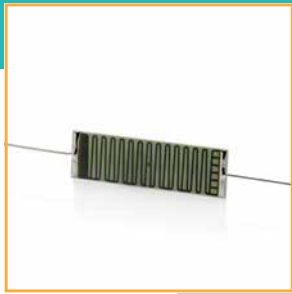


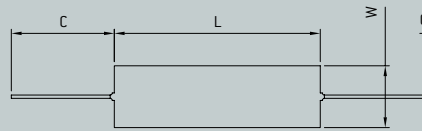
# HIGH VOLTAGE RESISTORS HVR 967



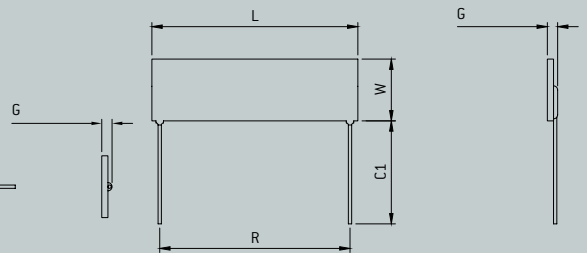
With their variety of designs, thick-film high voltage resistors offer ideal possibilities for mastering measuring, controlling and regulating processes in high voltage applications. Whether for high voltage pulses or for registering constant high voltages – with our HVR basic program we offer the ideal solution for all applications in high voltage engineering, high voltage network components, medical technology, electrostatics, the automotive industry and traffic engineering.



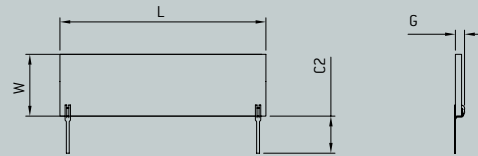
Axial wire connection



Radial wire connection



Optional contact PIN



- Flat designs
- Pulse-proof
- Low inductance

## GENERAL TECHNICAL SPECIFICATIONS

<b>Resistance values, standard</b>	5 K, 10 K, 100 K, 1 M, 5 M, 10 M, 25 M, 50 M, 100 M, 1 G, 2 G, 5 G
<b>Tolerance</b>	1 % (0.5 % to 20 %)*
<b>Temperature coefficient</b>	100 ppm/°C (25 ppm/°C to 200 ppm/°C)*
<b>Voltage coefficient</b>	<2 ppm/V
<b>Insulation resistance</b>	>10,000 MΩ (500 V 25 °C 75 % relative humidity)
<b>Dielectric strength of the insulation</b>	>1,000 V (25 °C 75 % relative humidity) ΔR/R 0.25 % max.
<b>Thermal shock</b>	ΔR/R 0.25 % max.
<b>Overload capacity</b>	1.5 x P[nom], 5s (not 1.5 x V[max])
<b>Moisture resistance</b>	ΔR/R 0.25 %
<b>Long-term stability</b>	ΔR/R 0.25 % max.
<b>Temperature range (operation / storage)</b>	−55 °C to +175 °C (−55 °C to +100 °C)
<b>Cover</b>	Epoxy-based varnishes (glass, silicone-based encasing)
<b>Connection type</b>	Tinned copper wire Cu vz Ø 0,8 mm, axial or radial; on request pin 10 mm (optionally Ø 0.5 silvered Cu)

Depending on ambient conditions, the characteristics of resistors can change. We recommend a suitability test under operational conditions. Specifications are subject to change without notice.

\* Other values upon request.

TYPE SELECTION							
TYPES	TCR (ppm/°C)	0.50 %	1 %	2 %	5 %	10 %	20 %
967.3.25 1 W 8 kV (air) 12 kV (oil)	25	5 K-2 G	2 K-2 G	2 K-2 G	2 K-2 G	2 K-2 G	2 K-2 G
	50	5 K-2 G	2 K-2 G	2 K-2 G	2 K-2 G	2 K-2 G	2 K-2 G
	100	5 K-2 G	2 K-2 G	2 K-2 G	2 K-2 G	2 K-2 G	2 K-2 G
	200	5 K-2 G	2 K-2 G	2 K-2 G	2 K-2 G	2 K-2 G	2 K-2 G
967.3.38 1.5 W 10 kV (air) 15 kV (oil)	25	4 K-500 M	4 K-3 G	4 K-3 G	4 K-3 G	4 K-3 G	4 K-3 G
	50	4 K-500 M	4 K-3 G	4 K-3 G	4 K-3 G	4 K-3 G	4 K-3 G
	100	4 K-500 M	4 K-3 G	4 K-3 G	4 K-3 G	4 K-3 G	4 K-3 G
	200	4 K-500 M	4 K-3 G	4 K-3 G	4 K-3 G	4 K-3 G	4 K-3 G
967.5.13 1.0 W 5 kV (air) 7.5 kV (oil)	25	3 K-500 M	2 K-1 G	2 K-1 G	2 K-1 G	2 K-1 G	2 K-1 G
	50	3 K-500 M	2 K-1 G	2 K-1 G	2 K-1 G	2 K-1 G	2 K-1 G
	100	3 K-500 M	2 K-1 G	2 K-1 G	2 K-1 G	2 K-1 G	2 K-1 G
	200	3 K-500 M	2 K-1 G	2 K-1 G	2 K-1 G	2 K-1 G	2 K-1 G
967.7.51 2 W 20 kV (air) 30 kV (oil)	25	10 K-400 M	5 K-5 G	5 K-5 G	5 K-5 G	5 K-5 G	5 K-5 G
	50	10 K-400 M	5 K-5 G	5 K-5 G	5 K-5 G	5 K-5 G	5 K-5 G
	100	10 K-400 M	5 K-5 G	5 K-5 G	5 K-5 G	5 K-5 G	5 K-5 G
	200	10 K-400 M	5 K-5 G	5 K-5 G	5 K-5 G	5 K-5 G	5 K-5 G
967.8.26 2 W 10 kV (air) 15 kV (oil)	25	10 K-1 G	5 K-2 G	5 K-2 G	5 K-2 G	5 K-2 G	5 K-2 G
	50	10 K-1 G	5 K-2 G	5 K-2 G	5 K-2 G	5 K-2 G	5 K-2 G
	100	10 K-1 G	5 K-2 G	5 K-2 G	5 K-2 G	5 K-2 G	5 K-2 G
	200	10 K-1 G	5 K-2 G	5 K-2 G	5 K-2 G	5 K-2 G	5 K-2 G
967.13.38 3 W 15 kV (air) 30 kV (oil)	25	10 K-1 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G
	50	10 K-1 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G
	100	10 K-1 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G
	200	10 K-1 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G
967.15.30 3 W 15 kV (air) 30 kV (oil)	25	10 K-1 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G
	50	10 K-1 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G
	100	10 K-1 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G
	200	10 K-1 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G
967.15.51 4.5 W 30 kV (air) 45 kV (oil)	25	20 K-1 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G
	50	20 K-1 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G
	100	20 K-1 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G
	200	20 K-1 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G	10 K-5 G
967.15.76 5.5 W 35 kV (air) 52 kV (oil)	25	10 K-5 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G
	50	10 K-5 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G
	100	10 K-5 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G
	200	10 K-5 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G
967.25.90 10 W 45 kV (air) 67 kV (oil)	25	20 K-5 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G
	50	20 K-5 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G
	100	20 K-5 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G
	200	20 K-5 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G	20 K-10 G

Other resistance values and temperature coefficients upon request.

DIMENSIONS							
TYPES	W [width]	C1	G	L [length]	R [raster spacing]	Unit	Weight [g]
967.3.25	3.8 (0.2)	36 (1.42)	2.5 (0.1)	25.4 (1.0)	22.9 (0.9)	mm (inches)	0.70
967.3.38	3.8 (0.15)	36 (1.42)	2.5 (0.1)	38.0 (1.5)	35.7 (1.41)	mm (inches)	0.52
967.5.13	5.0 (0.2)	36 (1.42)	2.5 (0.1)	12.7 (0.5)	10.2 (0.4)	mm (inches)	0.54
967.7.51	7.0 (0.3)	36 (1.42)	2.5 (0.1)	51.9 (2.04)	48.0 (1.89)	mm (inches)	1.60
967.8.26	8.0 (0.31)	36 (1.42)	2.5 (0.1)	25.4 (1.0)	22.5 (0.89)	mm (inches)	0.93
967.13.38	13.0 (0.51)	36 (1.42)	2.5 (0.1)	38.5 (1.52)	36.0 (1.42)	mm (inches)	2.20
967.15.30	15.0 (0.59)	36 (1.42)	2.5 (0.1)	30.0 (1.18)	22.1 (0.87)	mm (inches)	2.00
967.15.51	15.0 (0.59)	36 (1.42)	2.5 (0.1)	50.8 (2.0)	48.3 (1.9)	mm (inches)	3.42
967.15.76	15.5 (0.61)	36 (1.42)	2.5 (0.1)	76.2 (3.0)	73.20 (2.88)	mm (inches)	5.10
967.25.90	25.4 (1.0)	36 (1.42)	2.5 (0.1)	88.9 (3.45)	85.6 (3.37)	mm (inches)	10.0

Optional contact PIN - C2: 9 (0.35)

SAMPLE ORDER					
HVR 967.3.38 Type	A Connections	B Cover	100M Resistance value	1 % Tolerance	TC25 Temperature coefficient
	<b>A = axial*</b>	G = glass	R = Ω	0.5 %	25 ppm/°C
	<b>R = radial*</b>	<b>B = operation in air*</b>	K = KΩ	<b>1.0 %*</b>	50 ppm/°C
	P = PIN	D = operation in oil	M = MΩ	2.0 %	<b>100 ppm/°C*</b>
		U = encasing	G = GΩ	5.0 %	200 ppm/°C
				10.0 %	
				20.0 %	

\* standard

DERATING CURVE

