

## Carbon Film Resistors, General Purpose, High Voltage



### FEATURES

- Ratings to 10 W, 40 kV
- Available with either radial lugs or axial leads
- Epoxy/enamel coated, with additional Mylar® heat shrink sleeve 0.002" (0.051 mm) thick
- $\pm 20\%$  tolerance standard, tolerances of  $\pm 15\%$ ,  $\pm 10\%$  and  $\pm 5\%$  available
- See models D and G for special purpose high voltage carbon film resistors
- Material categorization: For definitions of COMPLIANT compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)


**RoHS\***

### Note

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

### STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	POWER RATING $P_{25\text{ °C}}$ W	MAXIMUM WORKING VOLTAGE <sup>(1)</sup> V	RESISTANCE RANGE <sup>(2)</sup> $\Omega$	TOLERANCE <sup>(3)</sup> $\pm \%$	STYLE
BAEW	0.5	2.5K	50K to 500M	5, 10, 15, 20	2
BAKW	1	5K	100K to 500M	5, 10, 15, 20	2
BBF	1	3.5K	50K to 500M	5, 10, 15, 20	1
BBFW	1	3.5K	50K to 500M	5, 10, 15, 20	2
BBM	2	7.5K	50K to 500M	5, 10, 15, 20	1
BBMW	2	7.5K	50K to 500M	5, 10, 15, 20	2
BBR	3	15K	100K to 500M	5, 10, 15, 20	1
BBRW	3	15K	100K to 500M	5, 10, 15, 20	2
BBV	5	30K	200K to 500M	5, 10, 15, 20	1
BFQ	4	15K	100K to 500M	5, 10, 15, 20	1
BFT	6	25K	200K to 500M	5, 10, 15, 20	1
BFW	10	40K	400K to 500M	5, 10, 15, 20	1
TAEW	0.5	3K	1M to 500M	5, 10, 15, 20	3
TAFW	1	5K	1M to 500M	5, 10, 15, 20	3
TAKW	1.5	7.5K	1M to 500M	5, 10, 15, 20	3
TAOW	2	10K	1M to 500M	5, 10, 15, 20	3
TAQW	2.5	12.5K	1M to 500M	5, 10, 15, 20	3
TARW	3	15K	1M to 500M	5, 10, 15, 20	3

### Notes

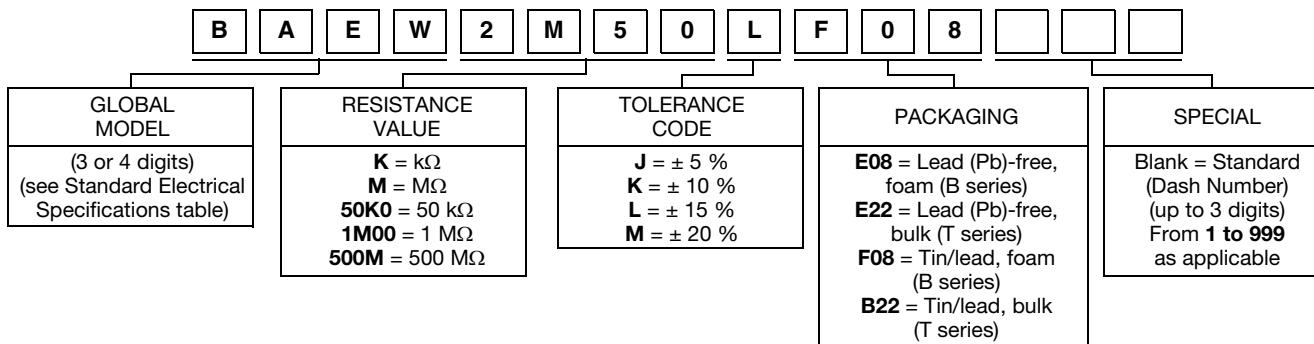
(1) Continuous working voltage shall be  $\sqrt{P} \times R$  or maximum working voltage, whichever is less.

(2) All resistance values are calibrated at 100 V<sub>DC</sub>-calibration at other voltages available on request. Contact factory for availability of values outside the listed range.

(3)  $\pm 20\%$  standard,  $\pm 5\%$ ,  $\pm 10\%$ , and  $\pm 15\%$  are available.

### GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: BAEW2M50LF08 (preferred part numbering format)



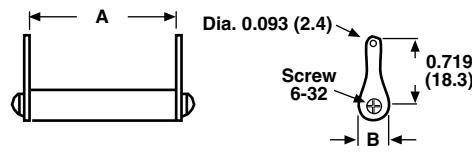
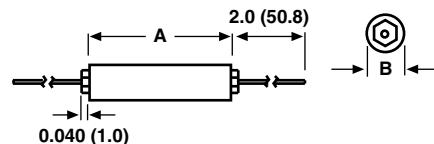
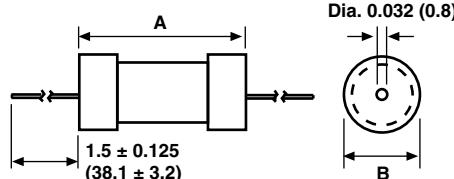
Historical Part Number example: BAEW 2M50 15% (will continue to be accepted)

BAEW	2M50	15 %	F08
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](http://www.vishay.com/doc?31544)).

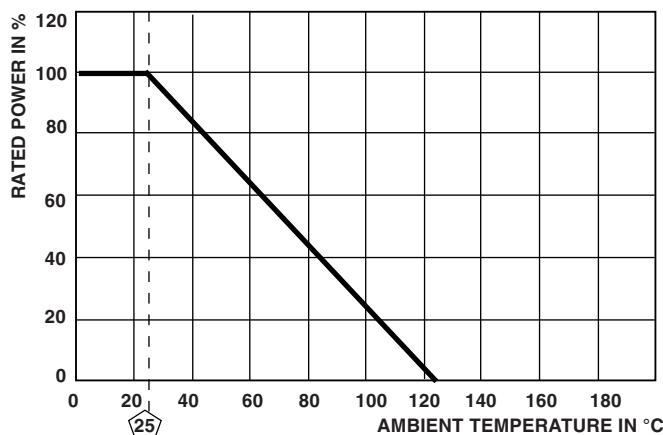
**DIMENSIONS** in inches (millimeters)

**Style 1**

**Style 2**

**Style 3**


GLOBAL MODEL	STYLE	A	B
BAEW	2	0.75 (19.05)	0.250 (6.35)
BAKW	2	1.50 (38.10)	0.250 (6.35)
BBF	1	1.00 (25.40)	0.313 (7.95)
BBFW	2	1.00 (25.40)	0.313 (7.95)
BBM	1	1.75 (44.45)	0.313 (7.95)
BBMW	2	1.75 (44.45)	0.313 (7.95)
BBR	1	3.00 (76.20)	0.313 (7.95)
BBRW	2	3.00 (76.20)	0.313 (7.95)
BBV	1	5.50 (139.70)	0.313 (7.95)
BFQ	1	2.50 (63.50)	0.563 (14.30)
BFT	1	4.00 (101.60)	0.563 (14.30)
BFW	1	6.50 (165.10)	0.563 (14.30)
TAEW	3	0.80 ± 0.05 (20.30 ± 1.30)	0.275 ± 0.020 (7.00 ± 0.50)
TAFW	3	1.05 ± 0.05 (26.70 ± 1.30)	0.275 ± 0.020 (7.00 ± 0.50)
TAKW	3	1.55 ± 0.05 (39.40 ± 1.30)	0.275 ± 0.020 (7.00 ± 0.50)
TAOW	3	2.05 ± 0.05 (52.10 ± 1.30)	0.275 ± 0.020 (7.00 ± 0.50)
TAQW	3	2.55 ± 0.05 (64.80 ± 1.30)	0.275 ± 0.020 (7.00 ± 0.50)
TARW	3	3.05 ± 0.05 (77.50 ± 1.30)	0.275 ± 0.020 (7.00 ± 0.50)

**Note**

- Models B axial leads are #20 AWG tinned copper. All other dimensional tolerances for styles 1 and 2, unless otherwise specified are  $\pm 0.016"$  [0.406 mm] or  $\pm 1\%$ , whichever is greater.

**DERATING**

**MARKING**

- DALE
- Model
- Value
- Tolerance
- Date code

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