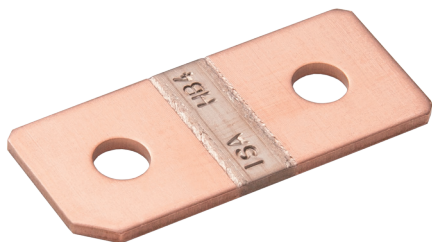




ISA-WELD® // PRECISION RESISTORS FOR HIGH CURRENT APPLICATIONS



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

Ordering code

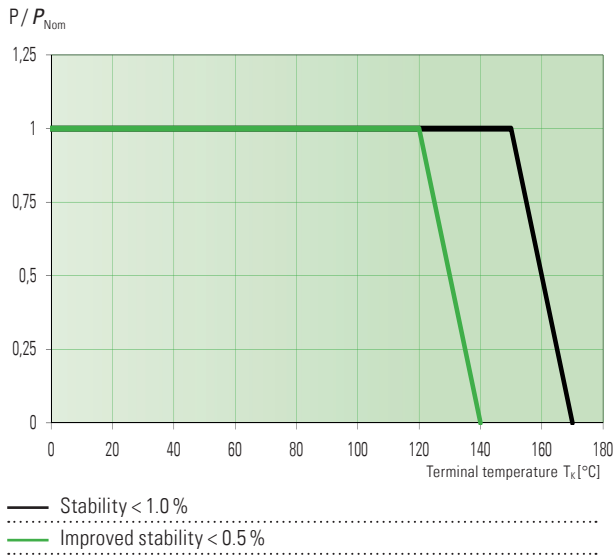
KVM - M - R0001 - 5.0

.....	Tolerance
.....	Resistance value [Ohm] / „R” represents decimal point
.....	Material (MANGANIN®)
.....	Type

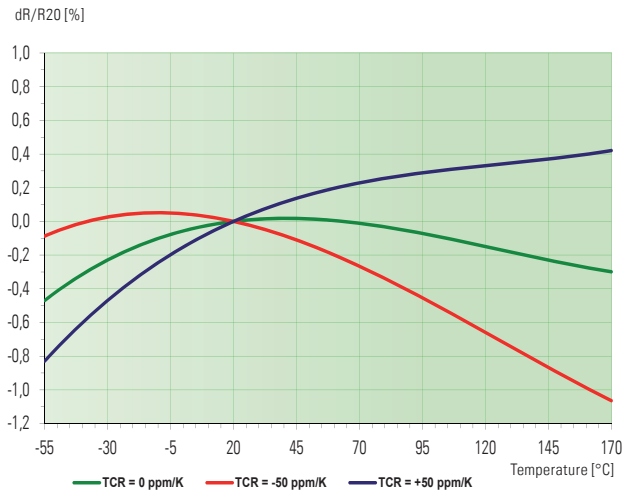


KVM

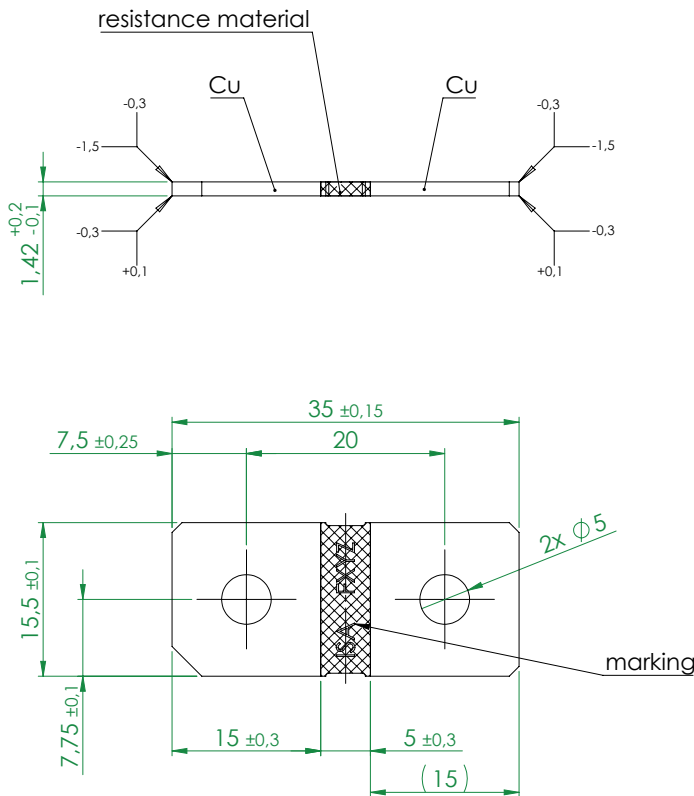
Power derating curve



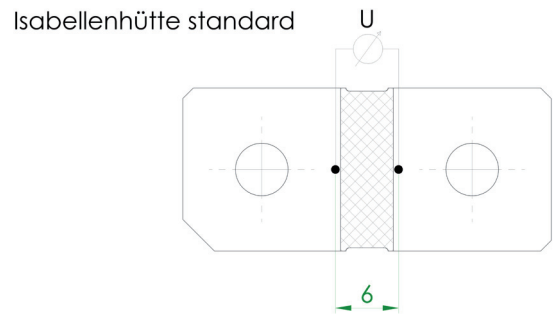
Temperature dependence of the electrical resistance of MANGANIN® resistors



Mechanical dimensions [mm]



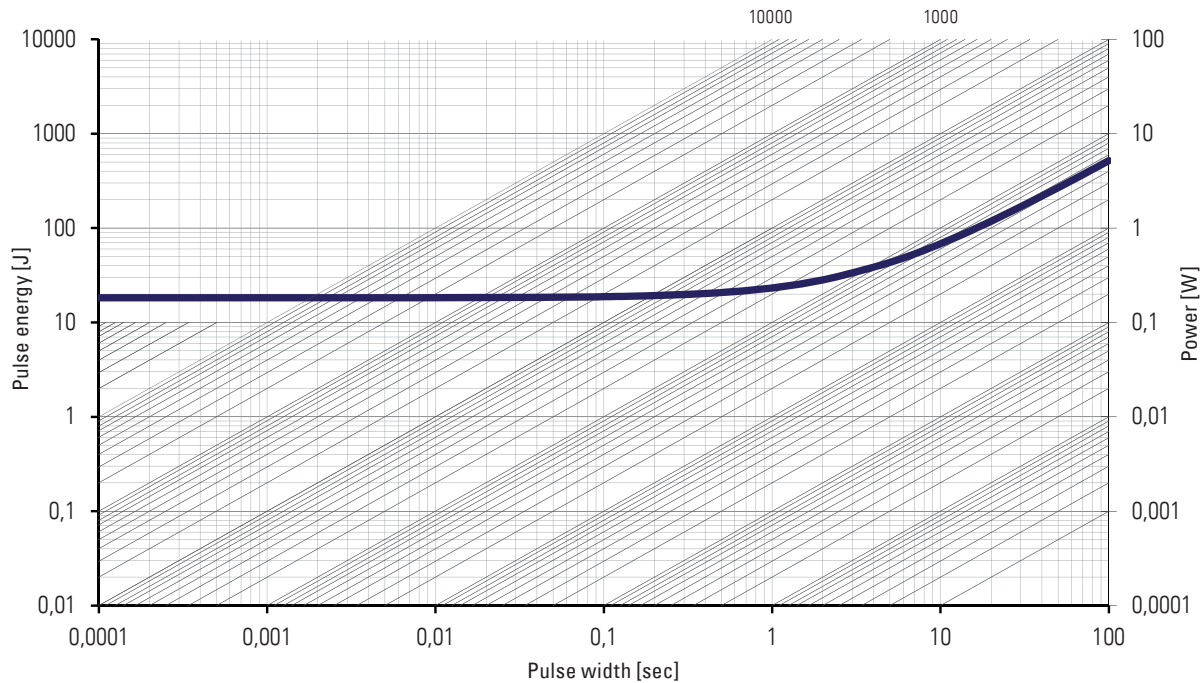
Position of sense terminals for TC measurement





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 _k max at nominal load	±0.5%, T _k = 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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