# 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
- ± 20 % tolerance standard, tolerances of ± 15 %, ± 10 % and ± 5 % available
- See models B and T for general purpose high voltage carbon film resistors

## STANDARD ELECTRICAL SPECIFICATIONS

| GLOBAL MODEL | HISTORICAL MODEL | POWER RATING $P_{70\,°C}$ W | MAXIMUM WORKING VOLTAGE (1) V | RESISTANCE RANGE (2) Ω | TOLERANCE (3) ± % | STYLE | |
|---|---|---|---|---|---|---|---|
| DJU | DJU | 10 | 25K | 50K to 500M | 5, 10, 15, 20 | 3 | |
| 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 | Non-Inductive |
| 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 $V_{DC}$-calibration at other voltages available on request.

(3) ± 20 % standard, ± 5 %, ± 10 %, and ± 15 % are available.

## GLOBAL PART NUMBER INFORMATION

**New Global Part Numbering: DPW2M50LB191 (preferred part numbering format)**

| D | P | W | 2 | M | 5 | 0 | L | B | 1 | 9 | 1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

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

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

| DPW-1 | 2M50 | L | B19 |
|---|---|---|---|
| HISTORICAL MODEL | RESISTANCE VALUE | TOLERANCE CODE | PACKAGING |

**Note**

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



For technical questions, contact: ff2aresistors@vishay.com

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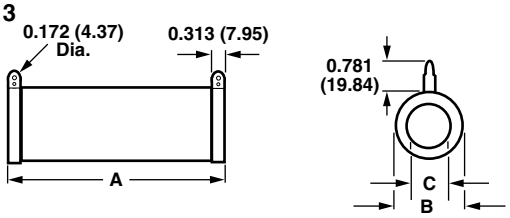
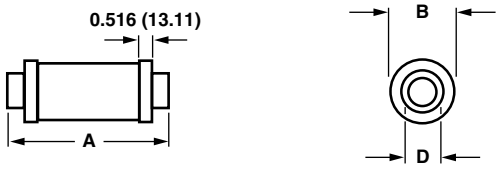
## DIMENSIONS in inches (millimeters)

**Style 3**




**Style 4**

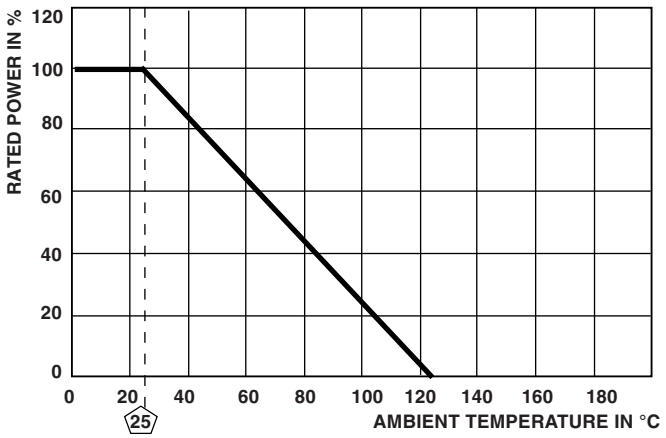



| GLOBAL MODEL | STYLE | A | B (1) | C | D |
|---|---|---|---|---|---|
| DJU | 3 | 4.50 (114.30) | 0.750 (19.05) | 0.50 (12.70) | N/A |
| DPW | 3 | 6.50 (165.10) | 1.13 (28.70) | 0.75 (19.05) | N/A |
| DPW..1 | 4 | 7.69 (195.33) | 1.13 (28.70) | N/A | 0.812 (20.62) |
| DPX | 3 | 10.50 (266.70) | 1.13 (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**

(1) Dimensional tolerances are ± 0.016" (0.406 mm) or ± 1 %, whichever is greater.

## DERATING




## MARKING

- Dale
- Model
- Value
- Tolerance
- Date code



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