



# 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 15 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\***  
COMPLIANT

### Note

\* Lead (Pb)-containing terminations are not RoHS-compliant. Exemptions may apply.

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
HVW001	HVW-1	2.5	7.5K	1K to 75M	5, 10, 20
HVX001	HVX-1	2.5	7.5K	1K to 75M	5, 10, 20
HVW002	HVW-2	5.0	15.0K	1K to 200M	5, 10, 20
HVX002	HVX-2	5.0	15.0K	1K to 200M	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: HVW00126K40KL B** (preferred part numbering format)

<b>H</b>	<b>V</b>	<b>W</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>K</b>	<b>4</b>	<b>0</b>	<b>K</b>	<b>L</b>	<b>B</b>			
GLOBAL MODEL (See Standard Electrical Specifications table)			RESISTANCE VALUE K = k $\Omega$ M = M $\Omega$ 1K000 = 1.0 k $\Omega$ 47K00 = 47 k $\Omega$ 200M0 = 200 M $\Omega$				TOLERANCE CODE J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$			PACKAGING CODE <sup>(3)(4)</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			

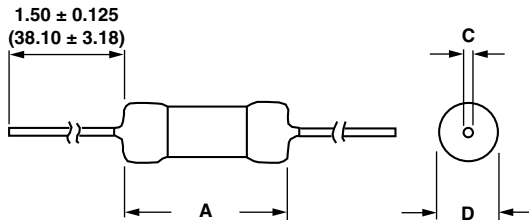
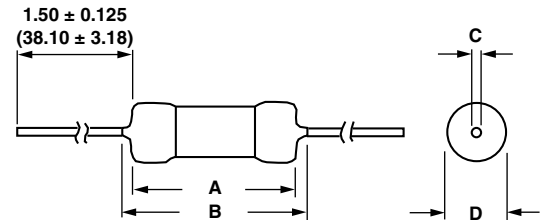
**Historical Part Numbering: HVW-126.4K10 %** (will continue to be accepted)

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

### Notes

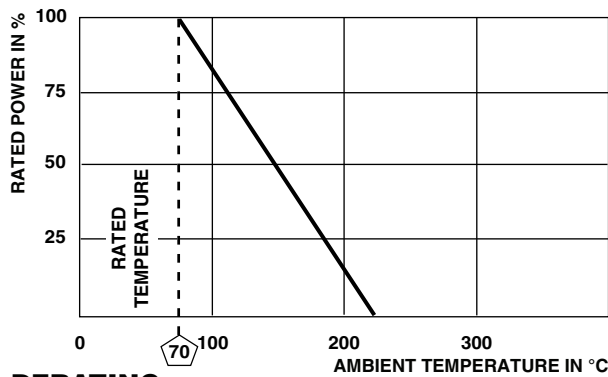
- (3) MVW products do not contain lead. Use tin/lead packaging codes to specify these lead free MVW products. Use lead (Pb)-free packaging codes to specify lead (Pb)-free HVW and HVX products.  
 (4) Some packaging codes are model specific.  
 • For additional information on packaging, refer to the Through-Hole 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)
HVW001	0.920 ± 0.020 (23.37 ± 0.51)	0.032 ± 0.002 (0.81 ± 0.05)	0.275 (6.99)
HVW002	2.080 ± 0.030 (52.83 ± 0.76)	0.032 ± 0.002 (0.81 ± 0.05)	0.275 (6.99)

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)
HVX001	0.988 (25.10)	1.062 (26.97)	0.032 ± 0.002 (0.81 ± 0.05)	0.310 (7.87)
HVX002	2.150 (54.61)	2.200 (55.88)	0.032 ± 0.002 (0.81 ± 0.05)	0.310 (7.87)


**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
HVW001, HVW002, HVX001, HVX002	LACER	LB	EL



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