

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



## **KVM**



### **Features**

- 7 W power rating
- Continuous current load up to 250 A



- 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	m0hm	0.1
Tolerance	%	5
Temperature coefficient (20-60 °C)	ppm/K	<50
Applicable temperature range	°C	-55 to +170
Power rating <b>P<sub>120°C</sub></b>	W	5
Power rating <b>P</b> <sub>110°C</sub>	W	7
Internal heat resistance (R <sub>thi</sub> )	K/W	<4
Inductance	nH	<5
Stability (at rated power) deviation after 2000h, $T_K$ = Terminal temperature		<0.5% (T <sub>K</sub> =120°C)
Packaging		Stack tubes, quantity/tube to be decided. Plastic bag sealed and filled with dry nitrogen.

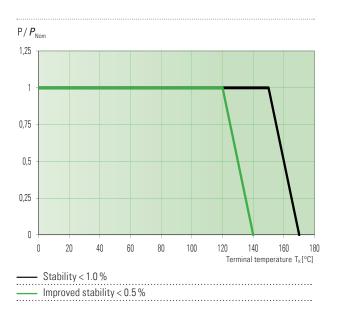
### **Ordering code**



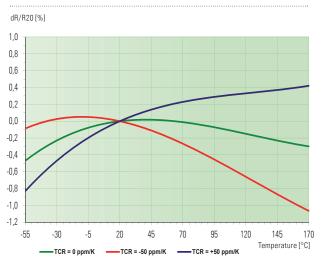


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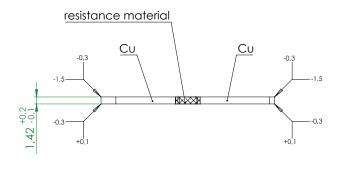
### Power derating curve



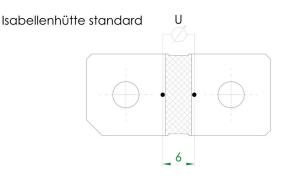
# Temperature dependence of the electrical resistance of MANGANIN $^{\circ}$ resistors

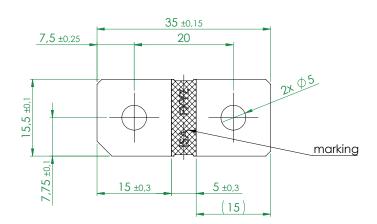


### Mechanical dimensions [mm]



### Position of sense terminals for TC measurement



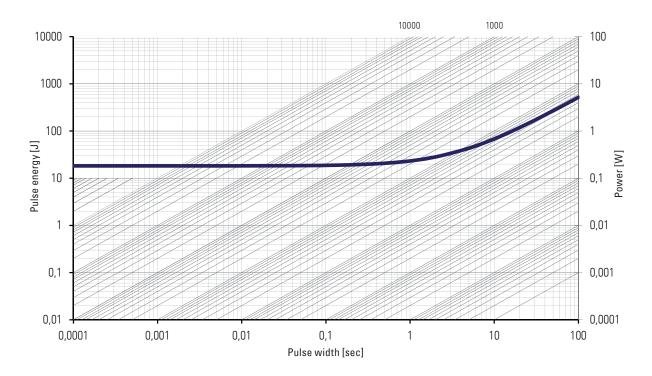


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## **KVM**

#### Maximum pulse energy respectively pulse power for permanent operation



### **Specification**

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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, $T_{\rm K}$ 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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