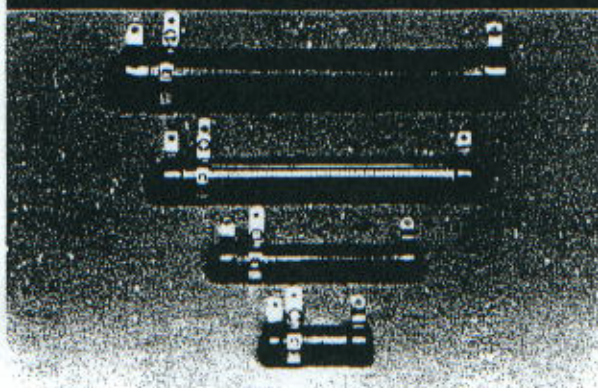


**Series VPA & VKA**  
**10, 25, 50, 100, 160-175, 200-225 Watt**  
**Adjustable-Power, Wirewound Resistors**



### Description

The VPA and VKA adjustable-power resistors are excellent for applications requiring settings at different resistance values. The resistors come equipped with an adjustable slider lug, making them ideal for adjusting circuits, obtaining odd resistance values, and setting equipment to meet various line voltages. The VPA and VKA series are made in accordance to MIL-R-26 standards. These resistors can be bracket mounted.

### Features

- Adjustable slider lug
- Rugged vitreous enamel
- All-welded construction
- Meets or exceeds MIL-R-19365 standards.

**DISCONTINUED**

### Series VPA & VKA Material Specifications

#### Coating

Vitreous enamel

#### Core

Tubular ceramic

#### Terminals

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

#### Weight

| VP10FA    | VP25KA    | VP50KA    | VK100NA   | VK160WA  | VK200WA    |
|-----------|-----------|-----------|-----------|----------|------------|
| 10 watt   | 25 watt   | 50 watt   | 100 watt  | 160 watt | 200 watt   |
| .32 oz.   | .8 oz.    | 1.44 oz.  | 3.2 oz.   | 8 oz.    | 9.92 oz.   |
| 8.96 gms. | 22.4 gms. | 40.3 gms. | 89.6 gms. | 224 gms. | 277.8 gms. |

### Series VPA & VKA Electrical Specifications

#### Resistance Tolerance

±10% standard

Closer tolerances available.

#### Power Rating

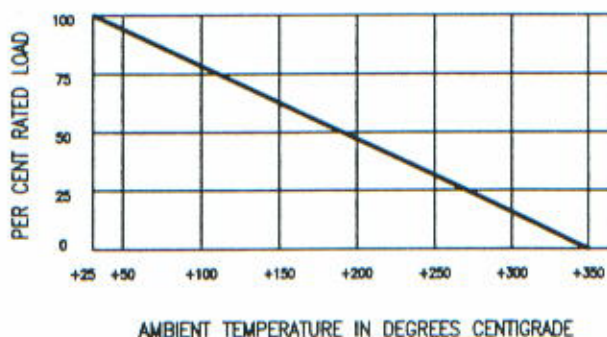
Based on 25°C free air rating

| Series  | Standard Wattage | Maximum Wattage |
|---------|------------------|-----------------|
| VP10FA  | 10               | 12              |
| VP25KA  | 25               | N/A             |
| VP50KA  | 50               | N/A             |
| VK100NA | 100              | N/A             |
| VK160WA | 160              | 175             |
| VK200WA | 200              | 225             |

N/A = Not applicable.

Figure 1

### Series VPA & VKA Derating



Electrical Specifications continued, next page

**Overload**

10 times rated wattage for 5 seconds

**Temperature Coefficient** $\pm 100 \text{ ppm}/^\circ\text{C}$ **Dielectric Withstanding Voltage**

1000 Vac

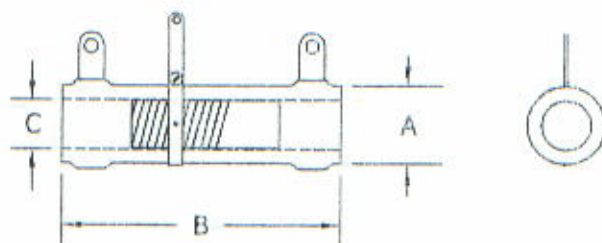
When dual wattages are shown:

Lower wattages have maximum hotspot  $275^\circ\text{C}$ ;Higher wattages have maximum hotspot  $350^\circ\text{C}$ .

Stated wattage applies only when full resistance is in the circuit.  
 Setting the slider lug at an intermediate point reduces the wattage rating by the approximate same proportion.

Example: Lug at 50%, wattage is reduced by 50%.

Figure 2

**Series VPA Dimensions**

|         | A*    | B*           | C*    |
|---------|-------|--------------|-------|
| VP10FA  | .313  | 1.750        | .188  |
| VP25KA  | .562  | 2.000        | .313  |
| VP50KA  | .562  | 4.000        | .313  |
| VK100NA | ----- | DISCONTINUED | ----- |
| VK160WA | ----- | DISCONTINUED | ----- |
| VK200WA | ----- | DISCONTINUED | ----- |

\* Maximum Dimensions

**Series VPA & VKA Standard Resistance Values****Stock Values**

| 12 WATT  |     | VP10FA  |      | ADJUSTABLE |      |
|----------|-----|---------|------|------------|------|
| 1        | 20  | 250     | 800  | 3500       | 8000 |
| 2        | 25  | 300     | 1000 | 4000       | 8500 |
| 3        | 50  | 350     | 1250 | 4500       | 9000 |
| 5        | 75  | 400     | 1500 | 5000       | 10K  |
| 7.5      | 100 | 500     | 2250 | 6000       |      |
| 10       | 150 | 600     | 2500 | 7000       |      |
| 15       | 200 | 750     | 3000 | 7500       |      |
| 25 WATT  |     | VP25KA  |      | ADJUSTABLE |      |
| 1        | 20  | 300     | 2000 | 6000       | 15K  |
| 2        | 25  | 400     | 2250 | 7000       | 20K  |
| 3        | 50  | 500     | 2500 | 7200       | 25K  |
| 4        | 75  | 750     | 3000 | 7500       |      |
| 5        | 100 | 800     | 3500 | 8000       |      |
| 7.5      | 150 | 1000    | 4000 | 9000       |      |
| 10       | 200 | 1250    | 4500 | 10K        |      |
| 15       | 250 | 1500    | 5000 | 12K        |      |
| 50 WATT  |     | VP50KA  |      | ADJUSTABLE |      |
| 1        | 50  | 500     | 2500 | 7200       | 25K  |
| 2        | 75  | 750     | 3000 | 7500       | 30K  |
| 3        | 100 | 800     | 3500 | 8000       | 35K  |
| 4        | 150 | 1000    | 4000 | 9000       | 40K  |
| 5        | 200 | 1250    | 4500 | 10K        | 50K  |
| 10       | 250 | 1500    | 5000 | 12K        | 60K  |
| 20       | 300 | 2000    | 6000 | 15K        | 75K  |
| 25       | 400 | 2250    | 7000 | 20K        | 100K |
| 100 WATT |     | VK100NA |      | ADJUSTABLE |      |
| 1        | 15  | 250     | 1500 | 15K        | 75K  |
| 2        | 25  | 300     | 2000 | 20K        | 100K |
| 3        | 50  | 400     | 2500 | 25K        |      |
| 4        | 100 | 500     | 3500 | 30K        |      |
| 5        | 150 | 750     | 5000 | 40K        |      |
| 10       | 200 | 1000    | 10K  | 50K        |      |
| 175 WATT |     | VK160WA |      | ADJUSTABLE |      |
| 1        | 10  | 250     | 5000 | 30K        |      |
| 2        | 25  | 500     | 10K  | 40K        |      |
| 3        | 50  | 1000    | 15K  | 50K        |      |
| 4        | 100 | 1500    | 20K  | 75K        |      |
| 5        | 150 | 2500    | 25K  | 100K       |      |
| 225 WATT |     | VK200WA |      | ADJUSTABLE |      |
| 1        | 10  | 100     | 500  | 10K        | 50K  |
| 2        | 20  | 150     | 1000 | 15K        | 75K  |
| 3        | 25  | 200     | 1500 | 20K        | 100K |
| 4        | 50  | 250     | 2500 | 25K        |      |
| 5        | 75  | 300     | 5000 | 30K        |      |

**Notes:**

Special resistance values available.

Mounting brackets sold separately.

For specials, please consult Factory.

| Series  | Bracket Number |
|---------|----------------|
| VP10FA  | F-100          |
| VP25KA  | K-100          |
| VP50KA  | K-100          |
| VK100NA | N-100          |
| VK160WA | W-100          |
| VK200WA | W-100          |

**Series VPA & VKA How To Order**

Series/Wattage + Resistance Value = Part Number

Example:

25 watt adjustable + 150 ohms = VP25KA-150