



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 7.5 kV)
- Semi-precision: ± 5 %, ± 10 %, ± 20 %
- Axial leads: HVW, HVX = tinned copper MVW = copper clad steel



 Material categorization: for definitions of compliance please see <a href="https://www.vishay.com/doc?99912">www.vishay.com/doc?99912</a>

### 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 <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

### 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 NUM	GLOBAL PART NUMBER INFORMATION						
New Global Part Numbering	New Global Part Numbering: HVW1/226K40KLB (preferred part numbering format)						
H V W 1	/ 2 2	6 K	4 0	K	В		
						7	
GLOBAL MODEL	RESISTANCE VALUE	TOLERAI CODE		ACKAGING CO	DE <sup>(1)(2)</sup>	SPECIAL	
(see Standard Electrical Specifications table)	K = kΩ $M = MΩ$ 1K000 = 1.0 $kΩ$ 47K00 = 47 $kΩ$ 50M = 50 $MΩ$	<b>J</b> = ± 5 <b>K</b> = ± 10 <b>M</b> = ± 20	) %     EI	EL = lead (Pb)-free, lacer EK = lead (Pb)-free, bulk EE = lead (Pb)-free, reel LB = tin/lead, lacer BJ = tin/lead, bulk		Blank = standard (dash number) (up to 3 digits) from <b>1 to 999</b> as applicable	
Historical Part Number Example: HVW-1/2 26.4K 10 % (will continue to be accepted)							
Thistorical Fart Number Example. 11747-172 20.410 To 70 (will containe to be accepted)							
HVW-1/2	26.4K		10 %			L05	
HISTORICAL MODEL	RESISTANCE VA	RESISTANCE VALUE		E 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.vishav.com/doc?31544)



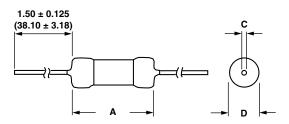


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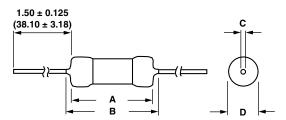
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## **DIMENSIONS** in inches (millimeters)

# HVW/MVW (Uncoated)

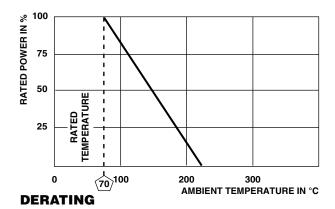


HVX	
(Silicone	coated)



DIMENSIONS HVW/MVW					
GLOBAL MODEL	А	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)		

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)	



## Note

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

PACKAGING				
CLOPAL MODEL	DAOKACINO TYPE	PACKAGING CODE		
GLOBAL MODEL	PACKAGING TYPE	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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