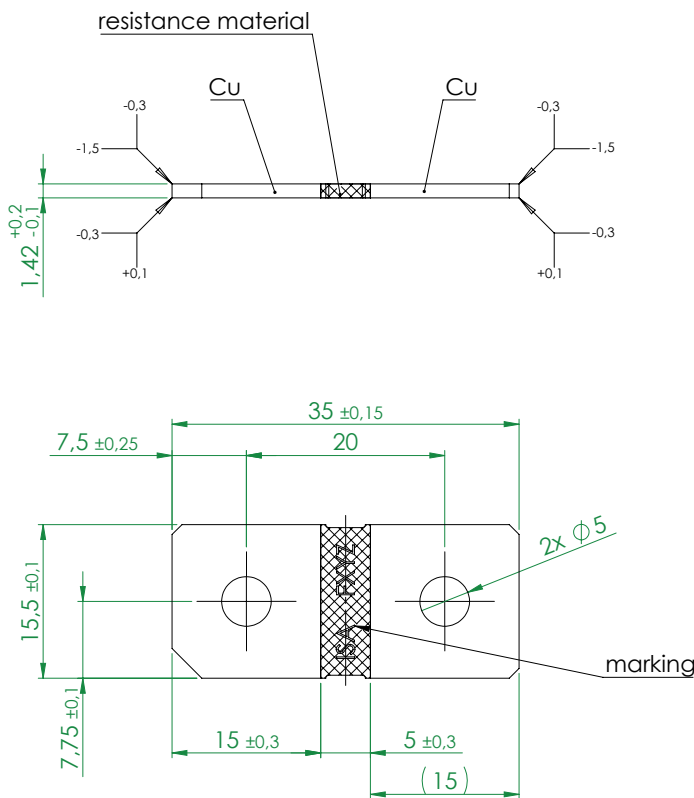
## Power derating curve



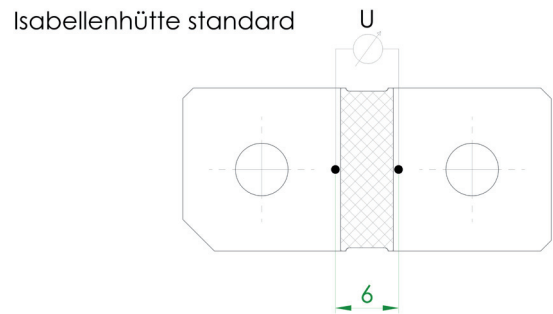
## Temperature dependence of the electrical resistance of MANGANIN® resistors



## Mechanical dimensions [mm]



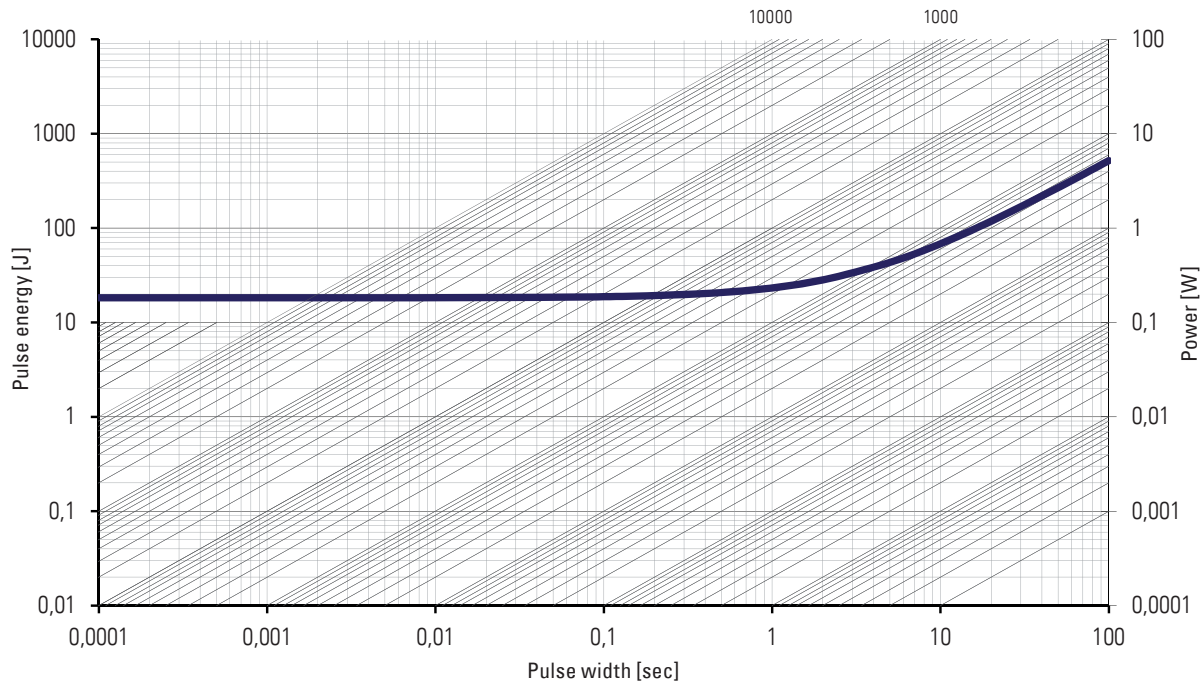
## Position of sense terminals for TC measurement





# KVM

## Maximum pulse energy respectively pulse power for permanent operation



### Specification

Parameters	Test conditions	Specified values
Temperature Cycling	1000 cycles (-55 °C to +150 °C)	±0.5%
Low Temperature Storage and Operation	-55 °C for 250 h	±0.2%
Resistance to Soldering Heat	235 °C for 10 sec / 4h steam aging	n.a.
Operational Life	2000 h, T <sub>k</sub> max at nominal load	±0.5%, T <sub>k</sub> = 120 °C
High Temperature Exposure	2000 h / 170 °C	±1.0%
Bias Humidity	+85 °C, 85 r.F., 1000 h	±0.2%

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