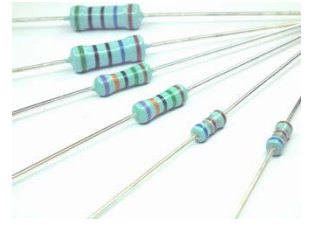


- Features:
- High resistance for high voltage circuits
  - High voltage handling in small package size
  - More economical than comparable high voltage resistors
  - VCR less than 20 ppm/V
  - RoHS compliant



| Electrical Specifications |                      |                         |                                    |  |         |     |
|---------------------------|----------------------|-------------------------|------------------------------------|--|---------|-----|
| Type / Code               | Power Rating (Watts) | Maximum Working Voltage | Resistance Temperature Coefficient | Ohmic Range ( $\Omega$ ) and Tolerance |         |     |
|                           |                      |                         |                                    | 1%                                     | 5%      | 10% |
| HVA05                     | 0.5W                 | 3500V                   | $\pm 200$ ppm/ $^{\circ}$ C        | 1M - 500M                              |         |     |
| HVA08                     | 0.8W                 | 7000V                   |                                    | 1M - 500M                              | 1M - 1G |     |
| HVA12                     | 1.2W                 | 8000V                   |                                    | 1M - 500M                              | 1M - 1G |     |

Rated voltage =  $\sqrt{\text{Power Rating} \times \text{Nominal Resistance}}$  or Maximum Working voltage, whichever is lower.

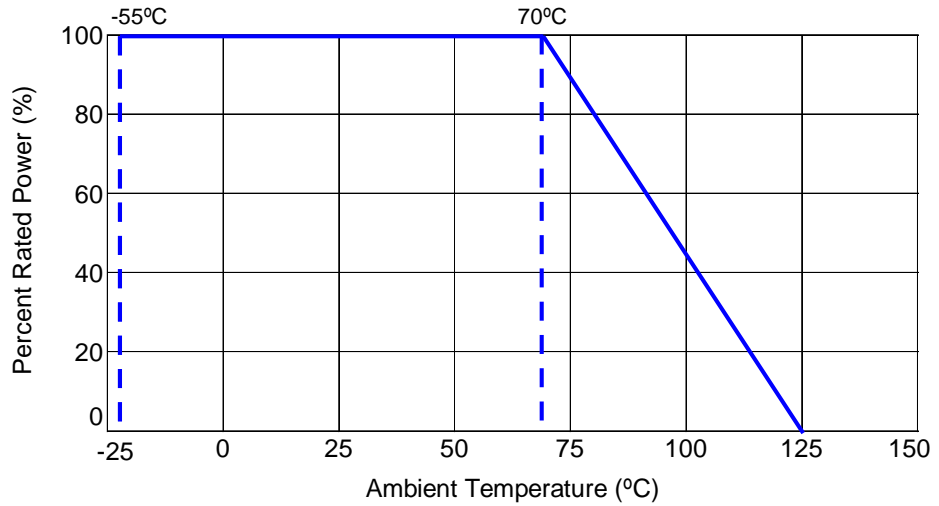
| Mechanical Specifications |             |                   |                    |                    |                         |        |
|---------------------------|-------------|-------------------|--------------------|--------------------|-------------------------|--------|
|                           |             |                   |                    |                    |                         |        |
| Type / Code               | Weight (mg) | L<br>Body Length  | D<br>Body Diameter | d<br>Lead Diameter | H<br>Lead Length (bulk) | Unit   |
| HVA05                     | 210         | 0.236 $\pm$ 0.008 | 0.098 $\pm$ 0.020  | 0.022 $\pm$ 0.020  | 1.102 $\pm$ 0.118       | inches |
|                           |             | 6.00 $\pm$ 0.20   | 2.50 $\pm$ 0.50    | 0.55 $\pm$ 0.50    | 28.00 $\pm$ 3.00        | mm     |
| HVA08                     | 330         | 0.335 $\pm$ 0.039 | 0.118 $\pm$ 0.020  | 0.027 $\pm$ 0.020  | 1.102 $\pm$ 0.118       | inches |
|                           |             | 8.50 $\pm$ 1.00   | 3.00 $\pm$ 0.50    | 0.68 $\pm$ 0.50    | 28.00 $\pm$ 3.00        | mm     |
| HVA12                     | 570         | 0.433 $\pm$ 0.039 | 0.157 $\pm$ 0.020  | 0.031 $\pm$ 0.020  | 1.102 $\pm$ 0.118       | inches |
|                           |             | 11.00 $\pm$ 1.00  | 4.00 $\pm$ 0.50    | 0.78 $\pm$ 0.50    | 28.00 $\pm$ 3.00        | mm     |

| Performance Characteristics                               |                             |  |
|---|-----------------------------|--|
| Item  | Specification               | Test Condition and Method  |
| Temperature Coefficient of Resistance (ppm/ $^{\circ}$ C) | $\pm 200$ ppm/ $^{\circ}$ C | 25 $^{\circ}$ C ~ 125 $^{\circ}$ C   |
| Rapid Change of Temperature                               | $\pm 1\%$                   | -25 $^{\circ}$ C (30 m.)/+125 $^{\circ}$ C (30 m.) - 5 cycles                                    |
| Damp Heat (steady state)                                  | $\pm 5\%$                   | 40 $\pm$ 2 $^{\circ}$ C 93 $\pm$ 3% R.H. 0.1 x Rated Voltage<br>90 m. ON, 30 m. OFF - 1000 hours |
| Endurance (at 70 $^{\circ}$ C)                            | $\pm 5\%$                   | Room temperature. Rated Voltage<br>90 m ON, 30 m. OFF - 1000 hours                               |
| Resistance to Soldering Heat                              | $\pm 1\%$                   | 260 $\pm$ 5 $^{\circ}$ C, 10 $\pm$ 1 s.  |

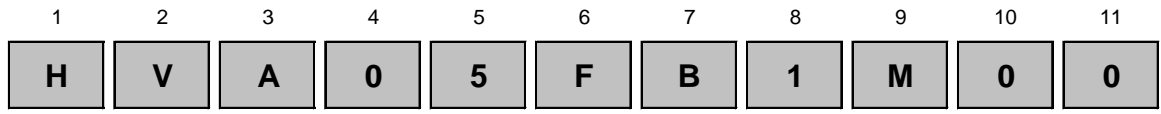
Reference standards: JIS-C5201-1, IEC60115-1

Operating Temperature Range: -25 $^{\circ}$ C to +125 $^{\circ}$ C

Power Derating Curve:



**How to Order**



| Product Series |                                    | Size | Power Rating | Tolerance |     |       | Packaging |             |       |           | Resistance Value  |
|----------------|------------------------------------|------|--------------|-----------|-----|-------|-----------|-------------|-------|-----------|---|
|                |                                    |      |              | Code      | Tol | Value | Code      | Description | Size  | Quantity  |   |
| HVA            | High voltage Axial Leaded Resistor | 05   | 0.5W         | F         | 1%  | E24   | A         | Ammo        | 05,08 | 2,000     | Four characters with the multiplier used as the decimal holder.<br>1 Mohm = 1M00<br>50 Mohm = 50M0<br>1 Gohm = 1G00 |
|                |                                    | 08   | 0.8W         | J         | 5%  |       | B         |             | Bulk  | 12        |   |
|                |                                    | 12   | 1.2W         | K         | 10% |       |           |             |       | all sizes |   |