

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 ±0.05
HVR 30	30.0	6.0	1.4	27.5	0.40 ±0.05
HVR 40	40.0	6.0	1.4	37.8	0.40 ±0.05
HVR 50	50.0	12.5	1.4	47.8	0.40 ±0.05

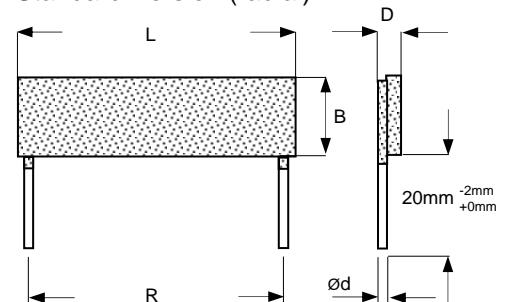
L = length, B = width, D = thickness (Tolerance of dimensions: ±0.5 mm)

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

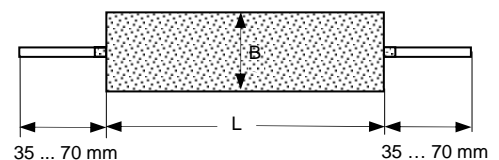
d = wire diameter (in mm), other diameters possible (changes D)

Axial versions, kinked versions and versions with leadframes are available on request.

Standard Version (radial)



Special Version (axial)



Packaging:

Bulk in plastic bags or boxes

Minimum quantity: 30 pieces per value

The labeling is made at the packing unit only.

Any marking of single components is not available (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.

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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 ¹⁾ / VCR				
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

¹⁾ TCR 25/50: Temperature range +25°C...+85°C

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 DIN EN 60068-1	55/125/56
Humidity- / contact protection	Lacquer coating ²⁾

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

²⁾ Resistant to most solvents. For cleaning the use of isopropyl alcohol (IPA) is recommended.
The use of acetone and methylene chloride is **not** allowed.