



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



RoHS*
COMPLIANT

Note

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

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
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

- (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: HVW00126K40KL B (preferred part numbering format)

H	V	W	0	0	1	2	6	K	4	0	K	L	B			
GLOBAL MODEL <small>(See Standard Electrical Specifications table)</small>			RESISTANCE VALUE K = k Ω M = M Ω 1K000 = 1.0 k Ω 47K00 = 47 k Ω 200M0 = 200 M Ω				TOLERANCE CODE J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$			PACKAGING CODE ⁽³⁾⁽⁴⁾ 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			

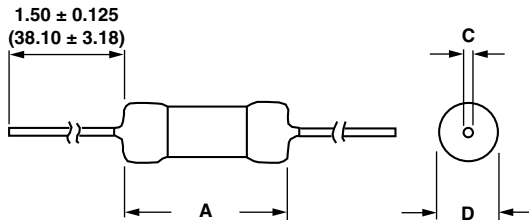
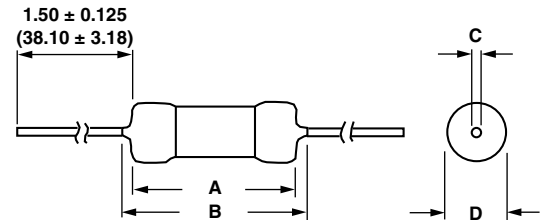
Historical Part Numbering: HVW-126.4K10 % (will continue to be accepted)

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

Notes

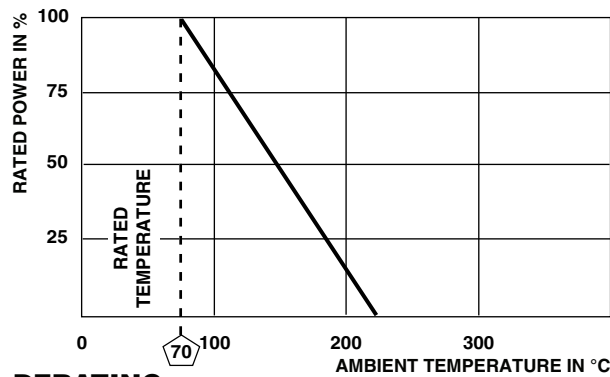
- (3) MVW products do not contain lead. Use tin/lead packaging codes to specify these lead free MVW products. Use lead (Pb)-free packaging codes to specify lead (Pb)-free HVW and HVX products.
 (4) Some packaging codes are model specific.
 • For additional information on packaging, refer to the Through-Hole 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)
HVW001	0.920 ± 0.020 (23.37 ± 0.51)	0.032 ± 0.002 (0.81 ± 0.05)	0.275 (6.99)
HVW002	2.080 ± 0.030 (52.83 ± 0.76)	0.032 ± 0.002 (0.81 ± 0.05)	0.275 (6.99)

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)
HVX001	0.988 (25.10)	1.062 (26.97)	0.032 ± 0.002 (0.81 ± 0.05)	0.310 (7.87)
HVX002	2.150 (54.61)	2.200 (55.88)	0.032 ± 0.002 (0.81 ± 0.05)	0.310 (7.87)


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
HVW001, HVW002, HVX001, HVX002	LACER	LB	EL



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

Material Category Policy

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Vishay:](#)

[HVW3/410M00JLB](#) [HVW-1/2-3.3M-5%](#) [MVW3/4 40K 10%TR](#) [HVX00250M00KLB](#) [HVW3/415M00JLB](#)
[HVX00110M00JLB](#) [HVX1\2100K0JLB](#) [HVW2-50M 10%](#) [HVX3/410M00JLB](#) [HVW3/450M00JEK](#) [MVW1/240K00KRC](#)
[MVW3/440K00KRC](#) [HVX1/2 40K 5%](#) [HVW00210K00JLB](#) [HVX1/225M00JEL](#) [HVX3/425M00JEL](#) [HVX1\25M000JLB](#)
[HVW002160K0JLB](#) [HVX1/240K00JLB](#) [HVX00110M00JEL](#) [HVW1/23M300JLB](#) [HVW3/410K00JLB](#) [HVW3/450M00JEL](#)