

## Wirewound Resistors, Commercial Power, Aluminum Housed, Chassis Mount


**FEATURES**

- High volume product suitable for commercial applications
- Molded construction for total environmental protection
- Complete welded construction
- Available in non-inductive styles (special “NI”) with Ayrton-Perry winding for lowest reactive components
- Mounts on chassis to utilize heat-sink effect
- For industrial applications, please see RH/NH datasheet: [www.vishay.com/doc?0201](http://www.vishay.com/doc?0201)
- 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	POWER RATING WITH STANDARD HEATSINK $P_{25\text{ }^\circ\text{C}}$ W	POWER RATING WITHOUT STANDARD HEATSINK $P_{25\text{ }^\circ\text{C}}$ W	RESISTANCE RANGE $\Omega$ $\pm 5\%$ ; $\pm 10\%$	RESISTANCE RANGE $\Omega$ $\pm 1\%$	RESISTANCE RANGE (-NI) $\Omega$ $\pm 5\%$ ; $\pm 10\%$	RESISTANCE RANGE (-NI) $\Omega$ $\pm 1\%$	WEIGHT (typical) g
AH075	75	45	0.1 to 50K	10 to 10K	5 to 100	10 to 100	80
AH100	100	50	0.1 to 100K	10 to 10K	5 to 200	10 to 200	110
AH150	150	55	0.1 to 100K	10 to 10K	5 to 500	10 to 500	166
AH200	200	50	0.1 to 50K	10 to 10K	5 to 500	10 to 500	435
AH250	250	60	0.1 to 65K	10 to 10K	5 to 500	10 to 500	500
AH300	300	75	0.1 to 80K	10 to 10K	5 to 500	10 to 500	615

TECHNICAL SPECIFICATIONS		
PARAMETER	UNIT	AH RESISTOR CHARACTERISTICS
Temperature Coefficient	ppm/ $^\circ\text{C}$	Typical values: $\pm 100$ std. for $1\ \Omega$ to $1\ \text{k}\Omega$ ; 25 std. for $> 1\ \text{k}\Omega$
Insulation Resistance	$\Omega$	$> 10\ 000\ \text{M}\Omega$
Operating Temperature Range	$^\circ\text{C}$	-25 to +250

GLOBAL PART NUMBER INFORMATION																
Global Part Numbering example: AH0754R125JE66																
A	H	0	7	5	4	R	1	2	5	J	E	6	6			
GLOBAL MODEL			RESISTANCE VALUE			TOLERANCE CODE			PACKAGING			SPECIAL				
<b>AH075</b> (see Standard Electrical Specifications Global Model column for options)			<b>R</b> = decimal <b>K</b> = thousand <b>1R500</b> = 1.5 $\Omega$ <b>1K500</b> = 1.5 k $\Omega$			<b>F</b> = 1.0 % <b>J</b> = 5.0 % <b>K</b> = 10.0%			<b>E66</b> = lead (Pb)-free, cardboard separator pack			<b>NI</b> = non-inductive (dash number) from <b>1</b> to <b>999</b> as applicable				

**DIMENSIONS** in inches [millimeters]


GLOBAL MODEL	DIMENSIONS in inches [millimeters]								
	A MAX.	B MAX.	C MAX.	D ± 0.012 [0.3]	E ± 0.012 [0.3]	F ± 0.012 [0.3]	G MAX.	H MAX.	I MAX.
AH075	1.97 [50]	2.8 [71]	1.89 [48]	1.14 [29]	1.46 [37]	0.17 [4.4]	0.46 [11.8]	1.02 [26]	0.14 [3.5]
AH100	2.6 [66]	3.54 [90]	1.89 [48]	1.38 [35]	1.46 [37]	0.17 [4.4]	0.46 [11.8]	1.02 [26]	0.14 [3.5]
AH150	3.86 [98]	4.92 [125]	1.89 [48]	2.28 [58]	1.46 [37]	0.17 [4.4]	0.46 [11.8]	1.02 [26]	0.14 [3.5]
AH200	3.54 [90]	5.71 [145]	2.87 [73]	1.38 [35]	2.25 [57.2]	0.21 [5.3]	0.81 [20.5]	1.77 [45]	0.27 [6.75]
AH250	4.33 [110]	6.5 [165]	2.87 [73]	1.75 [44.5]	2.25 [57.2]	0.21 [5.3]	0.81 [20.5]	1.77 [45]	0.27 [6.75]
AH300	5.12 [130]	7.09 [180]	2.87 [73]	2.05 [52]	2.25 [57.2]	0.26 [6.6]	0.81 [20.5]	1.77 [45]	0.27 [6.75]

GLOBAL MODEL	LIMITING ELEMENT VOLTAGE (DC/AC <sub>RMS</sub> )	DIELECTRIC STRENGTH (AC <sub>PK</sub> )	STANDARD HEATSINK <sup>(1)</sup>		TERMINAL TYPE
			AREA (cm <sup>2</sup> )	THICKNESS (mm)	
AH075	1400	5000	1000	3	Lugged
AH100	1900	5000	1000	3	Lugged
AH150	2500	5000	1000	3	Lugged
AH200	1900	5000	3750	3	Threaded
AH250	2200	5000	4800	3	Threaded
AH300	2500	5000	5800	3	Threaded

**Note**

<sup>(1)</sup> It is recommended that a heatsink compound be applied between the resistor and heatsink surface

**TEMPERATURE VS. POWER**

**DERATING**

**Note**

- Typical at 25°C



## **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.