

## Adjustable Ribwound Resistor



### FEATURES

- Resistance wire is spotwelded to the terminal bands and then “locked” onto the core with a vitreous enamel or silicone coating
- Hardware can be supplied mounted, as loose assemblies, or as individual parts. Enclosures can also be produced.
- Available as fixed and adjustable resistors (for fixed Ribwound Resistor see [www.vishay.com/doc?31807](http://www.vishay.com/doc?31807))
- Wirewound
- Material categorization: For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

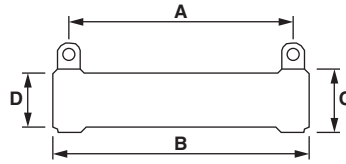

**RoHS**  
COMPLIANT

### STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	HISTORICAL MODEL	POWER RATING W	RESISTANCE RANGE $\Omega$	TOLERANCE <sup>(4)</sup> %
RBEA0090 <sup>(1)</sup>	9-64- $\Omega$ RA	90	0.014 to 25.3	10
RBEA0100 <sup>(1)</sup>	12-56- $\Omega$ RA	100	0.011 to 20.7	10
RBEA0110 <sup>(1)</sup>	12-64- $\Omega$ RA	110	0.014 to 26.8	10
RBEA0120 <sup>(1)</sup>	12-72- $\Omega$ RA	120	0.017 to 32.9	10
RBEA0135 <sup>(1)</sup>	12-80- $\Omega$ RA	135	0.020 to 39	10
RBEA0150 <sup>(1)</sup>	18-64- $\Omega$ RA	150	0.018 to 39	10
RBEA0160 <sup>(1)</sup>	12-96- $\Omega$ RA	160	0.027 to 51.3	10
RBEA0175 <sup>(1)</sup>	18-72- $\Omega$ RA	175	0.022 to 48.1	10
RBEA0180 <sup>(1)</sup>	12-104- $\Omega$ RA	180	0.030 to 57.4	10
RBEA0220 <sup>(1)</sup>	18-96- $\Omega$ RA	220	0.035 to 75	10
RBEA0225 <sup>(1)</sup>	18-98- $\Omega$ RA	225	0.036 to 77.2	10
RBEA0240 <sup>(1)</sup>	18-104- $\Omega$ RA	240	0.039 to 83.9	10
RBEA0300 <sup>(1)(3)</sup>	18-136- $\Omega$ RA	300	0.055 to 120	10
RBEA0375 <sup>(1)</sup>	18-168- $\Omega$ RA	375	0.072 to 156	10
RBEA0400 <sup>(1)</sup>	26-136- $\Omega$ RA	400	0.062 to 149	10
RBEA0420 <sup>(1)</sup>	18-188- $\Omega$ RA	420	0.082 to 178	10
RBEA0500 <sup>(1)(3)</sup>	26-168- $\Omega$ RA	500	0.083 to 200	10
RBEA0550 <sup>(1)</sup>	26-188- $\Omega$ RA	550	0.097 to 232	10
RBSA0750 <sup>(2)</sup>	40-192- $\Omega$ RA	750	0.130 to 158	10
RBSA1000 <sup>(2)(3)</sup>	40-240- $\Omega$ RA	1000	0.176 to 209	10
RBSA1500 <sup>(2)(3)</sup>	40-320- $\Omega$ RA	1500	0.248 to 294	10
RBSA2000 <sup>(2)</sup>	52-320- $\Omega$ RA	2000	0.300 to 380	10

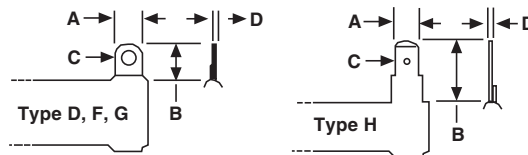
#### Notes

- Ratings are based on a temperature rise of 375 °C above an ambient of 40 °C.
- Operating temperature range - 55 °C to 415 °C.
- <sup>(1)</sup> RBEA0090 to RBEA0550 vitreous enamel coating is standard, silicone coating is available.
- <sup>(2)</sup> RBSA0750 to RBSA2000 silicone coating is standard.
- <sup>(3)</sup> Stock wattage, see Ribwound Stock Ribs ([www.vishay.com/doc?31808](http://www.vishay.com/doc?31808))
- <sup>(4)</sup> Closer tolerances available upon request.

**DIMENSIONS** in inches (millimeters)


- For Terminal Data and Mounting Hardware, see [www.vishay.com/doc?31811](http://www.vishay.com/doc?31811)
- For Enclosures and Frames, see [www.vishay.com/doc?31810](http://www.vishay.com/doc?31810)

GLOBAL MODEL	CORE DIMENSIONS (REF.)			A DISTANCE BETWEEN TERMINAL (REF.)	TERMINAL STYLE
	B LENGTH	C OUTER DIAMETER	D INNER DIAMETER		
RBEA0090	4 (101.6)	0.5625 (14.2875)	0.3125 (7.9375)	3.50 (88.9)	D
RBEA0100	3.5 (88.9)	0.75 (19.05)	0.5 (12.7)	2.63 (66.675)	F
RBEA0110	4 (101.6)	0.75 (19.05)	0.5 (12.7)	3.13 (79.375)	F
RBEA0120	4.5 (114.3)	0.75 (19.05)	0.5 (12.7)	3.63 (92.075)	F
RBEA0135	5 (127)	0.75 (19.05)	0.5 (12.7)	4.13 (104.775)	F
RBEA0150	4 (101.6)	1.125 (28.575)	0.75 (19.05)	3.13 (79.375)	F
RBEA0160	6 (152.4)	0.75 (19.05)	0.5 (12.7)	5.13 (130.175)	F
RBEA0175	4.5 (114.3)	1.125 (28.575)	0.75 (19.05)	3.63 (92.075)	F
RBEA0180	6.5 (165.1)	0.75 (19.05)	0.5 (12.7)	5.63 (142.875)	F
RBEA0220	6 (152.4)	1.125 (28.575)	0.75 (19.05)	5.13 (130.175)	F
RBEA0225	6.125 (155.575)	1.125 (28.575)	0.75 (19.05)	5.25 (133.35)	F
RBEA0240	6.5 (165.1)	1.125 (28.575)	0.75 (19.05)	5.63 (142.875)	F
RBEA0300	8.5 (215.9)	1.125 (28.575)	0.75 (19.05)	7.63 (193.675)	F
RBEA0375	10.5 (266.7)	1.125 (28.575)	0.75 (19.05)	9.63 (244.475)	F
RBEA0400	8.5 (215.9)	1.625 (41.275)	1.125 (28.575)	7.63 (193.675)	G
RBEA0420	11.75 (298.45)	1.125 (28.575)	0.75 (19.05)	10.88 (276.225)	F
RBEA0500	10.5 (266.7)	1.625 (41.275)	1.125 (28.575)	9.00 (228.6)	G
RBEA0550	11.75 (298.45)	1.625 (41.275)	1.125 (28.575)	10.25 (260.35)	G
RBSA0750	12 (304.8)	2.5 (63.5)	1.75 (44.45)	10.50 (266.7)	G
RBSA1000	15 (381)	2.5 (63.5)	1.75 (44.45)	13.50 (342.9)	G
RBSA1500	20 (508)	2.5 (63.5)	1.75 (44.45)	18.50 (469.9)	G
RBSA2000	20 (508)	3.25 (82.55)	1.75 (44.45)	18.50 (469.9)	G

**TERMINAL STYLE** in inches (millimeters)


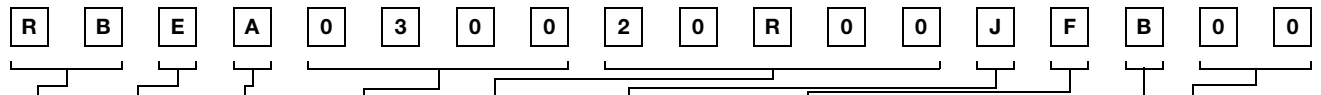
DIMENSIONS	D (1/4" LUG)	F (5/16" LUG)	G (1/2" LUG)	H (1/4" SQ)
Width (A)	0.25 (6.35)	0.375 (9.525)	0.5 (12.7)	0.25 (6.35)
Height (B)	0.5 (12.7)	0.625 (15.875)	0.9375 (23.8125)	0.625 (15.875)
Dia. (C)	0.17 (4.318)	0.2 (5.08)	0.26 (6.604)	0.065 (1.651)
Thickness (D)	0.02 (0.508)	0.035 (0.889)	0.046 (1.1684)	0.032 (0.8128)



MATERIAL SPECIFICATIONS	
Element	Copper-nickel, nickel-chrome, iron-chrome-aluminum
Core	Cordierite, steatite
Coating	Special high temperature silicone or vitreous enamel
Standard terminals	Nickel-iron
Part marking	Value, date code, MRC

**GLOBAL PART NUMBER INFORMATION**

Global Part Numbering example: **RBEA030020R00JFB00** (RBEA0300 20 5 % 3/8L B)



MODEL (2 digits)	COATING (1 digit)	TYPE (1 digit)	SIZE (4 digits)	VALUE (5 digits)	TOLERANCE (1 digit)	TERMINAL (1 digit)	PACKAGING (1 digit)	SPECIAL (2 digits)
<b>RB</b>	<b>E</b> = Enamel <b>S</b> = Silicone	<b>A</b> = Adjustable	<b>0300</b> = 300 W <b>2000</b> = 2000 W	<b>R</b> = Decimal <b>K</b> = Thousand <b>R1500</b> = 0.15 Ω <b>1K500</b> = 1.5 kΩ  Check datasheet for available value range	<b>D</b> = ± 0.5 % <b>F</b> = ± 1.0 % <b>G</b> = ± 2.0 % <b>H</b> = ± 3.0 % <b>J</b> = ± 5.0 % <b>K</b> = ± 10 % <b>M</b> = ± 20 %	<b>D</b> = 1/4" lug <b>E</b> = 5/16" lug <b>F</b> = 3/8" lug <b>G</b> = 1/2" lug <b>H</b> = 1/4" single quick-connect <b>J</b> = 1/4" double quick-connect <b>K</b> = 1/4" lug with steel hardware (ES-707F) <b>L</b> = 5/16" lug with steel hardware (ES-707F) <b>M</b> = 3/8" lug with steel hardware (ES-707F) <b>N</b> = 3/8" lug with brass hardware (ES-707b) <b>O</b> = 1/2" lug with steel hardware (ES-707F) <b>P</b> = 1/2" lug with brass hardware (ES-707b) <b>Q</b> = 1/4" lug with steel hardware (ES-708F) <b>R</b> = 5/16" lug with steel hardware (ES-708F) <b>S</b> = 3/8" lug with steel hardware (ES-708F) <b>T</b> = 3/8" lug with brass hardware (ES-708b) <b>U</b> = 1/2" lug with steel hardware (ES-708F) <b>V</b> = 1/2" lug with brass hardware (ES-708b) <b>W</b> = Ferrule	<b>B</b> = Bulk  See packaging codes for additional options	<b>00</b> = Standard <b>01</b> = Standard with customer part no. stamp <b>NI</b> = Non-inductive <b>CT</b> = Center tap <b>SW</b> = Surge winding <b>LT</b> = Low temperature coefficient alloy <b>EC</b> = End caps <b>CP</b> = Push in clips (bulk) <b>CA</b> = Push in clips (assembled) <b>VT</b> = Vertical mount <b>VS</b> = VT with customer part no. stamp <b>ES</b> = End slot side slot bracket <b>1A</b> = 1 high bracket zinc plated steel <b>1S</b> = 1A with customer part no. stamp <b>1B</b> = 1 high bracket stainless steel (300 W only) <b>1C</b> = Live bracket <b>2A</b> = 2 high bracket zinc plated steel <b>2B</b> = 2 high bracket stainless steel (300 W only) <b>3A</b> = 3 high bracket zinc plated steel <b>3B</b> = 3 high bracket stainless steel (300 W only) <b>4A</b> = 4 high bracket zinc plated steel <b>4B</b> = 4 high bracket stainless steel (300 W only)  <b>Note</b> 2A, 2B, 3A, 3B, 4A, and 4B assemblies: include identical resistors only wiring to be supplied by customer reference CS series for further customization <b>Note</b> 3A, 3B, 4A, and 4B limitations: brackets fit 40 W to 550 W RB resistors



## 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.**



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.