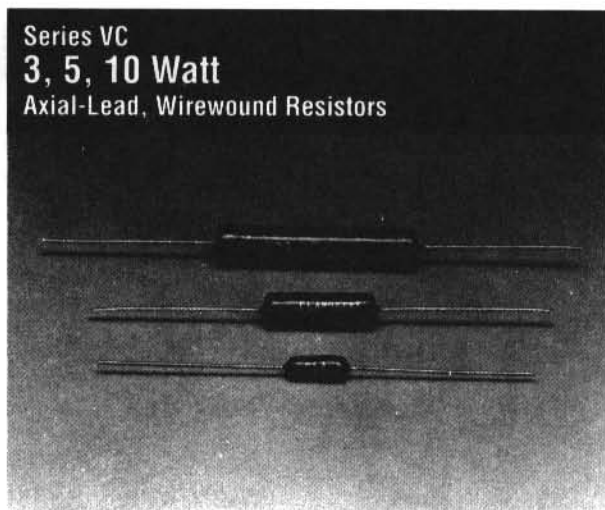


**Series VC**  
**3, 5, 10 Watt**  
 Axial-Lead, Wirewound Resistors



### Description

The VC series is a low-cost, high-quality, axial-lead resistor. Its small size makes it excellent for circuit board, point-to-point, or terminal board applications. The VC series is made in accordance to MIL-R-26 standards and is ideal for today's technology.

### Features

- *Rugged vitreous enamel*
- *Low cost*
- *All-welded construction*
- *Uniformly tinned leads*
- *Meets or exceeds MIL-R-26 standards*
- *Non-inductive winding available*

### Series VC Material Specifications

*Coating*  
 Conformal vitreous enamel

*Core*  
 Ceramic

*Terminals*  
 Tinned leads, solderable to MIL-R-26 standards

#### Weight

| VC3D      | VC5E      | VC10F     |
|-----------|-----------|-----------|
| 3 watt    | 5 watt    | 10 watt   |
| .032 oz.  | .096 oz.  | .224 oz.  |
| .896 gms. | 2.69 gms. | 6.27 gms. |

### Series VC Electrical Specifications

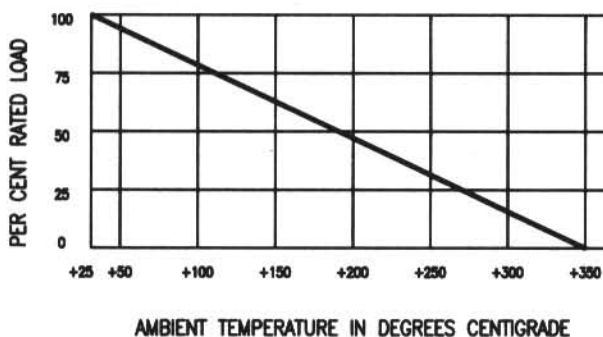
*Resistance Tolerance*  
 5% standard 1 ohm and up  
 ±10% under 1 ohm  
 Closer tolerances available.

*Power Rating*  
 Based on 25°C free air rating

| Series | Minimum Wattage | Maximum Wattage |
|--------|-----------------|-----------------|
| VC3D   | 3.0             | 3.25            |
| VC5E   | 5.0             | 6.50            |
| VC10F  | 10.0            | 11.00           |

Figure 1

### Series VC Derating



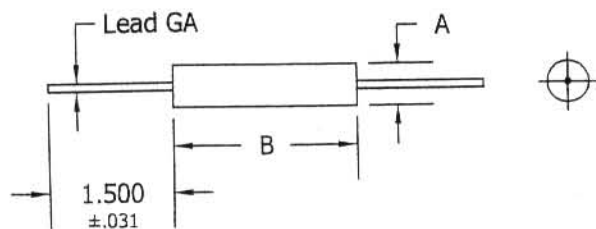
#### Overload

Under 5 watts, 5 times rated wattage for 5 seconds.  
 5 watts and over, 10 times rated wattage for 5 seconds.

*Temperature Coefficient*  
 ±150 ppm (closer TC available)

*Dielectric Withstanding Voltage*  
 500 Vac

# Series VC Dimensions



|       | A*    | B*     | Lead<br>GA |
|-------|-------|--------|------------|
| VC3D  | .220" | .500"  | 20         |
| VC5E  | .276" | 1.000" | 20         |
| VC10F | .394" | 1.844" | 20         |

\* Maximum Dimensions

## 11 WATT

## VC10F

|     |     |     |       |       |       |
|-----|-----|-----|-------|-------|-------|
| .1  | 18  | 150 | 750   | 3.9K  | 15K   |
| .13 | 20  | 180 | 800   | 4K    | 16K   |
| .15 | 22  | 200 | 820   | 4.5K  | 17.5K |
| .2  | 25  | 220 | 900   | 4.7K  | 18K   |
| .25 | 27  | 225 | 1K    | 5K    | 20K   |
| .3  | 30  | 250 | 1.1K  | 5.6K  | 22K   |
| .33 | 33  | 270 | 1.2K  | 6K    | 22.5K |
| .50 | 35  | 300 | 1.25K | 6.8K  | 25K   |
| .75 | 39  | 330 | 1.5K  | 7K    | 27K   |
| 1   | 40  | 350 | 1.75K | 7.5K  | 30K   |
| 1.5 | 47  | 390 | 1.8K  | 8K    | 33K   |
| 2   | 50  | 400 | 2K    | 8.2K  | 35K   |
| 3   | 56  | 450 | 2.2K  | 8.5K  | 39K   |
| 4   | 68  | 470 | 2.25K | 9K    | 40K   |
| 5   | 75  | 500 | 2.5K  | 10K   | 45K   |
| 7.5 | 82  | 560 | 2.7K  | 11K   | 47K   |
| 10  | 100 | 600 | 3K    | 12K   | 50K   |
| 12  | 120 | 680 | 3.3K  | 12.5K |       |
| 15  | 125 | 700 | 3.5K  | 13.5K |       |

## Series VC Standard Resistance Values

### Stock Values

#### 3.25 WATT

#### VC3D

|     |    |     |      |       |      |
|-----|----|-----|------|-------|------|
| .1  | 10 | 68  | 390  | 1.25K | 5K   |
| .13 | 12 | 75  | 400  | 1.5K  | 5.6K |
| .15 | 15 | 82  | 450  | 1.75K | 6K   |
| .2  | 18 | 100 | 470  | 1.8K  | 6.8K |
| .25 | 20 | 120 | 500  | 2K    | 7K   |
| .3  | 22 | 125 | 560  | 2.2K  | 7.5K |
| .33 | 25 | 150 | 600  | 2.25K | 8K   |
| .5  | 27 | 180 | 680  | 2.5K  | 8.2K |
| .75 | 30 | 200 | 700  | 2.7K  | 9K   |
| 1   | 33 | 220 | 750  | 3K    | 10K  |
| 1.5 | 35 | 225 | 800  | 3.3K  |      |
| 2   | 39 | 250 | 820  | 3.5K  |      |
| 3   | 40 | 270 | 900  | 3.9K  |      |
| 4   | 47 | 300 | 1K   | 4K    |      |
| 5   | 50 | 330 | 1.1K | 4.5K  |      |
| 7.5 | 56 | 350 | 1.2K | 4.7K  |      |

#### 6.5 WATT

#### VC5E

|     |    |     |       |       |       |
|-----|----|-----|-------|-------|-------|
| .1  | 12 | 75  | 450   | 1.8K  | 7K    |
| .13 | 15 | 82  | 470   | 2K    | 7.5K  |
| .15 | 18 | 100 | 500   | 2.2K  | 8K    |
| .2  | 20 | 120 | 560   | 2.25K | 8.2K  |
| .25 | 22 | 125 | 600   | 2.5K  | 9K    |
| .3  | 25 | 150 | 680   | 2.7K  | 10K   |
| .33 | 27 | 180 | 700   | 3K    | 12.5K |
| .5  | 56 | 200 | 750   | 3.3K  | 15K   |
| .75 | 30 | 220 | 800   | 3.5K  | 17.5K |
| 1   | 33 | 225 | 820   | 3.9K  | 18K   |
| 1.5 | 35 | 250 | 900   | 4K    | 20K   |
| 2   | 39 | 270 | 1K    | 4.5K  | 22K   |
| 3   | 40 | 300 | 1.1K  | 4.7K  | 22.5K |
| 4   | 47 | 330 | 1.2K  | 5K    | 25K   |
| 5   | 50 | 350 | 1.25K | 5.6K  |       |
| 7.5 | 56 | 390 | 1.5K  | 6K    |       |
| 10  | 68 | 400 | 1.75K | 6.8K  |       |

Standard Resistance Values continued, next column

### Notes:

Standard packaging: 10 pieces per pack.  
Tape and reel available.  
Special resistance values available.  
Non-inductive winding available.  
For specials, please consult Factory.

## Series VC How To Order

Series/Wattage + Resistance = Part number

Example:

3 watt + 10K ohm = VC3D-10K