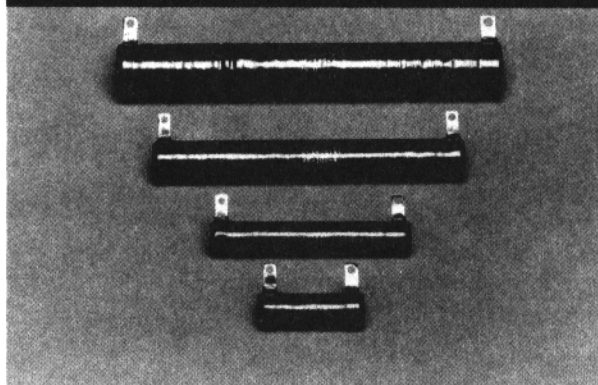


**Series VP & VK**  
**25, 50, 100, 160-175, 200-225 Watt**  
 Fixed Power, Wirewound Resistors



### Description

The VP and VK series are for applications requiring high power resistors. These resistors have lug terminals, which are solderable, and they can be bracket mounted. Made in accordance to Mil-R-26 standards, the VP and VK series are suitable for rugged applications.

### Features

- *Rugged vitreous coating*
- *High wattage applications*
- *All-welded construction*
- *Meets or exceeds MIL-R-26*
- *Non-inductive winding available*

### Series VP & VK Material Specifications

#### Coating

Vitreous enamel

#### Core

Tubular ceramic

#### Terminals

Tinned, lug terminals, solderable to MIL-R-26 standards

#### Weight

| VP25K     | VP50K     | VK100N    | VK160W     | VK200W     |
|-----------|-----------|-----------|------------|------------|
| 25 watt   | 50 watt   | 100 watt  | 160 watt   | 200 watt   |
| .816 oz.  | 1.312 oz. | 3.2 oz.   | 7.12 oz.   | 11.84 oz.  |
| 22.8 gms. | 36.7 gms. | 89.6 gms. | 199.4 gms. | 331.5 gms. |

### Series VP & VK Electrical Specifications

#### Resistance Tolerance

±5% standard

Closer tolerances available.

#### Power Rating

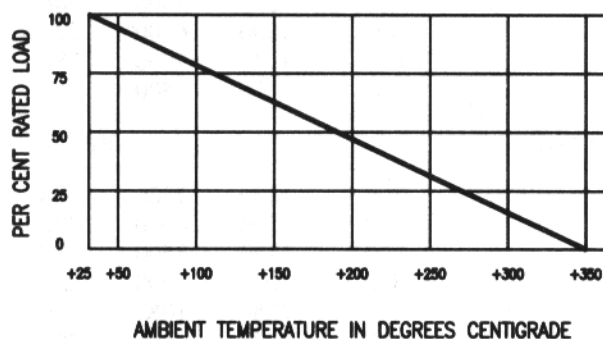
Based on 25°C free air rating

| Series | Minimum Wattage | Maximum Wattage |
|--------|-----------------|-----------------|
| VP25K  | 25              | N/A             |
| VP50K  | 50              | N/A             |
| VK100N | 100             | N/A             |
| VK160W | 160             | 175             |
| VK200W | 200             | 225             |

N/A = Not Applicable

Figure 1

### Series VP & VK Derating



Electrical Specifications continued, next page

Electrical Specifications continued

Overload

10 times rated wattage 5 seconds

Temperature Coefficient

±100 ppm/°C (Closer TC available)

Dielectric Withstanding Voltage

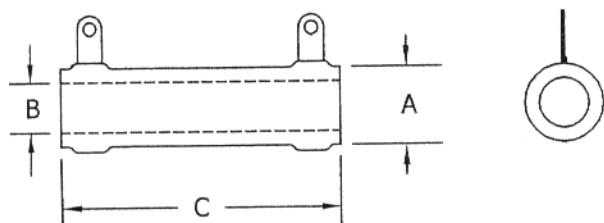
1000 Vac when dual wattage shown:

Lower wattages have max hotspot 275°

Higher wattages have max hotspot 350°

Figure 2

Series VP & VK Dimensions



|        | A*                       | B*   | C*     |
|--------|--------------------------|------|--------|
| VP25K  | .562                     | .313 | 2.000  |
| VP50K  | .562                     | .313 | 4.000  |
| VK100N | .750                     | .500 | 6.500  |
| VK160W | ----- DISCONTINUED ----- |      |        |
| VK200W | 1.125                    | .750 | 10.500 |

\* Maximum Dimensions

\*\* Dimensional Tolerance: ±.0313"

Series VP & VK Standard Resistance Values

Stock Values

| 25 WATT  |     | VP25K  |      |      | FIXED |
|----------|-----|--------|------|------|-------|
| 1        | 25  | 500    | 3K   | 15K  | 60K   |
| 2        | 50  | 750    | 3.5K | 20K  | 70K   |
| 3        | 75  | 800    | 4K   | 25K  | 80K   |
| 4        | 100 | 1K     | 5K   | 30K  | 100K  |
| 5        | 150 | 1500   | 6K   | 35K  |       |
| 10       | 200 | 2K     | 7.5K | 40K  |       |
| 15       | 250 | 2.5K   | 10K  | 50K  |       |
| 50 WATT  |     | VP50K  |      |      | FIXED |
| 1        | 75  | 750    | 4K   | 20K  | 150K  |
| 2        | 100 | 800    | 5K   | 25K  | 175K  |
| 3        | 150 | 1K     | 6K   | 30K  | 200K  |
| 4        | 200 | 1.25K  | 7.5K | 35K  | 225K  |
| 5        | 250 | 1.5K   | 8K   | 50K  | 250K  |
| 10       | 300 | 2K     | 10K  | 75K  |       |
| 25       | 400 | 2.5K   | 12K  | 100K |       |
| 50       | 500 | 3K     | 15K  | 125K |       |
| 100 WATT |     | VK100N |      |      | FIXED |
| 1        | 25  | 200    | 1.5K | 7.5K | 40K   |
| 2        | 50  | 250    | 2K   | 10K  | 50K   |
| 3        | 75  | 300    | 2.5K | 15K  | 60K   |
| 4        | 100 | 500    | 3K   | 20K  | 75K   |
| 5        | 125 | 750    | 4K   | 25K  | 100K  |
| 10       | 150 | 1K     | 5K   | 30K  | 200K  |
| 175 WATT |     | VK160W |      |      | FIXED |
| 1        | 25  | 250    | 3K   | 20K  | 75K   |
| 2        | 50  | 500    | 5K   | 25K  | 100K  |
| 3        | 75  | 1K     | 7.5K | 30K  |       |
| 4        | 100 | 1.5K   | 10K  | 40K  |       |
| 5        | 125 | 2K     | 12K  | 50K  |       |
| 10       | 150 | 2.5K   | 15K  | 60K  |       |
| 225 WATT |     | VK200W |      |      | FIXED |
| 1        | 25  | 250    | 2.5K | 15K  | 100K  |
| 2        | 50  | 500    | 3K   | 20K  |       |
| 3        | 75  | 750    | 5K   | 25K  |       |
| 4        | 100 | 1K     | 7.5K | 30K  |       |
| 5        | 150 | 1.5K   | 10K  | 50K  |       |
| 10       | 200 | 2K     | 12K  | 75K  |       |

Note:

Special resistance values available; consult factory.

Mounting brackets sold separately.

| Series | Bracket Number |
|--------|----------------|
| VP25K  | K-100 ✓        |
| VP50K  | K-100          |
| VK100N | N-100          |
| VK160W | W-100          |
| VK200W | W-100          |

Series VP & VK How To Order

Series/Wattage + Resistance Value = Part Number

Example:

25 watts at 1 ohm = VP25K-1