## MVW, HVW, HVX



Vishay Dale

# 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: ± 5 %, ± 10 %, ± 20 %
- Axial leads: HVW, HVX = Tinned copper MVW = Copper clad steel



RoHS

COMPLIANT

 Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

#### Note

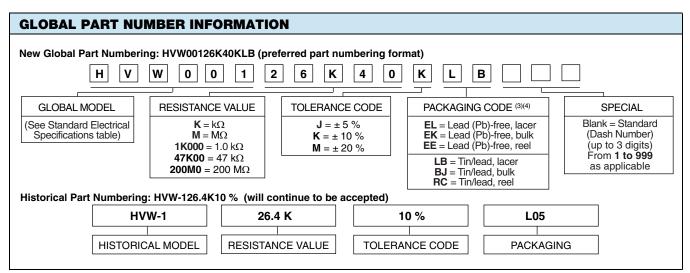
Lead (Pb)-containing terminations are not RoHS-compliant. Exemptions may apply.

STANDARD ELECTRICAL SPECIFICATIONS						
GLOBAL MODEL	HISTORICAL MODEL	POWER RATING P <sub>70 °C</sub> W	MAXIMUM WORKING VOLTAGE <sup>(2)</sup> V	RESISTANCE RANGE <sup>(2)</sup> Ω	TOLERANCE ± %	
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

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

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



### Notes

<sup>(3)</sup> 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.

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(4) Some packaging codes are model specific.

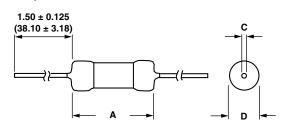
For additional information on packaging, refer to the Through-Hole Resistor Packaging document (www.vishav.com/doc?31544).

For technical questions, contact: ff2aresistors@vishay.com



### **DIMENSIONS** in inches (millimeters)

### HVW/MVW (Uncoated)

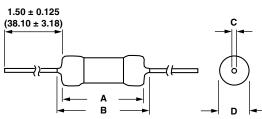


DIMENSIONS HVW/MVW					
GLOBAL MODEL	Α	с	D (Max.)		
HVW1/2	0.545 ± 0.015	0.032 ± 0.002	0.155		
	(13.84 ± 0.38)	(0.81 ± 0.05)	(3.94)		
MVW1/2	0.545 ± 0.015	0.032 ± 0.002	0.155		
	(13.84 ± 0.38)	(0.81 ± 0.05)	(3.94)		
HVW3/4	0.895 ± 0.010	0.032 ± 0.002	0.155		
	(22.73 ± 0.25)	(0.81 ± 0.05)	(3.94)		
MVW3/4	0.895 ± 0.010	0.032 ± 0.002	0.155		
	(22.73 ± 0.25)	(0.81 ± 0.05)	(3.94)		
HVW001	0.920 ± 0.020	0.032 ± 0.002	0.275		
	(23.37 ± 0.51)	(0.81 ± 0.05)	(6.99)		
HVW002	2.080 ± 0.030	0.032 ± 0.002	0.275		
	(52.83 ± 0.76)	(0.81 ± 0.05)	(6.99)		

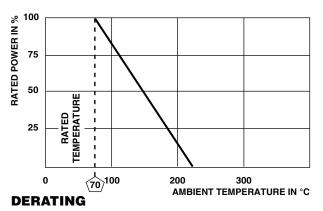
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### HVX (Silicone coated)





DIMENSIONS HVX						
GLOBAL	A	B	с	D		
MODEL	(Max.)	(Max.)		(Max.)		
HVX1/2	0.651	0.680	0.032 ± 0.002	0.180		
	(16.54)	(17.27)	(0.81 ± 0.05)	(4.57)		
HVX3/4	0.988	1.062	0.032 ± 0.002	0.180		
	(25.10)	(26.97)	(0.81 ± 0.05)	(4.57)		
HVX001	0.988	1.062	0.032 ± 0.002	0.310		
	(25.10)	(26.97)	(0.81 ± 0.05)	(7.87)		
HVX002	2.150	2.200	0.032 ± 0.002	0.310		
	(54.61)	(55.88)	(0.81 ± 0.05)	(7.87)		



#### Note

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

PACKAGING					
GLOBAL MODEL	PACKAGING TYPE	PACKAGING CODE			
GLOBAL MODEL		LEAD (Pb)-BEARING	LEAD (Pb)-FREE		
	BULK	n/a	BJ		
MVW1/2, MVW3/4	TAPE/REEL	n/a	RC		
	LACER	n/a	LB		
	BULK	BJ	EK		
HVW1/2, HVW3/4, HVX1/2, HVX3/4	TAPE/REEL	RC	EE		
110/1/2; 110/0/4	LACER	LB	EL		
HVW001, HVW002, HVX001, HVX002	LACER	LB	EL		

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