

20 Series



Vitreous Enamel Conformal Axial Terminal Wirewound, 5% Tolerance Std.



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.

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.

SERIES SPECIFICATIONS

| Series | Wattage | Ohms | Max. Voltage* |
|--------|---------|----------|---------------|
| 21 | 1 | 1.0-3.0K | 75 |
| 22 | 2 | 1.0-3.0K | 65 |
| 23 | 3 | 0.1-10K | 135 |
| 25 | 5 | 0.1-28K | 330 |
| 27 | 7 | 0.1-25K | 450 |
| 20 | 10 | 0.1-100K | 720 |

12.5 watt size available on special order

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

CHARACTERISTICS

| | |
|--------------------------------|--|
| 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 |
| 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 |

DIMENSIONS

(in./mm max.)



| Series | Wattage | Length* (max.) | Diam.* (max.) | Lead ga. |
|--------|---------|----------------|---------------|----------|
| 21 | 1 | 0.421 / 10.7 | 0.156 / 4.0 | 24 |
| 22 | 2 | 0.421 / 10.7 | 0.219 / 5.6 | 20 |
| 23 | 3 | 0.515 / 13.1 | 0.220 / 5.6 | 20 |
| 25 | 5 | 1.015 / 25.8 | 0.276 / 7.0 | 20 |
| 27 | 7 | 1.265 / 32.1 | 0.394 / 10.0 | 20 |
| 20 | 10 | 1.859 / 47.2 | 0.394 / 10.0 | 20 |

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

(continued)

20 Series

Vitreous Enamel Conformal Axial Terminal Wirewound, 5% Tolerance Std.

ORDERING INFORMATION

Standard part numbers

| 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.



Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9