

When limited space is a consideration, choose Ohmite's "thin" stackable 250 Type resistors. These oval-shaped ceramic-core resistors feature a low profile to permit installation in spaces with minimal height. They are also equipped with integral mounting brackets so they can be fastened to a chassis and stacked in locations with limited surface area.

When properly fastened, the mounting brackets add a heat sinking benefit resulting in a smaller size per watt. Durable 250 Type resistors are fully welded and coated with lead free vitreous enamel.

## FEATURES

- Small size-to-power ratio.
- Stackable
- Integral mounting bracket conducts heat to mounting surface.
- Low profile for use in equipment where space is limited.
- All-welded construction.
- RoHS compliant product available Jan. 2006 Add "E" suffix to part number to specify.

## SPECIFICATIONS

### Material

**Coating:** Lead free vitreous enamel.

**Core:** Ceramic.

**Terminals:** Tinned lug with hole.

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

### Electrical

**Tolerance:** ±5% (J)

**Power rating:** Based on mounting a single resistor on a metal surface measuring 10" (254mm) square by .04" (1.016mm) thick. Reduce rating by 15% when mounting on non-metallic surface.

**Overload:** 5 times rated wattage for 5 seconds.

**Temperature coefficient:**

1 to 20Ω: ±400 ppm/°C.  
Over 20Ω: ±260 ppm/°C

**Dielectric withstanding voltage:**

500 VAC: 10 and 20 watt rating.  
1000 VAC: 30, 40 and 55 watt rating (measured from lug to mounting bracket)

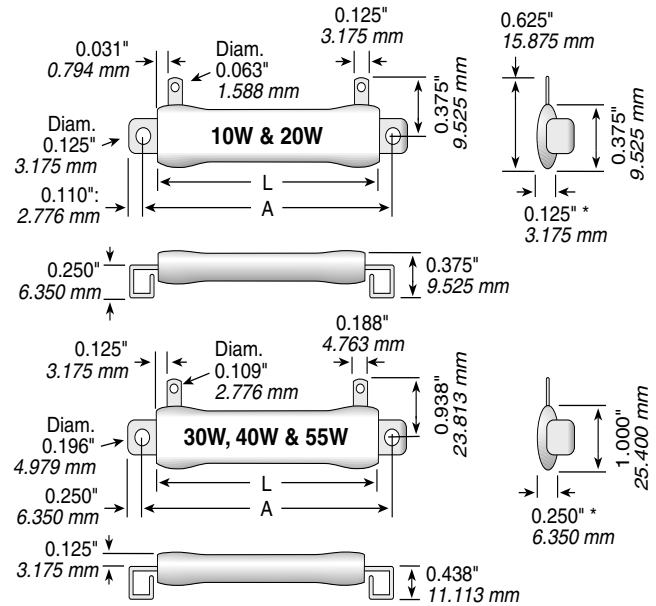
**To calculate max. amps:** use the formula  $\sqrt{P/R}$

**Note:** When resistors are stacked, use washers or spacers as required to insure clearance and improve power dissipation.

# 250 Series

'Thin' Stackohm®

## Vitreous Enamel Power Resistors



\*Reference dimension only; varies according to resistance value

| Series | Wattage | Ohms    | Dimensions (in. / mm) |                 | Voltage |
|--------|---------|---------|-----------------------|-----------------|---------|
|        |         |         | Length L              | Length A        |         |
| F10    | 10      | 1.0-15K | 0.750 / 19.050        | 1.000 / 25.400  | 187     |
| F20    | 20      | 1.0-50K | 2.000 / 50.800        | 2.313 / 58.750  | 815     |
| F30    | 30      | 1.0-10K | 1.250 / 31.750        | 2.000 / 50.800  | 281     |
| F40    | 40      | 1.0-25K | 2.000 / 50.800        | 2.750 / 69.850  | 655     |
| F55    | 55      | 1.0-30K | 3.500 / 88.900        | 4.250 / 107.950 | 1405    |

Adjustable versions available. Consult factory.  
Other sizes available. Consult factory.  
Also available in low cost Centohm coating. Consult Factory.

## STOCK PART NUMBERS FOR STANDARD RESISTANCE VALUES

| Wattage     |                  |      |      |      |      |      | Wattage     |                  |      |      |      |      |      | Wattage     |                  |      |      |      |      |      |
|-------------|------------------|------|------|------|------|------|-------------|------------------|------|------|------|------|------|-------------|------------------|------|------|------|------|------|
| Ohmic value | Part No.         | 10   | 20   | 30   | 40   | 55   | Ohmic value | Part No.         | 10   | 20   | 30   | 40   | 55   | Ohmic value | Part No.         | 10   | 20   | 30   | 40   | 55   |
|             | Prefix<br>Suffix | F10J | F20J | F30J | F40J | F55J |             | Prefix<br>Suffix | F10J | F20J | F30J | F40J | F55J |             | Prefix<br>Suffix | F10J | F20J | F30J | F40J | F55J |
| 1           | —1R0             | ✓    | ✚    | ✓    | ✚    | ✚    | 125         | —125             | ✚    |      |      |      |      | 3,000       | —3K0             | ✚    | ✚    | ✓    | ✓    | ✓    |
| 1.5         | —1R5             |      |      | ✓    | ✚    | ✚    | 150         | —150             |      | ✓    |      |      |      | 3,500       | —3K5             |      |      |      |      |      |
| 2           | —2R0             | ✓    | ✓    |      | ✚    | ✚    | 200         | —200             | ✓    | ✚    | ✓    | ✓    | ✚    | 4,000       | —4K0             | ✚    | ✚    | ✓    | ✚    | ✓    |
| 3           | —3R0             |      |      | ✚    | ✓    | ✓    | 250         | —250             | ✚    | ✓    | ✓    | ✚    | ✚    | 5,000       | —5K0             | ✚    | ✓    | ✚    | ✚    | ✚    |
| 4           | —4R0             |      |      |      | ✚    | ✓    | 300         | —300             | ✚    | ✓    |      |      |      | 6,000       | —6K0             |      | ✚    |      |      |      |
| 5           | —5R0             | ✚    | ✚    | ✓    | ✚    | ✚    | 400         | —400             | ✚    | ✚    | ✚    | ✓    | ✓    | 7,500       | —7K5             |      | ✓    | ✚    | ✚    | ✚    |
| 7.5         | —7R5             | ✓    |      |      | ✓    | ✚    | 500         | —500             | ✓    | ✓    | ✓    | ✚    | ✓    | 10,000      | —10K             |      |      | ✚    | ✓    | ✓    |
| 10          | —10R             | ✓    | ✓    | ✚    | ✓    | ✚    | 600         | —600             | ✚    |      |      |      |      | 12,500      | —12K5            |      | ✚    |      |      |      |
| 15          | —15R             | ✓    | ✚    | ✚    |      |      | 750         | —750             | ✚    |      | ✓    | ✓    | ✚    | 15,000      | —15K             |      | ✚    |      | ✓    | ✚    |
| 20          | —20R             | ✓    |      |      |      |      | 800         | —800             |      | ✓    |      |      |      | 20,000      | —20K             |      | ✚    |      | ✓    | ✚    |
| 25          | —25R             | ✚    | ✚    | ✚    | ✚    | ✚    | 1,000       | —1K0             | ✓    | ✚    | ✚    | ✓    | ✓    | 25,000      | —25K             | ✚    |      |      | ✓    | ✚    |
| 30          | —30R             | ✓    |      |      |      |      | 1,250       | —1K25            | ✓    | ✓    |      |      |      | 30,000      | —30K             | ✚    |      |      |      |      |
| 40          | —40R             | ✚    | ✚    | ✚    | ✚    | ✓    | 1,500       | —1K5             | ✓    | ✓    | ✚    | ✚    | ✓    | 35,000      | —35K             | ✚    |      |      |      | ✚    |
| 50          | —50R             | ✓    | ✚    | ✓    | ✓    | ✓    | 1,750       | —1K75            | ✚    |      |      |      |      | 40,000      | —40K             | ✓    |      |      |      |      |
| 75          | —75R             | ✚    | ✚    | ✚    | ✚    | ✚    | 2,000       | —2K0             | ✚    | ✓    | ✚    | ✚    | ✚    | 50,000      | —50K             | ✚    |      |      |      |      |
| 100         | —100             | ✚    | ✓    | ✚    | ✚    | ✓    | 2,500       | —2K5             | ✓    | ✓    | ✓    | ✓    | ✓    |             |                  |      |      |      |      |      |

✚ = Most popular stock values  
✓ = Stock values  
✚ = Non-stock values subject to minimum handling charge per item

Shaded values involve very fine resistance wire and should not be used in critical applications without burn-in and/or thermal cycling.