

## SPECIFICATIONS

### Material

**Core:** Ceramic.

**Coating:** Vitreous enamel except for values above 4.7K (3W) and 7.5K (5W), which are supplied in silicone-ceramic coatings.

**Terminals:** Solder coated radial. #20 ga. tinned terminals require 0.046 in. (1.168 mm) holes (2). RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu

**Derating:** Linearly from 100% @ +25°C to 0% @ +350°C.

**Note:** Values above 3.9K (3W) and 8.2K (5W) involve very fine resistance wire and should not be used in critical applications without burn-in and/or thermal cycling.

### Electrical

**Tolerance:** ±5% (J) (other tolerances available).

**Power rating:** Based on 25°C free air rating.

### Overload:

3 watt: 5 times rated wattage for 5 seconds.

5.25 watt: 10 times rated wattage for 5 seconds.

**Temperature coefficient:** ±260 ppm/°C.

**To calculate max. amps:** use the formula  $\sqrt{P/R}$ .

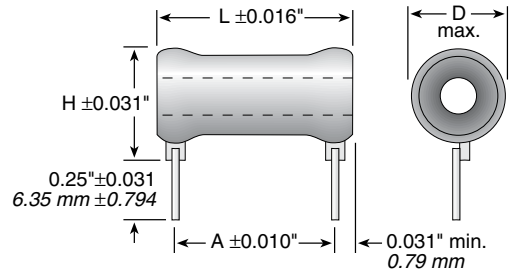
## FEATURES

- Radial construction for direct insertion into printed circuit boards; fit standard 0.10 inch matrix boards with standard 0.046 inch diameter holes. Provides a built in stand-off to reduce board temperature.
- Space saving radial terminals reduce the total length requirement compared to axial terminal resistors and increase packaging density possibilities.
- Flame resistant lead free vitreous enamel coating.
- RoHS compliant; add "E" suffix to part number to specify.



# PC-58 Series

## Tubular Radial Terminal Wirewound for PC Board Applications



| Series                          | Wattage | Ohms               | Dimensions (in. / mm) |               |              |              | Voltage |
|---------------------------------|---------|--------------------|-----------------------|---------------|--------------|--------------|---------|
|                                 |         |                    | Length                | Height        | Diam.        | Dim. A       |         |
| <b>R3</b> (vitreous) (silicone) | 3       | 1-3.9K<br>4K-10K   | 0.438 / 11.13         | 0.469 / 11.91 | 0.313 / 7.95 | 0.30 / 7.62  | 103     |
| <b>R5</b> (vitreous) (silicone) | 5.25    | 1-7.4K<br>7.5K-20K | 0.625 / 15.88         | 0.516 / 13.11 | 0.344 / 8.74 | 0.50 / 12.70 | 187     |

### STANDARD PART NUMBERS FOR PC-58 SERIES

| Ohmic value | Part No. | Wattage |   | Ohmic value | Part No. | Wattage |   | Ohmic value | Part No. | Wattage |   | Ohmic value | Part No. | Wattage |   |
|-------------|----------|---------|---|-------------|----------|---------|---|-------------|----------|---------|---|-------------|----------|---------|---|
|             |          | 3       | 5 |             |          | 3       | 5 |             |          | 3       | 5 |             |          | 3       | 5 |
| 1           | 1R0      | ✓       | ✓ | 51          | 51R      | ✓       | ✓ | 430         | 430      | ✓       | ✓ | 2500        | 2K5      | ✓       | ✓ |
| 1.5         | 1R5      | ✓       | ✓ | 56          | 56R      | ✓       | ✓ | 500         | 500      | ✓       | ✓ | 2700        | 2K7      | ✓       | ✓ |
| 2           | 2R0      | ✓       | ✓ | 68          | 68R      | ✓       | ✓ | 510         | 510      | ✓       | ✓ | 3000        | 3K0      | ✓       | ✓ |
| 2.4         | 2R4      | ✓       | ✓ | 75          | 75R      | ✓       | ✓ | 560         | 560      | ✓       | ✓ | 3300        | 3K3      | ✓       | ✓ |
| 3           | 3R0      | ✓       | ✓ | 82          | 82R      | ✓       | ✓ | 600         | 600      | ✓       | ✓ | 3900        | 3K9      | ✓       | ✓ |
| 3.9         | 3R9      | ✓       | ✓ | 100         | 100      | ✓       | ✓ | 620         | 620      | ✓       | ✓ | 4700        | 4K7      | ✓       | ✓ |
| 5           | 5R0      | ✓       | ✓ | 120         | 120      | ✓       | ✓ | 750         | 750      | ✓       | ✓ | 5000        | 5K0      | ✓       | ✓ |
| 5.1         | 5R1      | ✓       | ✓ | 150         | 150      | ✓       | ✓ | 800         | 800      | ✓       | ✓ | 5600        | 5K6      | ✓       | ✓ |
| 5.6         | 5R6      | ✓       | ✓ | 160         | 160      | ✓       | ✓ | 820         | 820      | ✓       | ✓ | 6200        | 6K2      | ✓       | ✓ |
| 7.5         | 7R5      | ✓       | ✓ | 200         | 200      | ✓       | ✓ | 910         | 910      | ✓       | ✓ | 6800        | 6K8      | ✓       | ✓ |
| 10          | 10R      | ✓       | ✓ | 220         | 220      | ✓       | ✓ | 1000        | 1K0      | ✓       | ✓ | 7500        | 7K5      | ✓       | ✓ |
| 15          | 15R      | ✓       | ✓ | 250         | 250      | ✓       | ✓ | 1200        | 1K2      | ✓       | ✓ | 8200        | 8K2      | ✓       | ✓ |
| 18          | 18R      | ✓       | ✓ | 270         | 270      | ✓       | ✓ | 1300        | 1K3      | ✓       | ✓ | 9000        | 9K0      | ✓       | ✓ |
| 20          | 20R      | ✓       | ✓ | 300         | 300      | ✓       | ✓ | 1500        | 1K5      | ✓       | ✓ | 9100        | 9K1      | ✓       | ✓ |
| 22          | 22R      | ✓       | ✓ | 330         | 330      | ✓       | ✓ | 1800        | 1K8      | ✓       | ✓ | 10,000      | 10K      | ✓       | ✓ |
| 25          | 25R      | ✓       | ✓ | 350         | 350      | ✓       | ✓ | 2000        | 2K0      | ✓       | ✓ | 12,000      | 12K      | ✓       | ✓ |
| 30          | 30R      | ✓       | ✓ | 390         | 390      | ✓       | ✓ | 2200        | 2K2      | ✓       | ✓ | 15,000      | 15K      | ✓       | ✓ |
| 40          | 40R      | ✓       | ✓ | 400         | 400      | ✓       | ✓ | 2400        | 2K4      | ✓       | ✓ | 20,000      | 20K      | ✓       | ✓ |
| 50          | 50R      | ✓       | ✓ |             |          |         |   |             |          |         |   |             |          |         |   |

✓ = Standard values  
 Values above 3.9K (3W) and 8.2K (5W) involve very fine resistance wire and should not be used in critical applications without burn-in and/or thermal cycling.  
 Values above 4.7K (3W) and 7.5K (5W) supplied in silicone-ceramic coatings instead of vitreous enamel.

Check product availability at [www.ohmite.com](http://www.ohmite.com)

## ORDERING INFORMATION

RoHS Compliant

**R 5 J 1 K 0 E**

PC-58 Series | Wattage | Tolerance (J = 5%) | Ohm Value

Example:  
 1R0 = 1.0Ω  
 10R = 10.0Ω  
 250 = 250Ω  
 4K7 = 4,700Ω

**Our friendly Customer Service team can be reached at 866-9-OHMITE**