

## FEATURES

- Rugged vitreous enamel coating withstands high humidity and temperature cycling.
- Durable construction, recommended for industrial applications where reliability is paramount.
- All-welded construction.
- Flame resistant lead free vitreous enamel coating.
- RoHS compliant; Add "E" suffix to part number to specify.

## SPECIFICATIONS

### Material

**Coating:** Conformal lead free vitreous enamel.

**Core:** Ceramic.

**Terminals:** Solder-coated axial.  
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% standard.  
Other tolerances available.

**Power rating:** Based on 25°C free air rating (other wattages available).

### Overload:

Under 7 watts: 5 times rated wattage for 5 seconds.  
7 watts and over: 10 times rated wattage for 5 seconds.

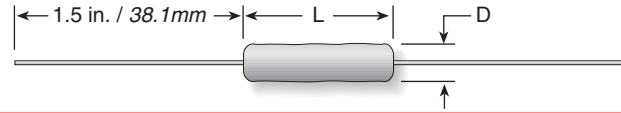
### Temperature coefficient:

1 to 9.99 ohms: ±50 ppm/°C  
10 ohms and over: ±30 ppm/°C



# 20 Series

## Vitreous Enamel Conformal Axial Terminal Wirewound, 5% Tolerance Standard



Series	Wattage	Ohms	Dimensions (in./mm max.)		Max. Volt.**	Lead ga.
			Length*	Diam.*		
21	1	1.0-3.0K	0.421 / 10.7	0.156 / 4.0	75	24
22	2	1.0-3.0K	0.421 / 10.7	0.219 / 5.6	65	20
23	3	0.1-10K	0.515 / 13.1	0.220 / 5.6	135	20
25	5	0.1-28K	1.015 / 25.8	0.276 / 7.0	330	20
27	7	0.1-25K	1.265 / 32.1	0.394 / 10.0	450	20
20	10	0.1-100K	1.859 / 47.2	0.394 / 10.0	720	20

12.5 watt size available on special order

\*For units below 1Ω, add 15% to body diameter, 10% to body length.

\*\*Maximum Voltage is based on Ohm's Law  $[V=\sqrt{P \cdot R}]$  as limited by the resistance value of specified product

The 20 Series axial terminal resistors are both durable and economical. They have all the electrical attributes of the more expensive 90 Series resistors, including all-welded construction.

They offer the durability of a lead free conformal vitreous enamel coating and are ideal for computer, communications and industrial applications in which cost, quality, and reliability are key considerations.

## ORDERING INFORMATION

RoHS Compliant

**21JR10E**

20 Series	Wattage	Tolerance	Resistance Value
Vitreous Enamel	1 = 1W	J = 5%	R10 = 0.10Ω
Axial Lead	2		1R0 = 1.0Ω
Wirewound	3		10R = 10.0Ω
	5		250 = 250Ω
	7		1K0 = 1,000Ω
	0 = 10W		4K5 = 4,500Ω
			50K = 50,000Ω

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

## STANDARD PART NUMBERS FOR 20 SERIES

Ohmic value	Part No. Prefix Suffix	Wattage						Ohmic value	Part No. Prefix Suffix	Wattage						Ohmic value	Part No. Prefix Suffix	Wattage					
		1	2	3	5	7	10			1	2	3	5	7	10			1	2	3	5	7	10
0.10 — R10		✓		✓	✓	✓	✓	62 — 62R	✓	✓	✓	✓	✓	✓	1,800 — 1K8	✓	✓	✓	✓	✓	✓	✓	
0.13 — R13			✓	✓	✓	✓	✓	68 — 68R	✓	✓	✓	✓	✓	✓	2,000 — 2K0	✓	✓	✓	✓	✓	✓	✓	
0.15 — R15			✓	✓	✓	✓	✓	75 — 75R	✓	✓	✓	✓	✓	✓	2,200 — 2K2	✓	✓	✓	✓	✓	✓	✓	
0.20 — R20			✓	✓	✓	✓	✓	82 — 82R	✓	✓	✓	✓	✓	✓	2,500 — 2K5	✓	✓	✓	✓	✓	✓	✓	
0.25 — R25			✓	✓	✓	✓	✓	100 — 100	✓	✓	✓	✓	✓	✓	2,700 — 2K7	✓	✓	✓	✓	✓	✓	✓	
0.30 — R30			✓	✓	✓	✓	✓	120 — 120	✓	✓	✓	✓	✓	✓	3,000 — 3K0	✓	✓	✓	✓	✓	✓	✓	
0.33 — R33			✓	✓	✓	✓	✓	125 — 125	✓	✓	✓	✓	✓	✓	3,300 — 3K3	✓	✓	✓	✓	✓	✓	✓	
0.50 — R50			✓	✓	✓	✓	✓	150 — 150	✓	✓	✓	✓	✓	✓	3,500 — 3K5	✓	✓	✓	✓	✓	✓	✓	
0.75 — R75			✓	✓	✓	✓	✓	180 — 180	✓	✓	✓	✓	✓	✓	3,900 — 3K9	✓	✓	✓	✓	✓	✓	✓	
1 — 1R0	✓	✓	✓	✓	✓	✓	✓	200 — 200	✓	✓	✓	✓	✓	✓	4,000 — 4K0	✓	✓	✓	✓	✓	✓	✓	
1.5 — 1R5	✓	✓	✓	✓	✓	✓	✓	220 — 220	✓	✓	✓	✓	✓	✓	4,500 — 4K5	✓	✓	✓	✓	✓	✓	✓	
2 — 2R0	✓	✓	✓	✓	✓	✓	✓	225 — 225	✓	✓	✓	✓	✓	✓	4,700 — 4K7	✓	✓	✓	✓	✓	✓	✓	
2.2 — 2R2	✓	✓	✓	✓	✓	✓	✓	250 — 250	✓	✓	✓	✓	✓	✓	5,000 — 5K0	✓	✓	✓	✓	✓	✓	✓	
3 — 3R0	✓	✓	✓	✓	✓	✓	✓	270 — 270	✓	✓	✓	✓	✓	✓	6,000 — 6K0	✓	✓	✓	✓	✓	✓	✓	
4 — 4R0	✓	✓	✓	✓	✓	✓	✓	300 — 300	✓	✓	✓	✓	✓	✓	6,800 — 6K8	✓	✓	✓	✓	✓	✓	✓	
5 — 5R0	✓	✓	✓	✓	✓	✓	✓	330 — 330	✓	✓	✓	✓	✓	✓	7,000 — 7K0	✓	✓	✓	✓	✓	✓	✓	
7.5 — 7R5	✓	✓	✓	✓	✓	✓	✓	350 — 350	✓	✓	✓	✓	✓	✓	7,500 — 7K5	✓	✓	✓	✓	✓	✓	✓	
10 — 10R	✓	✓	✓	✓	✓	✓	✓	390 — 390	✓	✓	✓	✓	✓	✓	8,000 — 8K0	✓	✓	✓	✓	✓	✓	✓	
12 — 12R	✓	✓	✓	✓	✓	✓	✓	400 — 400	✓	✓	✓	✓	✓	✓	9,000 — 9K0	✓	✓	✓	✓	✓	✓	✓	
15 — 15R	✓	✓	✓	✓	✓	✓	✓	450 — 450	✓	✓	✓	✓	✓	✓	10,000 — 10K	✓	✓	✓	✓	✓	✓	✓	
18 — 18R	✓	✓	✓	✓	✓	✓	✓	470 — 470	✓	✓	✓	✓	✓	✓	12,000 — 12K	✓	✓	✓	✓	✓	✓	✓	
20 — 20R	✓	✓	✓	✓	✓	✓	✓	500 — 500	✓	✓	✓	✓	✓	✓	13,000 — 13K	✓	✓	✓	✓	✓	✓	✓	
22 — 22R	✓	✓	✓	✓	✓	✓	✓	560 — 560	✓	✓	✓	✓	✓	✓	15,000 — 15K	✓	✓	✓	✓	✓	✓	✓	
25 — 25R	✓	✓	✓	✓	✓	✓	✓	600 — 600	✓	✓	✓	✓	✓	✓	17,000 — 17K	✓	✓	✓	✓	✓	✓	✓	
27 — 27R	✓	✓	✓	✓	✓	✓	✓	680 — 680	✓	✓	✓	✓	✓	✓	20,000 — 20K	✓	✓	✓	✓	✓	✓	✓	
30 — 30R	✓	✓	✓	✓	✓	✓	✓	750 — 750	✓	✓	✓	✓	✓	✓	22,000 — 22K	✓	✓	✓	✓	✓	✓	✓	
33 — 33R	✓	✓	✓	✓	✓	✓	✓	800 — 800	✓	✓	✓	✓	✓	✓	25,000 — 25K	✓	✓	✓	✓	✓	✓	✓	
35 — 35R	✓	✓	✓	✓	✓	✓	✓	820 — 820	✓	✓	✓	✓	✓	✓	30,000 — 30K	✓	✓	✓	✓	✓	✓	✓	
39 — 39R	✓	✓	✓	✓	✓	✓	✓	900 — 900	✓	✓	✓	✓	✓	✓	33,000 — 33K	✓	✓	✓	✓	✓	✓	✓	
40 — 40R	✓	✓	✓	✓	✓	✓	✓	1,000 — 1K0	✓	✓	✓	✓	✓	✓	35,000 — 35K	✓	✓	✓	✓	✓	✓	✓	
47 — 47R	✓	✓	✓	✓	✓	✓	✓	1,100 — 1K1	✓	✓	✓	✓	✓	✓	40,000 — 40K	✓	✓	✓	✓	✓	✓	✓	
50 — 50R	✓	✓	✓	✓	✓	✓	✓	1,200 — 1K2	✓	✓	✓	✓	✓	✓	50,000 — 50K	✓	✓	✓	✓	✓	✓	✓	
56 — 56R	✓	✓	✓	✓	✓	✓	✓	1,500 — 1K5	✓	✓	✓	✓	✓	✓									

✓ = Standard values

✦ = Non-standard 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.



## Стандарт Электрон Связь

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

### Наши контакты:

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