

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 height restrictions. 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. Add "E" suffix to part number to specify.

## SPECIFICATIONS

### Material

**Coating:** Lead free vitreous enamel.

**Core:** Ceramic.

**Terminals:** Tinned lug with hole. RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu

**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 0.04" (1.016mm) thick. Reduce rating by 15% when mounting on non-metallic surface.

**Overload:** 10x rated wattage for 5 seconds if max. voltage is not exceeded.

### 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)

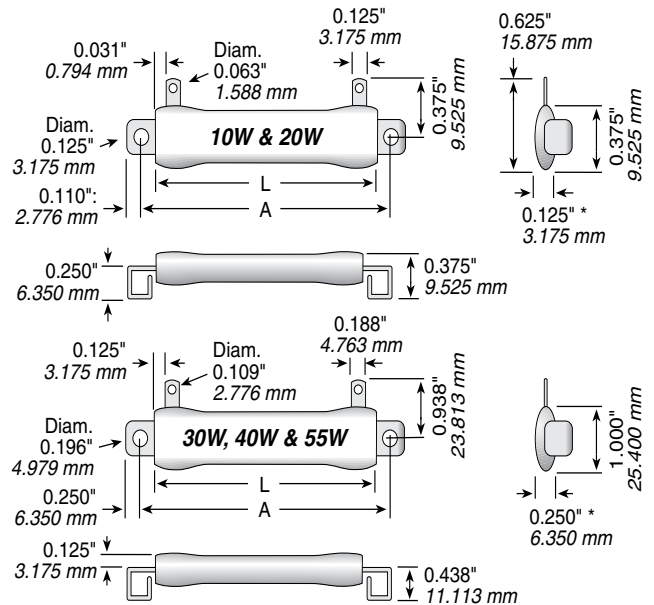
**To calculate max. amps:** use the formula  $\sqrt{P/R}$



# 250 Series

## 'Thin' Stackohm®

### Vitreous Enamel Power



\*Reference dimension only; varies according to resistance value.

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

### ORDERING INFO

Series	RoHS Compliant
<b>F 20 J 1 R 0 E</b>	
<b>Coating</b>	<b>Wattage</b>
Blank = Vitreous	C = Centohm
S = Silicone	
<b>Tolerance</b>	<b>Ohms</b>
F = 1%	1R0 = 1 Ω
H = 3%	250 = 250 Ω
J = 5%	1K0 = 1,000 Ω
K = 10%	25K = 25,000 Ω
	25K5 = 25,500 Ω

### MADE-TO-ORDER PARTS

See web-site for custom core info

Terminal Type: See "Resistor Terminals for Tubular Cores"

Tolerance: J = 5%

RoHS Compliant

## 2 5 3 0 T E 5 7 B 1 R 0 0 J E

Series	Wattage & Core Code	Mounting Brackets	Ohms
Vitreous enamel: 25 = 250 Fixed 26 = 260 Adjustable	See "Core and Terminal Selection"	(user supplies bracket for core TB) B = Stacking box S = Stacking stud, std. height H = Stacking stud high U = Unit type	Example: 1R00 = 1 Ω 250R = 250 Ω 1K00 = 1,000 Ω 25K0 = 25,000 Ω 25K5 = 25,500 Ω
Silicone ceramic: 45 = 450 Fixed 46 = 460 Adjustable			

Series	Wattage	Ohms	Dimensions (in. /mm)		Max. 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 Ohmite.  
Other sizes available. Consult Ohmite.  
Also available in low cost Centohm or Silicone coating. Consult Ohmite.  
\* Maximum Voltage is based on Ohm's Law  $[V=\sqrt{P \cdot R}]$  as limited by the resistance value of specified product

### STANDARD PART NUMBERS FOR 250 SERIES

Ohmic value	Part No. Prefix Suffix	Wattage					Ohmic value	Part No. Prefix Suffix	Wattage					Ohmic value	Part No. Prefix Suffix	Wattage					
		10	20	30	40	55			10	20	30	40	55			10	20	30	40	55	
1	—1R0E	✓	✓	✓	✓	✓	50	—50RE	✓	✓	✓	✓	✓	1,500	—1K5E	✓	✓	✓	✓	✓	✓ = Standard values; check availability using the worldwide inventory search at www.ohmite.com
1.5	—1R5E	✓	✓	✓	✓	✓	75	—75RE	✓	✓	✓	✓	✓	2,000	—2K0E	✓	✓	✓	✓		
2	—2R0E	✓	✓	✓	✓	✓	100	—100E	✓	✓	✓	✓	✓	2,500	—2K5E	✓	✓	✓	✓		
3	—3R0E	✓	✓	✓	✓	✓	150	—150E	✓	✓	✓	✓	✓	3,000	—3K0E	✓	✓	✓	✓		
4	—4R0E	✓	✓	✓	✓	✓	200	—200E	✓	✓	✓	✓	✓	4,000	—4K0E	✓	✓	✓	✓		
5	—5R0E	✓	✓	✓	✓	✓	250	—250E	✓	✓	✓	✓	✓	5,000	—5K0E	✓	✓	✓	✓		
7.5	—7R5E	✓	✓	✓	✓	✓	300	—300E	✓	✓	✓	✓	✓	6,000	—6K0E	✓	✓	✓	✓		
10	—10RE	✓	✓	✓	✓	✓	400	—400E	✓	✓	✓	✓	✓	7,500	—7K5E	✓	✓	✓	✓		
15	—15RE	✓	✓	✓	✓	✓	500	—500E	✓	✓	✓	✓	✓	10,000	—10KE	✓	✓	✓	✓		
20	—20RE	✓	✓	✓	✓	✓	750	—750E	✓	✓	✓	✓	✓	15,000	—15KE	✓	✓	✓	✓		
25	—25RE	✓	✓	✓	✓	✓	800	—800E	✓	✓	✓	✓	✓	20,000	—20KE	✓	✓	✓	✓		
30	—30RE	✓	✓	✓	✓	✓	1,000	—1K0E	✓	✓	✓	✓	✓	25,000	—25KE	✓	✓	✓	✓		
40	—40RE	✓	✓	✓	✓	✓	1,250	—1K25E	✓	✓	✓	✓	✓	40,000	—40KE	✓	✓	✓	✓		