

# SRT Resistor Technology

## High Voltage Resistors

Type: HVR

Sizes: HVR 25, HVR 30, HVR 40, HVR 50

### Features:

- High Voltage Resistors in thick film technology
- Radial leads, variable lead spacing by bending
- Climatic protection by silicone coating
- Chip version available (without coating)
- Special versions possible
- Resistance values up to 10 Tera-Ohm
- Low values of TCR and VCR



### Dimensions:

Size	L	B	D	R	d
HVR 25	25.0 (1")	9.0	1.4	22.9 (0.9")	0.40 <sup>±0.05</sup>
HVR 30	30.0	6.0	1.4	27.5	0.40 <sup>±0.05</sup>
HVR 40	40.0	6.0	1.4	37.8	0.40 <sup>±0.05</sup>
HVR 50	50.0	12.5	1.4	47.8	0.40 <sup>±0.05</sup>

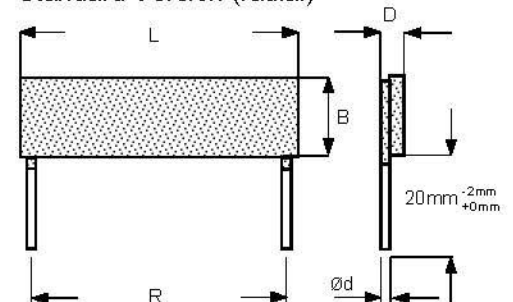
L = length, B = width, D = thickness (Tolerance of dimensions: ±0.5 mm)

R = standard lead spacing (other spacing possible by bending)

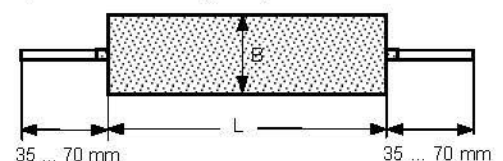
d = wire diameter (in mm), other diameters possible (changes D)

Axiale versions, versions with formed leads and versions with leadframes are available on request.

Standard Version (radial)



Special Version (axial)



### Packaging:

Bulk in plastic bags or boxes

Minimum quantity: 10 pieces per value

The labeling is made at the packing unit only.

The components are not marked (only on request at individual cases).

### Ordering data:

Type – value – tolerance – TCR

Example: HVR 30 10G ±10% TCR 100

If no data for TCR are supplied, the highest value in the table will be supplied.

The standard measuring voltage is 10V, other voltages on request.

## High Voltage Resistors

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### Technical data – depending on size:

Size	HVR 25	HVR 30	HVR 40	HVR 50
Power rating $P_{70}(W)$ ( $P_{125} = 0W$ )	1.0	1.0	1.2	3.0
Working voltage $U_{-}$ , $U_{eff}$ (V)	15 KV	10 KV	20 KV	30 KV

Ranges / Tolerances / TCR <sup>1)</sup> / VCR <sup>2)</sup>				
1M – 100M	0.25/.../10% TC 25/50/100 1 ppm/V	0.25/.../10% TC 25/50/100 2 ppm/V	0.25/.../10% TC 25/50/100 1 ppm/V	0.25/.../10% TC 25/50/100 1 ppm/V
>100M – 1G	1/2/5/10/20% TC 50/100/250 2 ppm/V	1/2/5/10/20% TC 50/100/250 5 ppm/V	1/2/5/10/20% TC 50/100/250 2 ppm/V	1/2/5/10/20% TC 25/50/100 1 ppm/V
>1G – 100G	5/10/20/30% TC 250/500 10 ppm/V	5/10/20/30% TC 250/500 20 ppm/V	5/10/20/30% TC 250/500 10 ppm/V	5/10/20/30% TC 100/250 5 ppm/V
>100G – 1T	5/10/20/30% TC 500/1000 50 ppm/V	5/10/20/30% TC 500/1000 100 ppm/V	5/10/20/30% TC 500/1000 50 ppm/V	5/10/20/30% TC 250/500 25 ppm/V
>1T – 10T	–	–	–	10/20/30% TC/VCR on request

<sup>1)</sup> TCR: in ppm/K; TC25/50: Temperature range +25°C...+85°C

<sup>2)</sup> VCR: typical values

Closer values of tolerance, TCR and VCR, other dimensions or voltage dividers on request and agreement

### General technical data:

Temperature range	-55°C ... +125°C
Climatic category to EN 60068-1	55/125/56
Humidity- / contact protection	Lacquer coating <sup>3)</sup>

Long term stability	≤10G	>10G
Storage 125°C/1000h	<1%	<2%
Max. voltage/1000h	<1%	<2%

<sup>3)</sup> Resistant to most solvents. For cleaning the use of isopropyl alcohol (IPA) is recommended. The use of acetone and methylene chloride is **not** allowed.