



# Carbon Film (Metal Alloy) Resistors, Special Purpose, High Voltage



## MATERIAL SPECIFICATIONS

**Element:** metal alloy

**Core:** alkaline earth porcelain

## FEATURES

- HVW and MVW are uncoated; HVX (blue flameproof coating) available on request
- High voltage (up to 7.5 kV)
- Semi-precision:  $\pm 5\%$ ,  $\pm 10\%$ ,  $\pm 20\%$
- Axial leads: HVW, HVX = tinned copper  
MVW = copper clad steel
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



RoHS\*  
Available

### Note

\* This datasheet provides information about parts that are RoHS-compliant and / or parts that are non RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details

## STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	HISTORICAL MODEL	POWER RATING $P_{70^{\circ}\text{C}}$ W	MAXIMUM WORKING VOLTAGE <sup>(2)</sup> V	RESISTANCE RANGE <sup>(2)</sup> $\Omega$	TOLERANCE $\pm\%$
HVW1/2	HVW-1/2	1.0	3.5K	1K to 25M	5, 10, 20
HVX1/2	HVX-1/2	1.0	3.5K	1K to 25M	5, 10, 20
MVW1/2	MVW-1/2	1.0	3.5K	1K to 25M	5, 10, 20
HVW3/4	HVW-3/4	1.5	7.5K	1K to 50M	5, 10, 20
HVX3/4	HVX-3/4	1.5	7.5K	1K to 50M	5, 10, 20
MVW3/4	MVW-3/4	1.5	7.5K	1K to 50M	5, 10, 20

### Notes

(1) All resistance values are calibrated at 100 V<sub>DC</sub>. Calibration at other voltages upon request

(2) Continuous working voltage shall be  $\sqrt{P \times R}$  or maximum working voltage, whichever is less

## GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: HVW1/226K40KLB (preferred part numbering format)

H V W 1 / 2 2 6 K 4 0 K L B

GLOBAL MODEL (see Standard Electrical Specifications table)	RESISTANCE VALUE K = k $\Omega$ M = M $\Omega$ 1K000 = 1.0 k $\Omega$ 47K00 = 47 k $\Omega$ 50M = 50 M $\Omega$	TOLERANCE CODE J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	PACKAGING CODE <sup>(1)(2)</sup> EL = lead (Pb)-free, lacer EK = lead (Pb)-free, bulk EE = lead (Pb)-free, reel LB = tin/lead, lacer BJ = tin/lead, bulk RC = tin/lead, reel	SPECIAL Blank = standard (dash number) (up to 3 digits) from 1 to 999 as applicable
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Historical Part Number Example: HVW-1/2 26.4K 10% (will continue to be accepted)

HVW-1/2	26.4K	10%	L05
HISTORICAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING

### Notes

(1) MVW products do not contain lead. Use tin/lead packaging codes to specify these lead free MVW products. Use lead (Pb)-free packaging codes to specify lead (Pb)-free HVW and HVX products

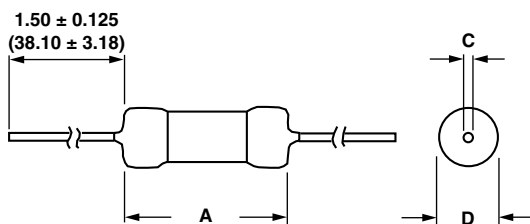
(2) Some packaging codes are model specific

- For additional information on packaging, refer to the Through-Hole Resistor Packaging document ([www.vishay.com/doc?31544](http://www.vishay.com/doc?31544))

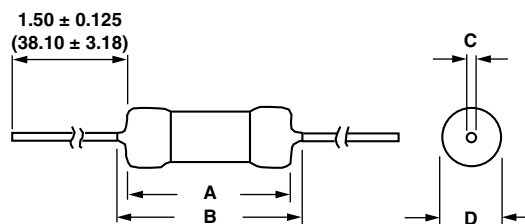


**DIMENSIONS** in inches (millimeters)

**HVW/MVW**  
(Uncoated)

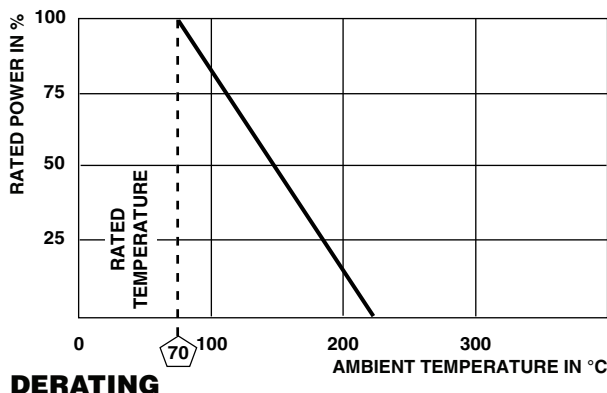


**HVX**  
(Silicone coated)



DIMENSIONS HVW/MVW			
GLOBAL MODEL	A	C	D (Max.)
HVW1/2	0.545 ± 0.015 (13.84 ± 0.38)	0.032 ± 0.002 (0.81 ± 0.05)	0.155 (3.94)
MVW1/2	0.545 ± 0.015 (13.84 ± 0.38)	0.032 ± 0.002 (0.81 ± 0.05)	0.155 (3.94)
HVW3/4	0.895 ± 0.010 (22.73 ± 0.25)	0.032 ± 0.002 (0.81 ± 0.05)	0.155 (3.94)
MVW3/4	0.895 ± 0.010 (22.73 ± 0.25)	0.032 ± 0.002 (0.81 ± 0.05)	0.155 (3.94)

DIMENSIONS HVX				
GLOBAL MODEL	A (Max.)	B (Max.)	C	D (Max.)
HVX1/2	0.651 (16.54)	0.680 (17.27)	0.032 ± 0.002 (0.81 ± 0.05)	0.180 (4.57)
HVX3/4	0.988 (25.10)	1.062 (26.97)	0.032 ± 0.002 (0.81 ± 0.05)	0.180 (4.57)



**Note**

- For operation in oil or inert atmosphere derating, consult factory

PACKAGING			
GLOBAL MODEL	PACKAGING TYPE	PACKAGING CODE	
		LEAD (Pb)-BEARING	LEAD (Pb)-FREE
MVW1/2, MVW3/4	BULK	n/a	BJ
	TAPE/REEL	n/a	RC
	LACER	n/a	LB
HVW1/2, HVW3/4, HVX1/2, HVX3/4	BULK	BJ	EK
	TAPE/REEL	RC	EE
	LACER	LB	EL



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