

# Carbon Film Resistors, Special Purpose, High Voltage



## FEATURES

- Ratings to 100 W, 125 kV
- Available with either radial bands or ferrule terminals
- Standard models epoxy/enamel coated, additional vinyl heat shrink sleeve available for added protection
- Model G is non-inductive
- $\pm 20\%$  tolerance standard, tolerances of  $\pm 15\%$ ,  $\pm 10\%$  and  $\pm 5\%$  available
- See models B and T for general purpose high voltage carbon film resistors

## STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	HISTORICAL MODEL	POWER RATING $P_{70^\circ\text{C}}$ W	MAXIMUM WORKING VOLTAGE (1) V	RESISTANCE RANGE (2) $\Omega$	TOLERANCE (3) $\pm \%$	STYLE	
DJU	DJU	10	25K	50K to 500M	5, 10, 15, 20	3	Non-Inductive
DPW	DPW	20	35K	100K to 500M	5, 10, 15, 20	3	
DPW..1	DPW-1	20	35K	100K to 500M	5, 10, 15, 20	4	
DPX	DPX	30	65K	100K to 500M	5, 10, 15, 20	3	
DPX..1	DPX-1	30	65K	100K to 500M	5, 10, 15, 20	4	
DVY	DVY	60	90K	400K to 500M	5, 10, 15, 20	3	
DVY..1	DVY-1	60	90K	400K to 500M	5, 10, 15, 20	4	
DZW	DZW	35	40K	300K to 500M	5, 10, 15, 20	3	
DZW..1	DZW-1	35	40K	300K to 500M	5, 10, 15, 20	4	
DZZ	DZZ	100	125K	700K to 500M	5, 10, 15, 20	3	
DZZ..1	DZZ-1	100	125K	700K to 500M	5, 10, 15, 20	4	
GJU	GJU	10	16K	1K to 1M	5, 10, 15, 20	3	
GPW	GPW	20	18K	1K to 1M	5, 10, 15, 20	3	
GPW..1	GPW-1	20	18K	1K to 1M	5, 10, 15, 20	4	
GPX	GPX	30	25K	1K to 1M	5, 10, 15, 20	3	
GPX..1	GPX-1	30	25K	1K to 1M	5, 10, 15, 20	4	
GVY	GVY	60	30K	1K to 5M	5, 10, 15, 20	3	
GVY..1	GVY-1	60	30K	1K to 5M	5, 10, 15, 20	4	
GZW	GZW	35	20K	1K to 1M	5, 10, 15, 20	3	
GZW..1	GZW-1	35	20K	1K to 1M	5, 10, 15, 20	4	
GZZ	GZZ	100	32K	1K to 10M	5, 10, 15, 20	3	
GZZ..1	GZZ-1	100	32K	1K to 10M	5, 10, 15, 20	4	

### Notes

- (1) Continuous working voltage shall be  $\sqrt{P \times R}$  or maximum working voltage, whichever is less.  
 (2) All resistance values are calibrated at 100 V<sub>DC</sub>-calibration at other voltages available on request.  
 (3)  $\pm 20\%$  standard,  $\pm 5\%$ ,  $\pm 10\%$ , and  $\pm 15\%$  are available.

## GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: DPW2M50L B191



GLOBAL MODEL (See Standard Electrical Specifications table)	RESISTANCE VALUE R = $\Omega$ K = k $\Omega$ M = M $\Omega$ 100R = 100 $\Omega$ 13K0 = 13 k $\Omega$ 500M = 500 M $\Omega$	TOLERANCE CODE J = $\pm 5\%$ K = $\pm 10\%$ L = $\pm 15\%$ M = $\pm 20\%$	PACKAGING E19 = Lead (Pb)-free, Bulk (all, except DJU, GJU) E03 = Lead (Pb)-free, Skin (DJU, GJU only) B19 = Tin/Lead, Bulk (all, except DJU, GJU) J03 = Tin/Lead, Skin (DJU, GJU only)	SPECIAL Blank = Standard (Dash Number) (up to 3 digits) From 1 to 999 as applicable 1 = Ferrule Terminals
--	--	---	---	--

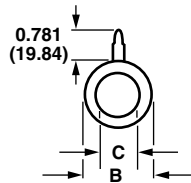
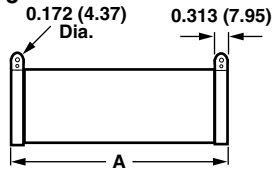
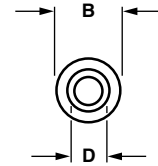
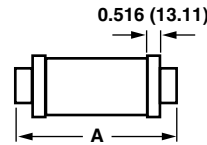
Historical Part Number example: DPW-12M50L (will continue to be accepted)



### Note

- For additional information on packaging, refer to the Through-Hole Resistor Packaging document ([www.vishay.com/doc?31544](http://www.vishay.com/doc?31544)).

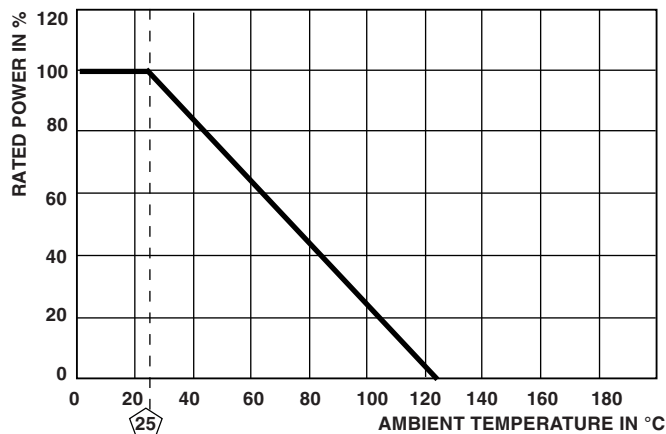
**DIMENSIONS** in inches (millimeters)

**Style 3**

**Style 4**


GLOBAL MODEL	STYLE	A	B <sup>(1)</sup>	C	D
DJU	3	4.50 (114.30)	0.750 (19.05)	0.50 (12.70)	N/A
DPW	3	6.50 (165.10)	1.13 (28.70)	0.75 (19.05)	N/A
DPW..1	4	7.69 (195.33)	1.13 (28.70)	N/A	0.812 (20.62)
DPX	3	10.50 (266.70)	1.13 (28.70)	0.75 (19.05)	N/A
DPX..1	4	11.69 (296.93)	1.13 (28.70)	N/A	0.812 (20.62)
DVY	3	14.50 (368.30)	1.50 (38.10)	1.13 (28.70)	N/A
DVY..1	4	15.69 (398.53)	1.50 (38.10)	N/A	1.14 (28.96)
DZW	3	6.50 (165.10)	2.0 (50.80)	1.56 (39.62)	N/A
DZW..1	4	7.69 (195.33)	2.0 (50.80)	N/A	1.14 (28.96)
DZZ	3	18.50 (469.90)	2.0 (50.80)	1.56 (39.62)	N/A
DZZ..1	4	19.69 (500.13)	2.0 (50.80)	N/A	1.14 (28.96)
GJU	3	4.50 (114.30)	0.750 (19.05)	0.50 (12.70)	N/A
GPW	3	6.50 (165.10)	1.13 (28.70)	0.75 (19.05)	N/A
GPW..1	4	7.69 (195.33)	1.13 (28.70)	N/A	0.812 (20.62)
GPX	3	10.50 (266.70)	1.13 (28.70)	0.75 (19.05)	N/A
GPX..1	4	11.69 (296.93)	1.13 (28.70)	N/A	0.812 (20.62)
Gvy	3	14.50 (368.30)	1.50 (38.10)	1.13 (28.70)	N/A
Gvy..1	4	15.69 (398.53)	1.50 (38.10)	N/A	1.14 (28.96)
GZW	3	6.50 (165.10)	2.0 (50.80)	1.56 (39.62)	N/A
GZW..1	4	7.69 (195.33)	2.0 (50.80)	N/A	1.14 (28.96)
GZZ	3	18.50 (469.90)	2.0 (50.80)	1.56 (39.62)	N/A
GZZ..1	4	19.69 (500.13)	2.0 (50.80)	N/A	1.14 (28.96)

**Note**

<sup>(1)</sup> Dimensional tolerances are  $\pm 0.016"$  (0.406 mm) or  $\pm 1\%$ , whichever is greater.

**DERATING**

**MARKING**

- Dale
- Model
- Value
- Tolerance
- Date code



## 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.**