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
- ± 20 % tolerance standard, tolerances of ± 15 %, ± 10 % and ± 5 % available
- See models D and G for special purpose high voltage carbon film resistors
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free Available

e3

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	POWER RATING $P_{25\,°C}$ W	MAXIMUM WORKING VOLTAGE (1) V	RESISTANCE RANGE (2) Ω	TOLERANCE (3) ± %	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
TAFW	1	5K	1M to 500M	5, 10, 15, 20	3
TAKW	1.5	7.5K	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_{DC}-calibration at other voltages available on request. Contact factory for availability of values outside the listed range.

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

GLOBAL PART NUMBER INFORMATION

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

B	A	E	W	2	M	5	0	L	F	0	8			

GLOBAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING	SPECIAL
(3 or 4 digits) (see Standard Electrical Specifications table)	**K** = kΩ **M** = MΩ **50K0** = 50 kΩ **1M00** = 1 MΩ **500M** = 500 MΩ	**J** = ± 5 % **K** = ± 10 % **L** = ± 15 % **M** = ± 20 %	**E08** = Lead (Pb)-free, foam (B series only) **E22** = Lead (Pb)-free, bulk (TAFW, TAKW only) **F08** = Tin/lead, foam (B series only) **B22** = Tin/lead, bulk (TAFW, TAKW only)	Blank = Standard (Dash Number) (up to 3 digits) From **1 to 999** as applicable

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).

For technical questions, contact: ff2aresistors@vishay.com

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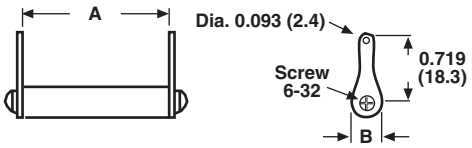
DIMENSIONS in inches (millimeters)

Style 1



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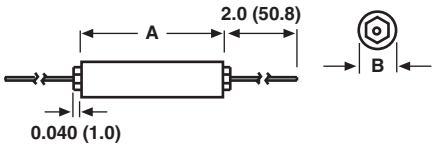
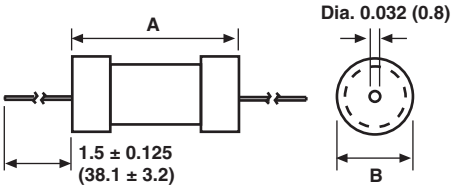


Style 3

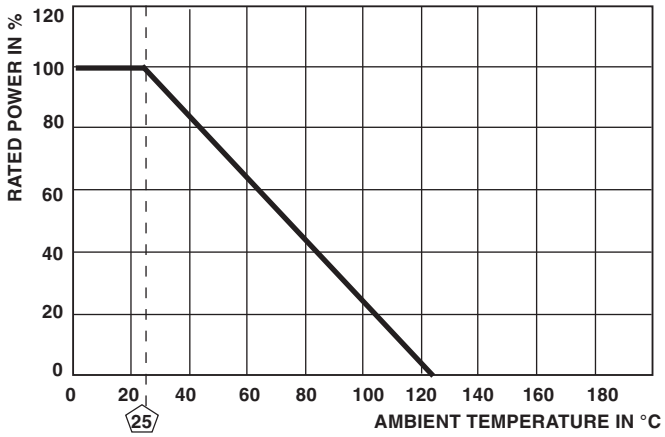


GLOBAL MODEL	STYLE	A	B
BAEW	2	0.75 (19.05)	0.250 (6.35)
BAKW	2	1.50 (38.10)	0.250 (6.35)
BBF	1	1.00 (25.40)	0.313 (7.95)
BBFW	2	1.00 (25.40)	0.313 (7.95)
BBM	1	1.75 (44.45)	0.313 (7.95)
BBMW	2	1.75 (44.45)	0.313 (7.95)
BBR	1	3.00 (76.20)	0.313 (7.95)
BBRW	2	3.00 (76.20)	0.313 (7.95)
BBV	1	5.50 (139.70)	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)
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)

Note

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

DERATING



MARKING

- DALE
- Model
- Value
- Tolerance
- Date code

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