

High Voltage Resistors DHVR – Non-Inductive

- it is vitreous Enamel coating for better resistor protection
- Can withstand 3-5 times the rated power for short time
- Standard resistor rated power : 0.5W - 500W
- Standard resistance range : 10k ohm - 100G ohm
- Tolerance : +/-1%, +/-2%, +/-5% and +/-10%
- Surge voltage up to 200kV
- Support High Pulse Current requirement
- Rated temperature range : -55C - 70C
- If Resistor will be immersed in high voltage insulation oil or SF6, please let us know. We support this requirement.

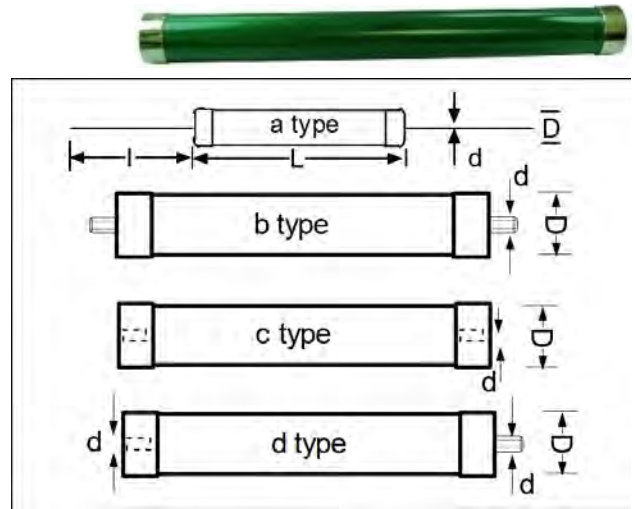
Applications :

High Voltage divider / Measuring resistor / Electrostatics /
Over voltage protection / Capacitor Discharge

Please provide following working conditions :

- Resistance value and Resistor Power
 - AC or DC voltage, if there is Surge Voltage, please tell the peak to peak voltage range, duty cycle and repetition rate.
 - Surge Voltage, if it is larger than the rated voltage $SQR(\text{Watt} * \text{Ohm})$
 - for AC and Surge Voltage, can you tell the estimated duty cycle, repetition rate or frequency
- The above conditions can help us offer suitable High Voltage Resistor for your applications.

DHVR type : For Resistor power that not listed above, please contact us for details.



Rated Power Wattage 70C	Resistor package type	Dimensions in mm *				Resistance range ohm	Temperature Coefficient ppm/C	Resistance Tolerance	Max. Pulse Voltage KV ###		
		Length L	Diameter D	Lead length	Lead diameter						
0.5W	a	7	2.5	30+/-1	0.6	<= 400		0.35			
1W	a	13+/-1	4.5		0.8			10k~100M	2.5		
2W	a	17+/-1	6.5		0.8			10k~100M	4.0		
3W	a	25+/-1	8		0.8			10k~500M	4.8		
4W	a	35	8		0.8			10k~500M	10		
5W	a	37 / 42 +/-1	11		1			100k~3G	8 / 10		
10W	a	71 / 84 +/-2	11 / 12		1			5k~10G	25 / 32		
20W	a	103 / 114 +/-2	11 / 12		1			5k~20G	40 / 45		
25W	a	126 / 138 +/-2	11 / 12		1			5k~40G	50 / 55		
30W	b c d	90+/-2	16		-			M5	5k~5G	+/-1% +/-2% +/-5% +/-10%	25
40W		100+/-2	27	-	M5 / 6	5k~10G	30				
50W		133+/-2	27			10k~40G	45				
60W		160+/-2	27			20k~60G	58				
70W		180+/-2	27			20k~60G	62				
80W		200+/-2	27			50k~60G	68				
90W		210+/-2	27			50k~75G	82				
100W		260 / 150 +/-2	27 / 35			50k~85G	100				
150W		310 / 210+/-2 / 154+/-2	27 / 28 / 60			-	M5 / 6 / 8	50k~100G	+/-250		130 / 55
200W		260+/-2 / 210+/-2	28 / 42			-	M8	50k~100G	+/-400		82
250W		270+/-2 / 180+/-2	42 / 60			-	M8				110 / 62
300W		310+/-2	37	-	M8	130					
400W		420 +/-2	42	-	M8	180					
500W		540 / 360 +/-2	42 / 62	-	M8 / 10	50k~100G	240				

* Resistor sizes might be vary depend on pulse voltage, load current, pulse rate and ambient temperature etc.

** We support lower Temperature Coefficient requirement

For a given rated power resistor, the actual max. pulse voltage will depend on the rated resistance value, pulse width, duty cycle, number of pulses per second/minute, ambient temperature, humidity and resistor surface cleanness.

For a given rated power Resistor, the actual max. pulse voltage is depended on the rated resistance value.

Support lower Temperature Coefficient requirement.

Part Number :

Series + type + Rated Power + Resistance Value (ohm) + Resistance Tolerance

DHVR	a	1 - 500W	10k ohm= 10KR	F = +/-1%
	b		100k ohm= 100kR	G = +/-2%
	c		1M ohm = 1MR	J = +/-5%
	d		100G ohm = 100GR	K = +/-10%

High Voltage Pulse Power Resistors DHVRC – Non-Inductive

This series is for High Voltage, High Frequency, Pulse Energy and Pulse Current applications.

Resistance range : 1 ohm to 5k ohm

Tolerance : +/-1%, +/-2%, +/-5% and +/-10%

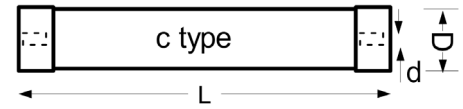
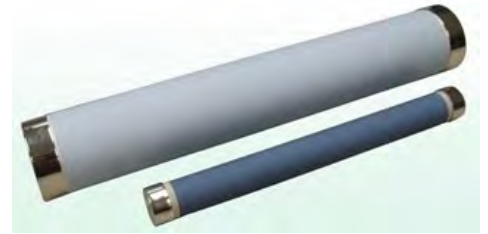
Temperature coefficient : +/-50ppm/C, +/-200ppm/C

Support lower Temperature Coefficient requirement.

Resistor package type : c

The max. Voltage depends on the rated resistance value.

For a given rated power, the actual max. pulse voltage is depended on the rated resistance value.



DHVRC type :

Rated Power Wattage 70C	Maximum Pulse Voltage kV #	Dimensions D x L in mm *
20W	0.5	25 x 50
30W	25	25 x 70
50W	40	25 x 125
60W	52	25 x 150
70W	60	25 x 172
80W	78	25 x 200
100W	100	25 x 250
150W	125	25 x 300
170W	55	60 x 154
200W	82	60 x 180
250W	180	42 x 270
300W	125	form by two 150W resistors
500W	200	form by two 250W resistors

* Resistor sizes might be vary depend on pulse voltage, load current, pulse rate and ambient temperature etc.

For a given rated power resistor, the actual max. pulse voltage will depend on the rated resistance value, pulse width, duty cycle, number of pulses per second/minute and ambient temperature, humidity and resistor surface cleanness.

For Resistor power that not listed above, please contact us for details.

Part Number :

Series + Rated Power + Resistance Value (ohm) + Resistance Tolerance

DHVRC	1 - 500W	5 ohm = 5R	J = +/-5%
		10 ohm = 10R	K = +/-10%
		100 ohm = 100R	
		1k ohm = 1kR	