

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.

- 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.

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: $\pm 5\%$ (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

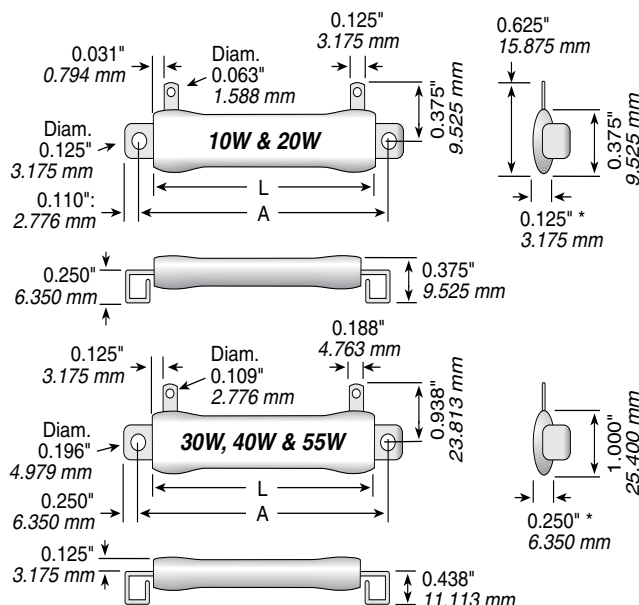
Dielectric withstanding voltage: 500 VAC: 10 and 20 watt rating. 1000 VAC: 30, 40 and 55 watt rating (measured from lug to mounting bracket)

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.

Series		RoHS Compliant	
	F 2 0 J 1 R 0 E		
Coating	Wattage	Tolerance	Ohms
Blank = Vitreous		F = 1%	1R0 = 1 Ω
C = Centohm		H = 3%	250 = 250 Ω
S = Silicone		J = 5%	1K0 = 1,000 Ω
		K = 10%	25K = 25,000 Ω
			25K5 = 25,500 Ω

See website for custom core info

See "Resistor Terminals for Tubular Cores"

Terminal Type

Tolerance
J = 5%

RoHS Compliant

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

Vitreous enamel:
25 = 250 Fixed
30 = 260 Adjustable
Silicone ceramic:
45 = 450 Fixed
46 = 460 Adjustable

Wattage & Core Code
See "Core and Terminal Selection"

Mounting Brackets
(user supplies bracket for core TB)
B = Stacking box
S = Stacking stud, std. height
H = Stacking stud high
U = Unit type

Ohms
Example:
1R00 = 1 Ω
250R = 250 Ω
1K00 = 1,000 Ω
25K0 = 25,000 Ω
25K5 = 25,500 Ω

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 $[V=\sqrt{P \times R}]$ as limited by the resistance value of specified product

Wattage							Wattage							Wattage						
Ohmic value	Part No. Prefix ▶ Suffix ▼	10	20	30	40	55	Ohmic value	Part No. Prefix ▶ Suffix ▼	10	20	30	40	55	Ohmic value	Part No. Prefix ▶ Suffix ▼	10	20	30	40	55
		F10J	F20J	F30J	F40J	F55J			F10J	F20J	F30J	F40J	F55J			F10J	F20J	F30J	F40J	F55J
1	— 1R0E	✓	✓	✓	✓	✓	50	— 50RE	✓		✓	✓	✓	1,500	— 1K5E	✓	✓	✓	✓	✓
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		✓			

✓ = Standard values; check availability using the worldwide inventory search at www.ohmite.com