



## WIRE WOUND RESISTORS

SILICONE / CEMENT COATED



### HIA

**Power rating :** 0.5W to 20W  
**Resistance range :** R01 to 120K  
**Tolerances available :** 1% - 10%  
**Applications :** Industrial, telecommunication and consumer electronics.  
**Features :**

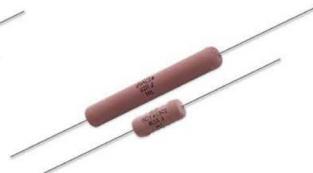
- UL approved flame retardant coating
- Industrial Grade - MIL sizes
- Non-inductive type available.
- Impulse resistors as per IEC 61000-4-5



### HTA

**Power rating :** 0.75W to 12W  
**Resistance range :** R01 to 100K  
**Tolerances available :** 1% - 10%  
**Applications :** Industrial, telecommunication and consumer electronics.  
**Features :**

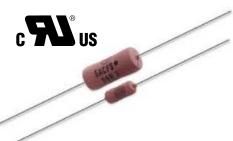
- UL approved flame retardant coating
- Non-inductive type available.
- Impulse resistors as per IEC 61000-4-5
- Industrial grade-JSS/IEC sizes.



### VHIA

**Power rating :** 0.5W to 20W  
**Resistance range :** R01 to 120K  
**Tolerances available :** 1% - 10%  
**Applications :** Industrial, telecommunication and consumer electronics.  
**Features :**

- UL approved flame retardant coating
- Non-inductive type available.
- Impulse resistors as per IEC 61000-4-5
- Copper clad steel wire terminations for reduced temperature on PCB.



### FRS

**Power rating :** 1W to 5W  
**Resistance range :** 10R to 100R\*  
**Tolerance available :** 1% - 10%  
**Applications :** Consumer, telecommunication and industrial electronics.  
**Features :**

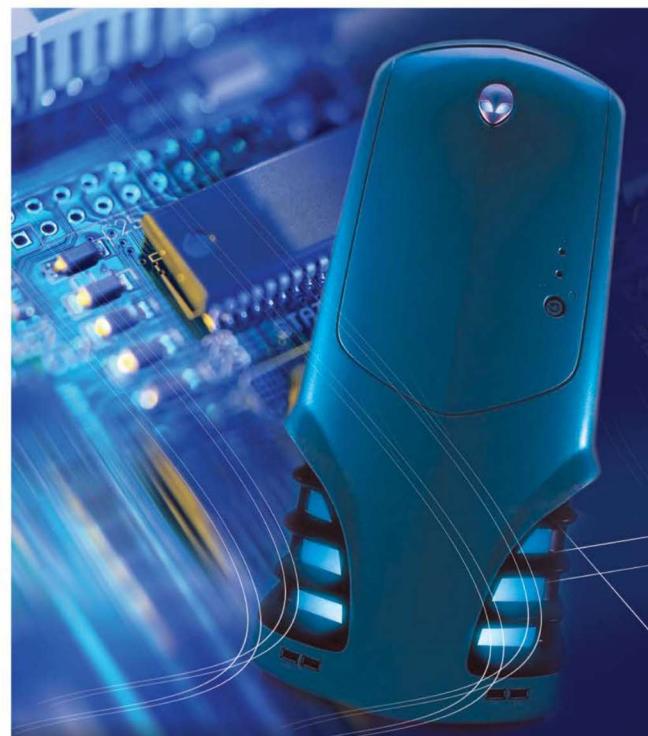
- UL 1412 approved.
- Safety fusing at 220/240 V.
- Tailor made fusing options available.



### HFW

**Power rating :** 1W to 5W  
**Resistance range :** 10R to 100R\*  
**Tolerance available :** 1% - 10%  
**Applications :** Consumer, telecommunication and industrial electronics.  
**Features :**

- UL 1412 approved.
- Safety fusing at 110/120V.



## WIRE WOUND RESISTORS

SILICONE / CEMENT COATED



### HAA

**Power rating :** 1W to 5W  
**Resistance range :** R01 to 56K  
**Tolerances available :** 1% - 10%  
**Applications :** Miniature sizes for automotive sector.  
**Features :**

- UL approved flame retardant coating
- Industrial grade
- Non-inductive type available
- Impulse resistors as per IEC 61000-4-5



### HFP

**Power rating :** 2.5W to 8W  
**Resistance range :** R10 to 56K  
**Tolerances Available :** 5% - 10%  
**Applications :** Commercial & industrial electronics.  
**Features :**

- Fiber Glass core.
- PCB pluggable style with different terminations and stand off heights available.
- UL approved flame retardant coating.



### HIR

**Power Rating :** 10W to 500W  
**Resistance range :** R22 to 100K  
**Tolerances Available :** 5% - 10%  
**Applications :** High power dissipation & impulse handling capability. • Load bank resistors.  

- High voltage bleeder resistor in power supplies.
- PCB pluggable style with different terminations and stand off heights available.
- UL approved flame retardant coating.
- Choice of anti-rust stainless steel terminations.



### RSR

**Power Rating :** 40W to 500W  
**Resistance range :** R05 to 18R  
**Tolerances Available :** 5% - 10%  
**Applications :** High power dissipation & impulse handling capability.  

- High voltage bleeder resistor in power supplies.
- Load bank resistors.
- Edge wound resistive strip for reduced surface temperature.
- High dissipation & very low ohmic values available.
- UL approved flame retardant coating.
- Radial terminals for Amp 187 & Amp 250 connectors available.
- Choice of anti-rust stainless steel terminations.



### HFA

**Power Rating :** 1W to 10W  
**Resistance range :** R10 to 51K  
**Tolerances Available :** 5% - 10%  
**Applications :** Low cost solution for consumer electronics.  
**Features :**

- Fiber glass core.
- UL approved flame retardant coating.



### HIP

**Power Rating :** 3W to 10W  
**Resistance range :** R01 to 90K  
**Tolerances Available :** 1% - 10%  
**Applications :** Commercial and industrial electronics.  
**Features :**

- Ceramic core.
- PCB pluggable style.
- UL approved flame retardant coating.

## SYMMETRY RESISTORS



### HSR

**Power Rating :** 8.25W, 11W & 20W  
**Resistance range :** 10K to 120K  
**Tolerances Available :** 1% - 10%  
**Applications :**

- Capacitor charging and discharging resistors.

**Features :**

- Wire wound symmetry resistors.
- UL approved flame retardant coating.
- Stainless steel terminals for direct mounting on capacitors.



### HSRC

**Power rating :** 11W, 20W & 25W  
**Resistance range :** 10K to 110K  
**Tolerance available :** 1% - 10%  
**Applications :**

- Capacitor charging & discharging resistors.

**Features :**

- Wire wound symmetry resistors.
- Ceramic encased resistors for greater heat dissipation. • Stainless steel terminals for direct mounting on capacitors.
- Customised solutions available upto 40W.



## WIRE WOUND RESISTORS

CERAMIC ENCASED



### HCA

**Power rating :** 1W to 20W  
**Resistance range :** R05 to 56K  
**Tolerance available :** 1% - 10%  
**Applications :** Industrial and consumer electronics.  
**Features :**

- Fibre glass and ceramic core available.
- Ceramic encased for high degree of insulation and low surface temperature.
- Impulse types available.
- Non inductive type available.



### HCV

**Power rating :** 7W to 20W  
**Resistance range :** R05 to 56K  
**Tolerance available :** 1% - 10%  
**Applications :** Industrial & consumer electronics.  
**Features :**

- High stability vertical mounting bracket available.
- Fibre glass and ceramic core available.
- Ceramic encased for high degree of insulation and low surface temperature.
- Impulse types available.
- Non inductive type available.
- Copper clad steel wire terminations for reduced temperature on PCB.
- Low TCR options available.



### HCW

**Power rating :** 1W to 20W  
**Resistance range :** R05 to 56K  
**Tolerance available :** 1% - 10%  
**Applications :** Industrial and consumer electronics.  
**Features :**

- Ceramic core.
- Ceramic encased for high degree of insulation and low surface temperature.
- Impulse types available.
- Non inductive type available.
- Choice of fibre glass or ceramic core.
- Choice of mounting pillars for additional stability.
- Non inductive type available.



## WIRE WOUND RESISTORS

CERAMIC ENCASED



### HSV

**Power rating :** 4W to 17W  
**Resistance range :** R04 to 82K  
**Tolerance available :** 1% - 10%  
**Applications :**

- Space saving, vertical mounting resistors.
- Consumer and industrial applications.

**Features :**

- Choice of fibre glass or ceramic core.
- Choice of mounting pillars for additional stability.
- Non inductive type available.



### HSVA/HSVAU

**Power rating :** 4W to 17W  
**Resistance range :** R04 to 82K  
**Tolerance available :** 1% - 10%  
**Applications :**

- Both axial and space saving vertical mounting resistors.
- Consumer and industrial applications.

**Features :**

- Choice of fibre glass or ceramic core.
- Dual purpose mounting in HSVAU series is an useful inventory reducer for broad line distributor.



### HCP

**Power rating :** 3W to 20W  
**Resistance range :** R10 to 56K  
**Tolerance available :** 5% & 10%  
**Applications :** Commercial and industrial electronics.  
**Features :**

- Fibre glass and ceramic core available.
- Ceramic encased for high power dissipation.
- PCB pluggable style with different terminations and stand off heights available.



### FRC

**Power rating :** 1W to 3W  
**Resistance range :** 10R to 750R  
**Tolerance available :** 3% - 10%  
**Applications :** Industrial & consumer electronics.  
**Features :**

- Tailor made fusing options available.
- Fibre glass and ceramic core available.
- Ceramic encased for high degree of insulation and low surface temperature.



### HEA

**Power rating :** 1W to 17W  
**Resistance range :** R025 to 82K  
**Tolerance available :** 1% - 10%  
**Applications :** Industrial and consumer electronics.  
**Features :**

- Fibre glass and ceramic core available.
- Ceramic encased for high degree of insulation & low surface temperature.
- Impulse types available.
- Non inductive type available.



### HCL

**Power rating :** 10W to 40W  
**Resistance range :** R10 to 68K  
**Tolerance available :** 5% & 10%  
**Applications :** Commercial and industrial electronics.  
**Features :**

- Fibre glass & ceramic core available.
- Ceramic encased for high power dissipation.
- Radial terminations for Amp 187 & Amp 250 connectors available.
- Available with mounting bracket which also serves as heat sink.



### HMW

**Power rating :** 2.5W to 15W  
**Resistance range :** R04 to 36K  
**Tolerance available :** 1% - 10%  
**Applications :** Industrial and consumer electronics.  
**Features :**

- Flat vertical mounting type.
- Ceramic and fibre glass core available.
- Ceramic legs for greater stability also act as heat sink - Impulse types available.
- Non inductive types available.
- PCB space saving resistor.