



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: $\pm 5\%$, $\pm 10\%$, $\pm 20\%$
- Axial leads: HVW, HVX = Tinned copper
MVW = Copper clad steel
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

RoHS*
Available

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 $P_{70^{\circ}\text{C}}$ W	MAXIMUM WORKING VOLTAGE ⁽²⁾ V	RESISTANCE RANGE ⁽²⁾ Ω	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

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 Numbering: HVW1/226K40KLB (preferred part numbering format)

H	V	W	1	/	2	2	6	K	4	0	K	L	B			
GLOBAL MODEL (see Standard Electrical Specifications table)			RESISTANCE VALUE K = kΩ M = MΩ 1K000 = 1.0 kΩ 47K00 = 47 kΩ 50M = 50 MΩ				TOLERANCE CODE J = ± 5 % K = ± 10 % M = ± 20 %			PACKAGING CODE (1)(2) 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			

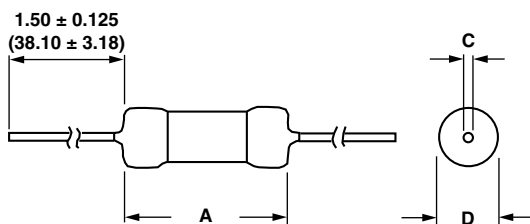
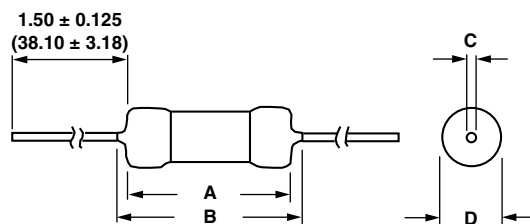
Historical Part Number example: HVW-1/2 26.4K 10 % (will continue to be accepted)

HVW-1/2	26.4K	10 %	L05
HISTORICAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING

Notes

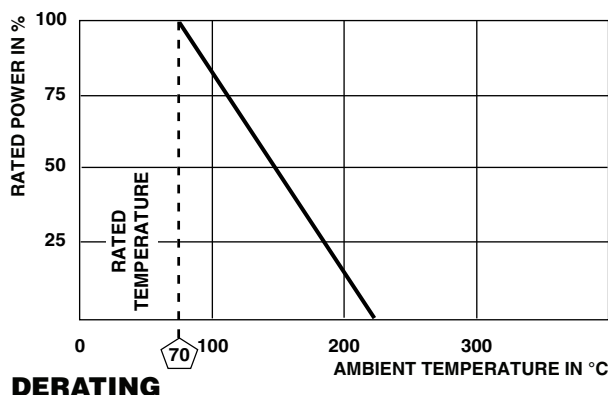
- (1) MVW products do not contain lead. Use tin/lead packaging codes to specify these lead free MVW products. Use lead (Pb)-free packaging codes to specify lead (Pb)-free HVW and HVX products.
 (2) Some packaging codes are model specific.
 • For additional information on packaging, refer to the Through-Hole Resistor Packaging document (www.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)

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)


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



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