

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
- Compliant to RoHS Directive 2002/95/EC


RoHS*
 COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS					
GLOBAL MODEL	POWER RATING $P_{25^\circ\text{C}}$ W	MAXIMUM WORKING VOLTAGE (1) V	RESISTANCE RANGE (2) Ω	TOLERANCE (3) $\pm \%$	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

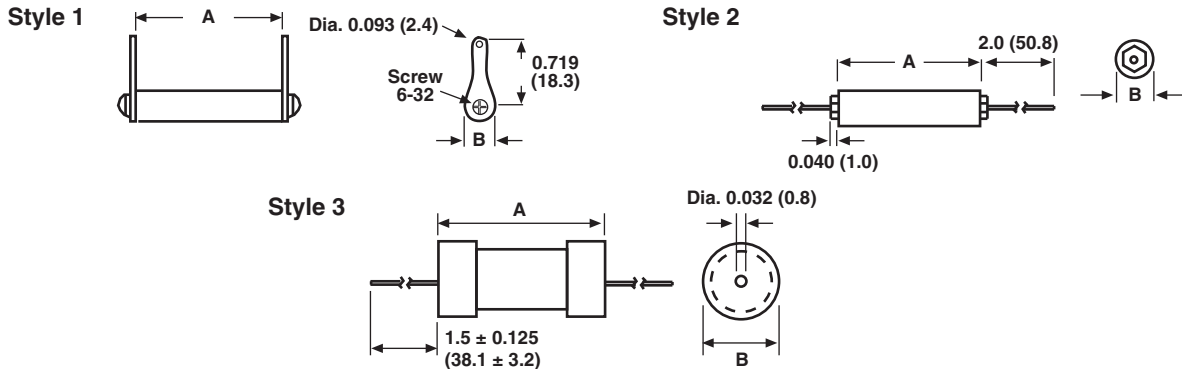
Notes

- (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_{DC}-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)				
B	A	E	W	2 M 5 0 L F 0 8
GLOBAL MODEL (3 or 4 digits) (see Standard Electrical Specifications table)	RESISTANCE VALUE K = k Ω M = M Ω 50K0 = 50 k Ω 1M00 = 1 M Ω 500M = 500 M Ω	TOLERANCE CODE J = $\pm 5\%$ K = $\pm 10\%$ L = $\pm 15\%$ M = $\pm 20\%$	PACKAGING E08 = Lead (Pb)-free, foam E22 = Lead (Pb)-free, bulk F08 = Tin/lead, foam B22 = Tin/lead, bulk	SPECIAL 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	

* Pb containing terminations are not RoHS compliant, exemptions may apply

DIMENSIONS in inches (millimeters)

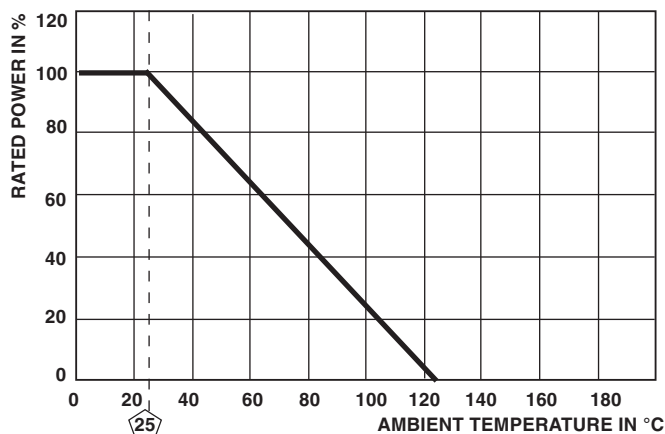


GLOBAL MODEL	STYLE	A	B
BAEW	2	0.75 (19.05)	0.250 (6.35)
BAKW	2	1.50 (38.10)	0.250 (6.35)
BBF	1	1.00 (25.40)	0.313 (7.95)
BBFW	2	1.00 (25.40)	0.313 (7.95)
BBM	1	1.75 (44.45)	0.313 (7.95)
BBMW	2	1.75 (44.45)	0.313 (7.95)
BBR	1	3.00 (76.20)	0.313 (7.95)
BBRW	2	3.00 (76.20)	0.313 (7.95)
BBV	1	5.50 (139.70)	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 ± 0.016" [0.406 mm] or ± 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 and agree to fully indemnify and hold Vishay and its distributors harmless from and against any and all claims, liabilities, expenses and damages arising or resulting in connection with such use or sale, including attorneys fees, even if such claim alleges that Vishay or its distributor was negligent regarding the design or manufacture of the part. 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.