



- **Highest Stability**
- **Nearly Temperature Independent**
- **Minimum Tolerance**
- **Low Capacity and Inductance**
- **Customized Resistor Values**

## SPECIFICATIONS

### ELEKTRICAL

	<b>USR 4-4020</b>	<b>UNR 4-4020</b> note <sup>1)</sup>
<b>Resistance Range</b> :	0R05 ... 500R	0R05 ... 500R
<b>Power Rating</b> :	2.5 W (70°C) without heatsink 30 W* * with heatsink	50 W*
<b>Thermal Resistance Rthj-c</b> :	3.6 K/W	2.2 K/W
<b>Tolerances</b> :		
<b>from 0R05</b> :	0.1%, 0.25%, 0.5%, 1%	
<b>from 10R</b> :	0.05%, 0.1%, 0.25%, 0.5%, 1%	
<b>from 50R</b> :	0.01%, 0.02%, 0.05%, 0.1%, 0.25%, 0.5%, 1%	
<b>Stability</b> :	0.01%	
<b>Temperature Coefficient</b> :	max. ±5 ppm/K (-55...155)°C typ. ±3 ppm/K (-55...125)°C upon request ±1 ppm/K (0...60)°C	
<b>Voltage Proof</b> :	750 VDC	
<b>Max. Current</b> :	15 A	15 A
<b>Thermal EMF</b> :	<1 µV/K	

### ENVIRONMENTAL

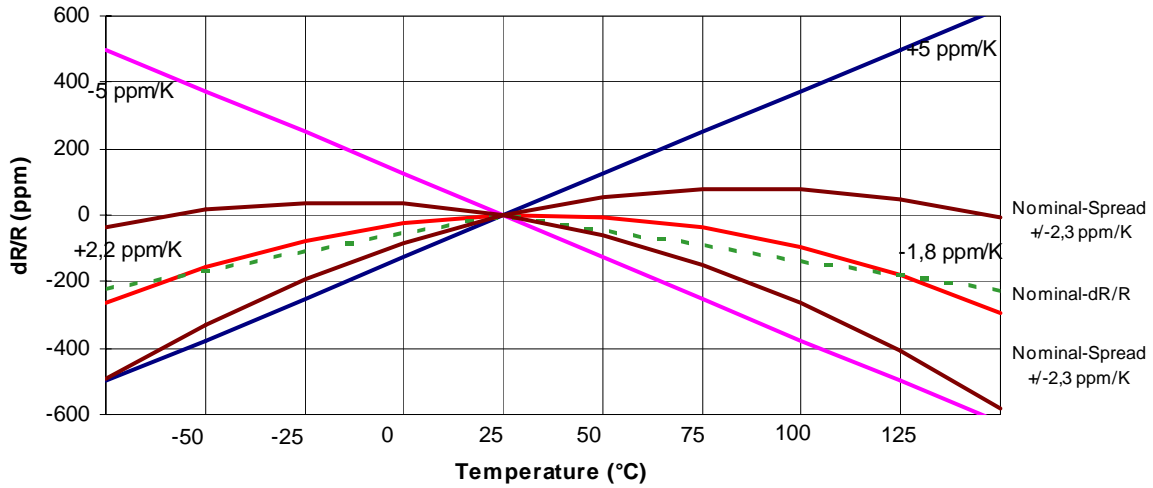
**Operating Temperature Range** : -55°C...155°C

### MECHANICAL

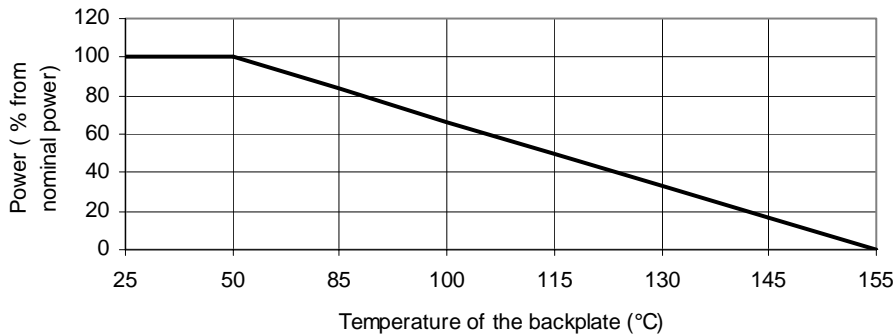
<b>Resistor Material</b> :	NiCr-Foil	
<b>Substrate</b> :	Al <sub>2</sub> O <sub>3</sub>	AlN
<b>Housing</b> :	Epoxy + Al-heatsink	
<b>Connector Material</b> :	Cu, tinned, 4-pin	
<b>Max. torque backplate</b> :	1.0 Nm	

note<sup>1)</sup>: Specially designed for applications with fast changing electrical load.

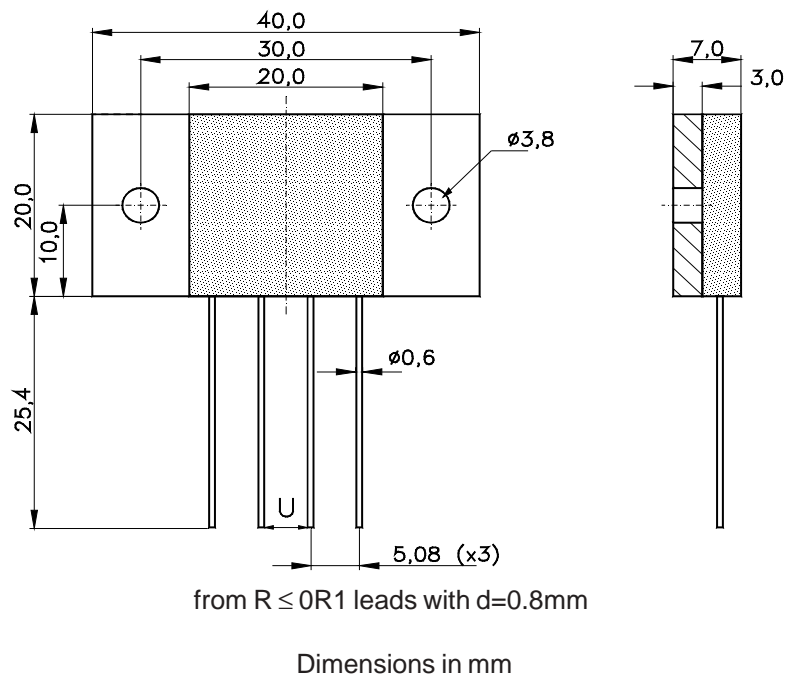
TEMPERATURE COEFFICIENT



DERATING CURVE



DIMENSIONS



HOW TO ORDER

USR 4-4020 0R3 D 0.25% TK3

UNR 4-4020 50R D 0.01% TK1