

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 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 <u>www.vishay.com/doc?99912</u>

Note

⁶ 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°C} W	MAXIMUM WORKING VOLTAGE ⁽²⁾ V	RESISTANCE RANGE ⁽²⁾ 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_{DC}. 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 Numberin	New Global Part Numbering: HVW1/226K40KLB (preferred part numbering format)					
H V W 1 / 2 2 6 K 4 0 K L B						
				4		
GLOBAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING CODE (1)(2	2) SPECIAL		
(see Standard Electrical	K = kΩ	$J = \pm 5 \%$	EL = lead (Pb)-free, lace			
Specifications table)	$\mathbf{M} = \mathbf{M}\Omega$	K = ± 10 %	EK = lead (Pb)-free, bull			
	1K000 = 1.0 kΩ	M = ± 20 %	EE = lead (Pb)-free, ree			
	47K00 = 47 kΩ		LB = tin/lead, lacer	from 1 to 999		
	50M = 50 MΩ		BJ = tin/lead, bulk	as applicable		
			RC = tin/lead, reel			
Historical Part Number Example: HVW-1/2 26.4K 10 % (will continue to be accepted)						
HVW-1/2	26.4K	26.4K 1		L05		
	20.41		10 %	200		
HISTORICAL MODEL	RESISTANCE VA	ALUE TO	ERANCE 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 (<u>www.vishay.com/doc?31544</u>)



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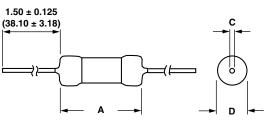
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DIMENSIONS in inches (millimeters)

HVW/MVW

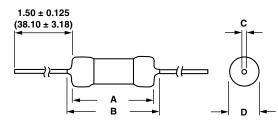




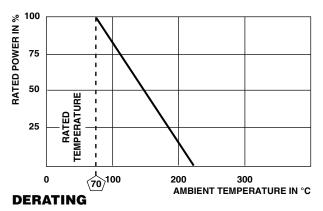
DIMENSIONS HVW/MVW				
GLOBAL MODEL	Α	С	D (Max.)	
HVW1/2	0.545 ± 0.015	0.032 ± 0.002	0.155	
	(13.84 ± 0.38)	(0.81 ± 0.05)	(3.94)	
MVW1/2	0.545 ± 0.015	0.032 ± 0.002	0.155	
	(13.84 ± 0.38)	(0.81 ± 0.05)	(3.94)	
HVW3/4	0.895 ± 0.010	0.032 ± 0.002	0.155	
	(22.73 ± 0.25)	(0.81 ± 0.05)	(3.94)	
MVW3/4	0.895 ± 0.010 (22.73 ± 0.25)	$\begin{array}{c} 0.032 \pm 0.002 \\ (0.81 \pm 0.05) \end{array}$	0.155 (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				
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	
	LACER	LB	EL	

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