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# 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 www.vishay.com/doc?99912

#### 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

- (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	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	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING CODE (1)(2)	SPECIAL		
(see Standard Electrical Specifications table)	K = kΩ $M = MΩ$ 1K000 = 1.0 $kΩ$ 47K00 = 47 $kΩ$	$J = \pm 5 \%$ $K = \pm 10 \%$ $M = \pm 20 \%$	EL = lead (Pb)-free, lacer EK = lead (Pb)-free, bulk EE = lead (Pb)-free, reel LB = tin/lead, lacer	(dash number)		
	$50M = 50 \text{ M}\Omega$		BJ = tin/lead, lacel BJ = tin/lead, bulk RC = tin/lead, reel	as applicable		
Historical Part Number Example: HVW-1/2 26.4K 10 % (will continue to be accepted)						
HVW-1/2 26.4K			10 %	L05		
HISTORICAL MODEL RESISTANC		ALUE	TOLERANCE CODE	PACKAGING		

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



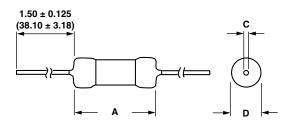


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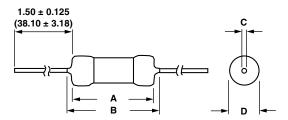
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## **DIMENSIONS** in inches (millimeters)

## HVW/MVW (Uncoated)

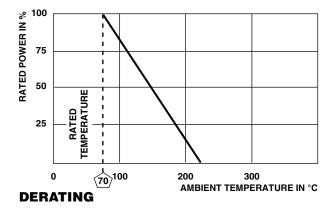


## HVX (Silicone coated)



DIMENSIONS HVW/MVW				
GLOBAL MODEL	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)	

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	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	
, 2,, 6, .	LACER	LB	EL	



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