

# USR UNR 4-4020



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

## SPECIFICATIONS

### ELEKTRICAL

	USR 4-4020	UNR 4-4020
<b>Resistance Range</b>	0R05 ... 500R other resistance values upon request / power rating depending on resistor value	note <sup>1)</sup> 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

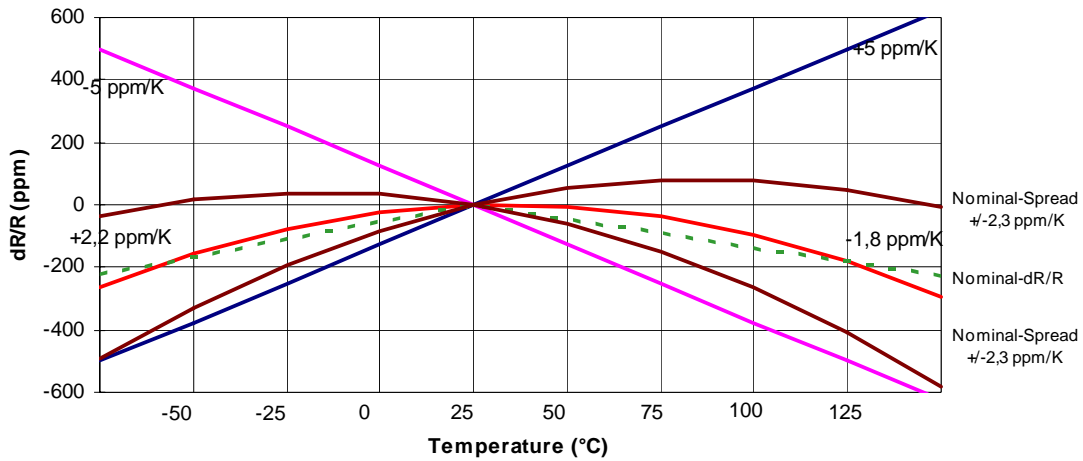
**Operating Temperature Range** : -55°C...155°C

### MECHANICAL

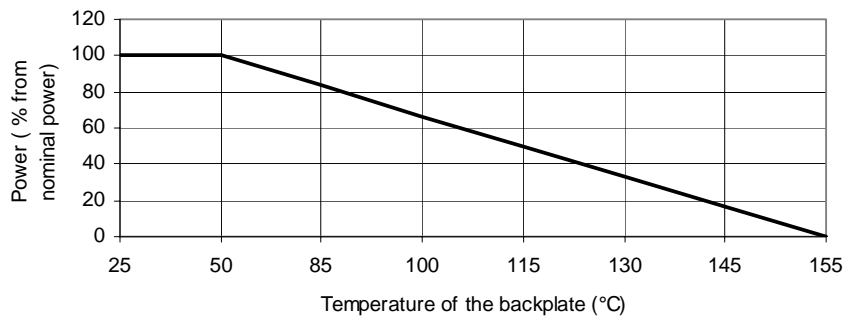
<b>Resistor Material</b>	: NiCr-Foil	
<b>Substrate</b>	: Al <sub>2</sub> O <sub>3</sub>	AlN
<b>Housing</b>	: Epoxy + Al-heatsink	
<b>Connector Material</b>	: Cu, tinned, 4-pin	
<b>Max. torque backplate</b>	: 1.0 Nm	

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

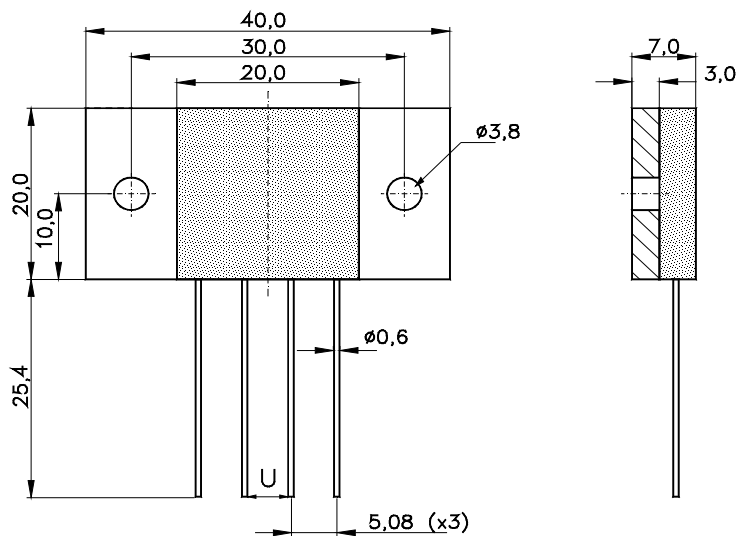
TEMPERATURE COEFFICIENT



DERATING CURVE



DIMENSIONS



from R ≤ 0R1 leads with d=0.8mm

Dimensions in mm

HOW TO ORDER

USR 4-4020 0R3 D 0.25% TK3

UNR 4-4020 50R D 0.01% TK1