

## 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<br>$P_{25^{\circ}\text{C}}$ W | POWER RATING WITHOUT STANDARD HEATSINK<br>$P_{25^{\circ}\text{C}}$ W | RESISTANCE RANGE<br>$\Omega$<br>$\pm 5\%; \pm 10\%$ | RESISTANCE RANGE<br>$\Omega$<br>$\pm 1\%$ | RESISTANCE RANGE (-NI)<br>$\Omega$<br>$\pm 5\%; \pm 10\%$ | RESISTANCE RANGE (-NI)<br>$\Omega$<br>$\pm 1\%$ | WEIGHT (typical)<br>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                   |

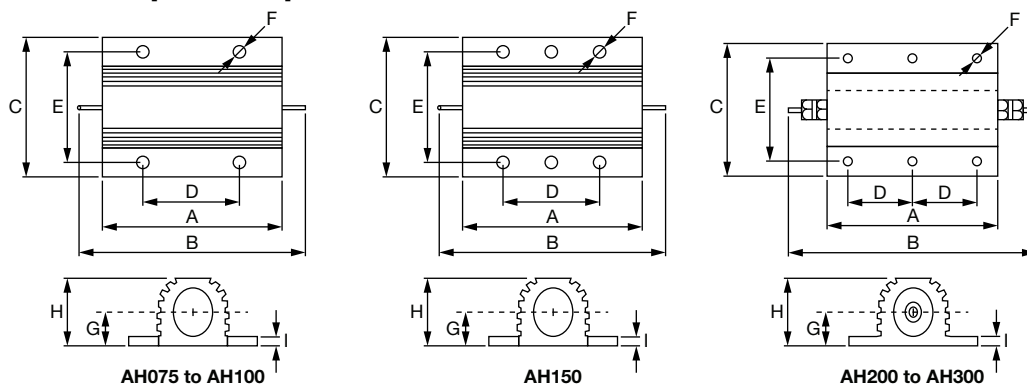
### TECHNICAL SPECIFICATIONS

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

### GLOBAL PART NUMBER INFORMATION

Global Part Numbering example: AH0754R125JE66

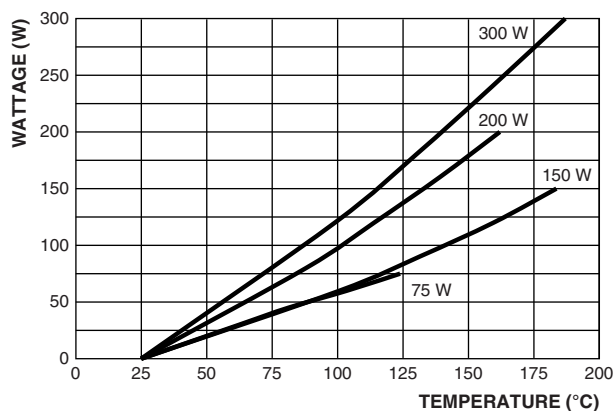
|                                                                                   |   |   |                                                                |   |   |                                     |   |   |                                                |   |   |                                                              |   |  |  |  |
|-----------------------------------------------------------------------------------|---|---|----------------------------------------------------------------|---|---|-------------------------------------|---|---|------------------------------------------------|---|---|--------------------------------------------------------------|---|--|--|--|
| A                                                                                 | H | 0 | 7                                                              | 5 | 4 | R                                   | 1 | 2 | 5                                              | J | E | 6                                                            | 6 |  |  |  |
| GLOBAL MODEL                                                                      |   |   | RESISTANCE VALUE                                               |   |   | TOLERANCE CODE                      |   |   | PACKAGING                                      |   |   | SPECIAL                                                      |   |  |  |  |
| AH075<br>(see Standard Electrical Specifications Global Model column for options) |   |   | R = decimal<br>K = thousand<br>1R500 = 1.5 Ω<br>1K500 = 1.5 kΩ |   |   | F = 1.0 %<br>J = 5.0 %<br>K = 10.0% |   |   | E66 = lead (Pb)-free, cardboard separator pack |   |   | NI = non-inductive (dash number) from 1 to 999 as applicable |   |  |  |  |

**DIMENSIONS** in inches [millimeters]


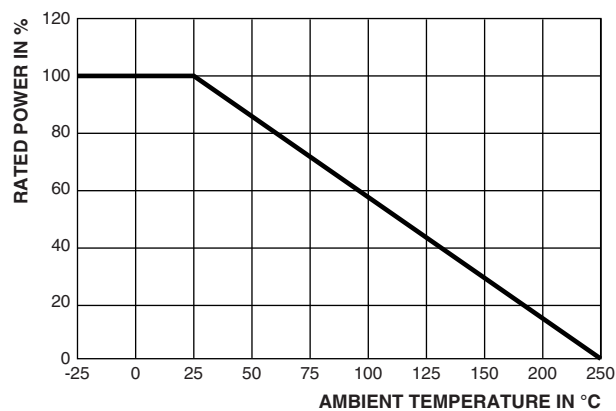
| GLOBAL MODEL | DIMENSIONS in inches [millimeters] |            |           |                 |                 |                 |             |           |             |
|--------------|------------------------------------|------------|-----------|-----------------|-----------------|-----------------|-------------|-----------|-------------|
|              | 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**

**Note**

- Typical at 25°C

**DERATING**




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