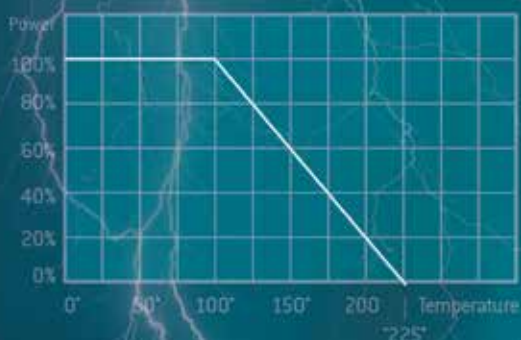




# HIGH VOLTAGE RESISTORS

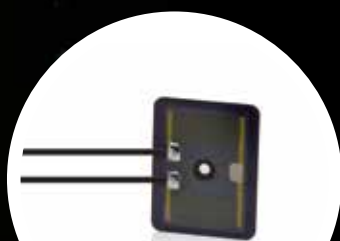
## Product Range



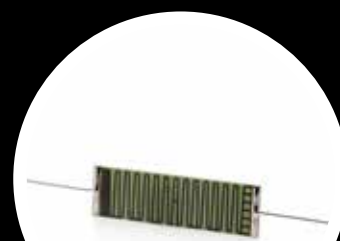
▶ HVR 969



▶ POC 400



▶ PLR/PLR-T0



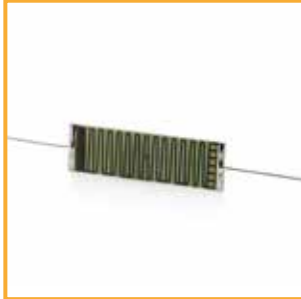
▶ HVR 967

# METALLUX – HIGH VOLTAGE RESISTORS



## HVR 967

### HIGH VOLTAGE RESISTOR HVR 967



Types	Dimensions W x L [mm (inches)]	Resistance values [Ω]	Tolerance [%]	TC [ppm/K]	Nominal power at 40°C [W]	Operating voltage KV <sub>DC</sub> in air (in oil)	VCR typ. [ppm/V]
967.3.25	3.8 (0.15) x 25.4 (1.0)	2 K – 2 G	from 0.5	from 25	1.0	8.0 (12.0)	< 2
967.3.38	3.8 (0.15) x 38.0 (1.5)	4 K – 3 G	from 0.5	from 25	1.5	10.0 (15.0)	< 2
967.5.13	5.0 (0.2) x 12.7 (0.5)	2 K – 1 G	from 0.5	from 25	1.0	5.0 (7.5)	< 2
967.7.51	7.0 (0.3) x 51.9 (2.04)	5 K – 5 G	from 0.5	from 25	2.0	20.0 (30.0)	< 0.9
967.8.26	8.0 (0.31) x 25.4 (1.0)	5 K – 2 G	from 0.5	from 25	2.0	10.0 (15.0)	< 2
967.13.38	13.0 (0.51) x 38.5 (1.52)	10 K – 5 G	from 0.5	from 25	3.0	15.0 (30.0)	< 1
967.15.30	15.0 (0.59) x 30.0 (1.18)	10 K – 5 G	from 0.5	from 25	3.0	15.0 (30.0)	< 1
967.15.51	15.0 (0.59) x 50.8 (2.0)	10 K – 5 G	from 0.5	from 25	4.5	30.0 (45.0)	< 1
967.15.76	15.5 (0.61) x 76.2 (3.0)	20 K – 10 G	from 0.5	from 25	5.5	35.0 (52.0)	< 0.8
967.25.90	25.4 (1.0) x 88.9 (3.45)	20 K – 10 G	from 0.5	from 25	10.0	45.0 (70.0)	< 0.5

**Electrical connection:** tinned copper wire Cu vz Ø 0.8 mm, axial or radial; on request pin 10 mm

## HVR 968

### HIGH VOLTAGE RESISTOR HVR 968



Types	Dimensions Ø x L [mm (inches)]	Resistance values [Ω]	Tolerance [%]	TC [ppm/K]	Nominal power at 40°C [W]	Operating voltage KV <sub>DC</sub> in air (in oil)	VCR typ. [ppm/V]
968.2	Ø 8.0 (0.31) x 27.0 (1.06)	9 K – 10 G	from 0.5	from 25	3.8	6.0 (13.5)	< 1.5
968.3	Ø 8.0 (0.31) x 37.0 (1.46)	6 K – 15 G	from 0.5	from 25	5.0	12.0 (18.0)	< 0.8
968.4	Ø 8.0 (0.31) x 47.0 (1.85)	10 K – 15 G	from 0.5	from 25	6.0	14.0 (21.0)	< 0.7
968.5	Ø 8.0 (0.31) x 52.0 (2.05)	10 K – 20 G	from 0.5	from 25	7.5	18.0 (27.0)	< 0.6
968.7	Ø 8.0 (0.31) x 78.0 (3.07)	20 K – 30 G	from 0.5	from 25	10.0	24.0 (36.0)	< 0.3
968.10	Ø 8.0 (0.31) x 103.0 (4.06)	30 K – 30 G	from 0.5	from 25	12.0	36.0 (54.0)	< 0.24
968.12	Ø 8.0 (0.31) x 128.0 (5.04)	35 K – 30 G	from 0.5	from 25	15.0	42.0 (63.0)	< 0.20
968.15	Ø 8.0 (0.31) x 153.0 (6.02)	50 K – 30 G	from 0.5	from 25	17.0	54.0 (81.0)	< 0.16

**Options:** timesaving, secure assembly by brass end caps wired or with M4 thread

## HVR 969

### HIGH VOLTAGE RESISTOR HVR 969



Types	Dimensions Ø x L [mm (inches)]	Resistance values [Ω]	Tolerance [%]	TC [ppm/K]	Nominal power at 40°C [W]	Operating voltage KV <sub>DC</sub> in air (in oil)	VCR typ. [ppm/V]
969.11	Ø 13.5 (0.53) x 81.0 (3.19)	10 K – 5 G	from 0.5	from 25	11.0	24.0 (32.0)	< 0.15
969.23	Ø 13.5 (0.53) x 156.0 (6.14)	10 K – 10 G	from 0.5	from 25	23.0	48.0 (72.0)	< 0.15
969.54	Ø 30.0 (1.18) x 158.0 (6.22)	15 K – 10 G	from 0.5	from 25	54.0	48.0 (72.0)	< 0.15
969.71	Ø 30.0 (1.18) x 208.0 (8.19)	25 K – 15 G	from 0.5	from 25	71.0	64.0 (96.0)	< 0.15
969.105	Ø 30.0 (1.18) x 308.0 (12.13)	35 K – 25 G	from 0.5	from 25	105.0	96.0 (148.0)	< 0.15

**Options:** timesaving, secure assembly by brass end caps with M4 or M8 thread

All resistors are covered to protect them against any environmental influences. Nature of the covering depends on the prevailing operational conditions. Resistors can change their characteristics depending on respective environmental influences. We recommend a qualification test under actual operational conditions. Supporting information will gladly be provided on request.

# METALLUX – HIGH VOLTAGE RESISTORS



## HPR 967 HIGH VOLTAGE PRECISION RESISTOR HPR 967



Types	Dimensions W x L [mm (inches)]	Resistance values [Ω]	Tolerance [%]	TC [ppm/K]	Nominal power at 40°C [W]	Operating voltage KV <sub>DC</sub> in air (in oil)	VCR typ. [ppm/V]
967.3.25	3.8 (0.15) x 25.4 (1.0)	2 K – 2 G	from 0.1	from 15	0.7	8.0 (12.0)	< 1
967.3.38	3.8 (0.15) x 38.0 (1.5)	4 K – 3 G	from 0.1	from 15	1.0	10.0 (15.0)	< 1
967.5.13	5.0 (0.2) x 12.7 (0.5)	2 K – 1 G	from 0.1	from 15	0.7	5.0 (7.5)	< 2
967.8.26	8.0 (0.31) x 25.4 (1.0)	5 K – 2 G	from 0.1	from 15	1.4	10.0 (15.0)	< 0.3
967.13.38	13.0 (0.51) x 38.5 (1.52)	10 K – 5 G	from 0.1	from 15	2.0	15.0 (22.0)	< 1
967.15.30	15.0 (0.59) x 30.0 (1.18)	10 K – 5 G	from 0.1	from 15	2.0	15.0 (22.0)	< 0.4
967.15.51	15.0 (0.59) x 50.8 (2.0)	10 K – 5 G	from 0.1	from 15	3.0	30.0 (45.0)	< 0.3
967.25.90	25.4 (1.0) x 88.9 (3.45)	20 K – 10 G	from 0.1	from 15	8.0	45.0 (70.0)	< 0.15

**Electrical connection:** tinned copper wire Cu vz Ø 0.8 mm, axial or radial; on request pin 10 mm

## HPR 968 HIGH VOLTAGE PRECISION RESISTOR HPR 968



Types	Dimensions Ø x L [mm (inches)]	Resistance values [Ω]	Tolerance [%]	TC [ppm/K]	Nominal power at 40°C [W]	Operating voltage KV <sub>DC</sub> in air (in oil)	VCR typ. [ppm/V]
968.2	Ø 8.0 (0.31) x 27.0 (1.06)	9 K – 10 G	from 0.1	from 15	2.6	9.0 (15.0)	< 0.75
968.3	Ø 8.0 (0.31) x 37.0 (1.46)	6 K – 15 G	from 0.1	from 15	3.0	12.0 (22.0)	< 0.4
968.5	Ø 8.0 (0.31) x 52.0 (2.05)	10 K – 20 G	from 0.1	from 15	5.0	18.0 (30.0)	< 0.3
968.7	Ø 8.0 (0.31) x 78.0 (3.07)	20 K – 30 G	from 0.1	from 15	6.5	24.0 (48.0)	< 0.15
968.10	Ø 8.0 (0.31) x 103.0 (4.06)	30 K – 30 G	from 0.1	from 15	8.0	36.0 (54.0)	< 0.12
968.12	Ø 8.0 (0.31) x 128.0 (5.04)	35 K – 30 G	from 0.1	from 15	10.0	42.0 (63.0)	< 0.1
968.15	Ø 8.0 (0.31) x 153.0 (6.02)	50 K – 30 G	from 0.1	from 15	12.0	54.0 (81.0)	< 0.08

**Options:** timesaving, secure assembly by brass end caps wired or with M4 thread

## HPR 969 HIGH VOLTAGE PRECISION RESISTOR HPR 969



Types	Dimensions Ø x L [mm (inches)]	Resistance values [Ω]	Tolerance [%]	TC [ppm/K]	Nominal power at 40°C [W]	Operating voltage KV <sub>DC</sub> in air (in oil)	VCR typ. [ppm/V]
969.11	Ø 13.5 (0.53) x 81.0 (3.19)	10 K – 5 G	from 0.1	from 15	7.0	24.0 (32.0)	< 0.1
969.23	Ø 13.5 (0.53) x 156.0 (6.14)	10 K – 10 G	from 0.1	from 15	15.0	48.0 (72.0)	< 0.1
969.54	Ø 30.0 (1.18) x 158.0 (6.22)	15 K – 10 G	from 0.1	from 15	36.0	48.0 (72.0)	< 0.1
969.71	Ø 30.0 (1.18) x 208.0 (8.19)	25 K – 15 G	from 0.1	from 15	54.0	64.0 (96.0)	< 0.1
969.105	Ø 30.0 (1.18) x 308.0 (12.13)	35 K – 25 G	from 0.1	from 15	75.0	96.0 (148.0)	< 0.1

**Options:** timesaving, secure assembly by brass end caps with M4 or M8 thread

## HVI 968 HIGH VOLTAGE IMPULSE RESISTOR HVI 968



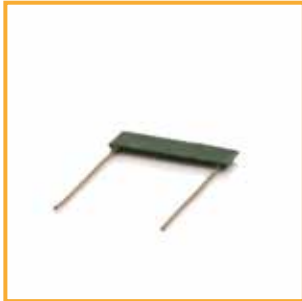
Types	Dimensions Ø x L [mm (inches)]	Resistance values [Ω]	Tolerance [%]	TC [ppm/K]	Nominal power at 40°C [W]	Operating voltage KV <sub>DC</sub> in air (in oil)	Pulse energy [J]
968.3	Ø 8.0 (0.31) x 37.0 (1.46)	50 R – 500 K	from 10	from 100	5.0	12.0 (22.0)	19
968.5	Ø 8.0 (0.31) x 52.0 (2.05)	50 R – 500 K	from 10	from 100	7.5	18.0 (30.0)	25
968.10	Ø 8.0 (0.31) x 103.0 (4.06)	50 R – 500 K	from 10	from 100	12.0	36.0 (54.0)	68

**Options:** timesaving, secure assembly by brass end caps wired or with M4 thread

# METALLUX – HIGH VOLTAGE RESISTORS



## HVI 967/HVID 967 HIGH VOLTAGE IMPULSE RESISTOR HVI 967/HVID 967



Types HVI	Dimensions W x L [mm (inches)]	Resistance values [Ω]	Tolerance [%]	TC [ppm/K]	Nominal power at 40°C [W]	Operating voltage KV <sub>DC</sub> in air (in oil)	Pulse energy [J]
9675.13	5.0 (0.2) x 12.7 (0.5)	50 R – 500 K	from 10	from 100	1.0	5.0 (7.5)	2
96715.51	15.0 (0.59) x 50.8 (2.0)	50 R – 500 K	from 10	from 100	4.5	30.0 (45.0)	36
96728.38	28.0 (1.1) x 38.0 (1.5)	50 R – 500 K	from 10	from 100	7.0	10.0 (15.0)	36
HVID [screen printed on both sides]							
9676.9	5.5 (0.22) x 9.0 (0.35)	50 R – 500 K	from 10	from 100	0.5	3.0 (5.0)	6
9676.11	5.5 (0.22) x 11.0 (0.43)	50 R – 500 K	from 10	from 100	0.5	3.5 (6.0)	8
9676.13	5.5 (0.22) x 13.0 (0.51)	50 R – 500 K	from 10	from 100	0.8	5.0 (7.5)	10
9678.21	8.0 (0.31) x 21.0 (0.83)	50 R – 500 K	from 10	from 100	1.0	7.0 (10)	24
96711.21	11.0 (0.43) x 21.0 (0.83)	50 R – 500 K	from 10	from 100	1.5	8.0 (12.0)	30
96711.26	11.0 (0.43) x 26.0 (1.02)	50 R – 500 K	from 10	from 100	2.0	10.0 (15.0)	40

**Electrical connection:** tinned copper wire Cu vz Ø 0.8 mm, axial or radial; on request pin 10 mm

## HVI 969 HIGH VOLTAGE IMPULSE RESISTOR HVI 969



Types	Dimensions Ø x L [mm (inches)]	Resistance values [Ω]	Tolerance [%]	TC [ppm/K]	Nominal power at 40 °C [W]	Operating voltage KV <sub>DC</sub> in air (in oil)	Pulse energy [J]
969.11	Ø13.5 (0.53) x 81.0 (3.19)	50 R – 500 K	from 10	from 100	11.0	24.0 (32.0)	108
969.54	Ø30.0 (1.18) x 158.0 (6.22)	50 R – 500 K	from 10	from 100	54.0	48.0 (72.0)	510
969.71	Ø30.0 (1.18) x 208.0 (8.19)	50 R – 500 K	from 10	from 100	71.0	64.0 (96.0)	806
969.105	Ø30.0 (1.18) x 308.0 (12.13)	50 R – 500 K	from 10	from 100	105.0	96.0 (148.0)	1,238

**Options:** timesaving, secure assembly by brass end caps with M4 or M8 thread

## HVD HIGH VOLTAGE DIVIDER HVD



Types	Dimensions W x L / Ø x L [mm (inches)]	Resistance values Ratio [Ω]	Tolerance Ratio [%]	TC Ratio [ppm/K]	Nominal power at 40 °C [W]	Operating voltage KV <sub>DC</sub> in air (in oil)	VCR typ. [ppm/V]
9678.26 [alt 1000.2]	8.0 (0.31) x 26.0 (1.02)	1.5 M – 150 M	bis 0.1	bis 10	0.5	8.0 (12.0)	< 1
96713.38 [alt 1000.3]	13.0 (0.51) x 38.5 (1.52)	5 M – 500 M	bis 0.1	bis 10	1.2	15.0 (22.0)	< 0.4
96715.30	15.0 (0.59) x 30.0 (1.18)	5 M – 500 M	bis 0.1	bis 10	1.0	15.0 (22.0)	< 0.4
96715.51 [alt 1000.4]	15.0 (0.59) x 50.8 (2.0)	10 M – 1.5 G	bis 0.1	bis 10	1.8	24.0 (36.0)	< 0.3
96715.77 [alt 1000.5]	15.5 (0.61) x 77.5 (3.05)	15 M – 2 G	bis 0.1	bis 10	2.4	32.0 (49.0)	< 0.2
968.5	Ø 8.0 (0.31) x 52.0 (2.05)	15 M – 2 G	bis 0.1	bis 10	3.0	15.0 (22.0)	< 0.2
968.7	Ø 8.0 (0.31) x 78.0 (3.07)	15 M – 2 G	bis 0.1	bis 10	6.0	20.0 (30.0)	< 0.15
969.23 [alt 2000.23]	Ø 13.5 (0.53) x 156.0 (6.14)	20 M – 3 G	bis 0.1	bis 10	10.0	45.0 (60.0)	< 0.1
969.105 [alt 2000.105]	Ø 30.0 (1.18) x 308.0 (12.13)	20 M – 3 G	bis 0.1	bis 10	50.0	90.0 (120.0)	< 0.1

**Electrical connection:** tinned copper wire Cu vz Ø 0.8 mm, axial or radial; on request pin 10 mm for the serie HVD 967. Timesaving, secure assembly by brass end caps (wired or M4 thread) for the serie HVD 968 or by end caps (M8 thread) for the serie HVD 969.

# METALLUX – HIGH VOLTAGE RESISTORS



## HVS 967

### HIGH VOLTAGE SMD RESISTOR HVS 967



Types	Dimensions W x L [mm (inches)]	Resistance values [ $\Omega$ ]	Tolerance [%]	TC [ppm/K]	Nominal power at 40°C [W]	Operating voltage KV <sub>DC</sub> in air (in oil)	
9673.25	3.8 (0.15) x 25.4 (1.0)	2 K – 2 G	from 0.5	from 25	1.0	8.0 (12.0)	
9675.13	5.0 (0.2) x 12.7 (0.5)	4 K – 3 G	from 0.5	from 25	1.0	5.0 (7.5)	
9676.12	6.35 (0.25) x 12.7 (0.5)	4 K – 3 G	from 0.5	from 25	1.0	5.0 (7.5)	
9676.25	6.35 (0.25) x 25.4 (1.0)	2 K – 1 G	from 0.5	from 25	1.5	10.0 (15.0)	
9678.26	8.0 (0.31) x 25.4 (1.0)	2 K – 1 G	from 0.5	from 25	2.0	10.0 (15.0)	

## POC 400

### HIGH VOLTAGE POTENTIOMETER POC 400



Types	Dimensions L x W x H [mm (inches)]	Resistance values [ $\Omega$ ]	Tolerance [%]	TC abs./ratio [ppm/K]	Linearity [%]	Operating voltage KV <sub>DC</sub> in air	Degree of protection
400	50.0 (1.97) x 35.0 (1.38) x 22.5 (0.89)	5 M, 10 M, 15 M	± 10	50	± 4	2.5	IP 60

## PLR-T0/PLR

### POWER RESISTOR, THICK-FILM PLR



Types	Dimensions L x W [mm (inches)]	Resistance values [ $\Omega$ ]	Tolerance [%]	Operating voltage [V]	Nominal power at 40°C [W]	Degree of protection
PLR 100.55.43	55.0 (2.17) x 43.0 (1.69)	20 R – 1 K	± 10	1,000	100	IP 00
PLR 100.61.41	61.0 (2.4) x 41.0 (1.61)	20 R – 1K	± 10	1,000	100	IP 00
PLR 180.145.20	145.0 (5.71) x 20.0 (0.79)	50 R – 500 R	± 10	1,000	180	IP 00
PLR 200.70.51	70.0 (2.76) x 51.0 (2.0)	20 R – 1 K	± 10	1,000	200	IP 00
PLR 300.70.61	70.0 (2.76) x 61.0 (2.4)	20 R – 1 K	± 10	1,000	300	IP 00
PLR 900.188.75	188.0 (7.4) x 75.0 (2.95)	100 R – 500 R	± 10	1,000	900	IP 00

**Electrical connections:**

L = solder pad without tin; LV = solder pad tinned; K = cable 100 mm, AWG20, UL1015, sw; M = push contact 2.8;

OE = solder contact

\* other values on request

\*\* values are only valid if resistor is connected to a cooler

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System Certification  
to ISO 9001:2015