

# 40 Series

## Ohmicone® Silicone-Ceramic Conformal Axial Terminal Wirewound 1% and 5% Tolerance Standard



Ohmite 40 Series resistors are the most economical conformal silicone-ceramic coated resistors offered. These all-welded units are characterized by their low temperature coefficients and resistance to thermal shock, making them ideal for a wide range of electrical and electronic applications.

Units with 1% and 5% tolerances are identical in construction and electrical specifications. Durable but economical 40 Series resistors exceed industry requirements for quality.

### FEATURES

- Economical
- Applications include commercial, industrial and communications equipment
- Stability under high temperature conditions
- All-welded construction
- RoHS compliant; add "E" suffix to part number to specify.

### SERIES SPECIFICATIONS

| Series | Wattage | Ohms      | Voltage |
|--------|---------|-----------|---------|
| 41     | 1.0     | 0.10-6K   | 150     |
| 42     | 2.0     | 0.10-8K   | 100     |
| 43     | 3.0     | 0.10-20K  | 200     |
| 45     | 5.0     | 0.10-70K  | 460     |
| 47     | 7.0     | 0.10-80K  | 670     |
| 40     | 10.0    | 0.10-150K | 1000    |

Non-Inductive versions available. Insert "N" before tolerance code.  
Example: 42NJ27R

### CHARACTERISTICS

|                                |                                                                                                             |
|--------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Coating</b>                 | Conformal silicone-ceramic.                                                                                 |
| <b>Core</b>                    | Ceramic.                                                                                                    |
| <b>Terminals</b>               | Solder-coated copper clad axial. RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu                        |
| <b>Derating</b>                | Linearly from 100% @ +25°C to 0% @ +275°C.                                                                  |
| <b>Tolerance</b>               | ±5% (J type), ±1% (F type) (other tolerances available).                                                    |
| <b>Power rating</b>            | Based on 25°C free air rating                                                                               |
| <b>Overload</b>                | Under 5 watts: 5 times rated wattage for 5 seconds. 5 watts and over: 10 times rated wattage for 5 seconds. |
| <b>Temperature coefficient</b> | Under 1Ω: ±90 ppm/°C; 1Ω to 9.99Ω: ±50 ppm/°C; 10Ω and over: ±20 ppm/°C                                     |
| <b>Operating temp. range</b>   | -55°C to 275°C                                                                                              |

### DIMENSIONS

(in./mm max.)



| Series | Wattage | Length       | Diam.        | Lead ga. |
|--------|---------|--------------|--------------|----------|
| 41     | 1.0     | 0.437 / 11.1 | 0.125 / 3.2  | 24       |
| 42     | 2.0     | 0.406 / 10.3 | 0.219 / 5.6  | 20       |
| 43     | 3.0     | 0.593 / 15.1 | 0.219 / 5.6  | 20       |
| 45     | 5.0     | 0.937 / 23.8 | 0.343 / 8.7  | 18       |
| 47     | 7.0     | 1.280 / 32.5 | 0.343 / 8.7  | 18       |
| 40     | 10.0    | 1.900 / 48.3 | 0.406 / 10.3 | 18       |

(continued)

# 40 Series

## Ohmicone® Silicone-Ceramic Conformal Axial Terminal Wirewound 1% and 5% Tolerance Standard

### ORDERING INFORMATION

#### Standard part numbers

| Ohmic value | Wattage and Tolerance      |   |   |   |    |              |   |   |   |    | Ohmic value | Wattage and Tolerance      |   |   |   |    |              |   |   |   |    | Ohmic value                                                         | Wattage and Tolerance      |   |   |   |    |              |   |   |   |    |
|-------------|----------------------------|---|---|---|----|--------------|---|---|---|----|-------------|----------------------------|---|---|---|----|--------------|---|---|---|----|---------------------------------------------------------------------|----------------------------|---|---|---|----|--------------|---|---|---|----|
|             | 1% Tolerance               |   |   |   |    | 5% Tolerance |   |   |   |    |             | 1% Tolerance               |   |   |   |    | 5% Tolerance |   |   |   |    |                                                                     | 1% Tolerance               |   |   |   |    | 5% Tolerance |   |   |   |    |
|             | Part No. Prefix > Suffix > | 1 | 3 | 5 | 10 | 1            | 2 | 3 | 5 | 10 |             | Part No. Prefix > Suffix > | 1 | 3 | 5 | 10 | 1            | 2 | 3 | 5 | 10 |                                                                     | Part No. Prefix > Suffix > | 1 | 3 | 5 | 10 | 1            | 2 | 3 | 5 | 10 |
| 0.1         | R10                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 68          | 68R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 2,200                                                               | 2K2                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 0.15        | R15                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 75          | 75R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 2,500                                                               | 2K5                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 0.2         | R20                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 82          | 82R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 2,700                                                               | 2K7                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 0.25        | R25                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 100         | 100                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 3,000                                                               | 3K0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 0.3         | R30                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 120         | 120                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 3,300                                                               | 3K3                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 0.33        | R33                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 125         | 125                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 3,500                                                               | 3K5                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 0.4         | R40                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 150         | 150                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 3,900                                                               | 3K9                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 0.5         | R50                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 180         | 180                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 4,000                                                               | 4K0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 0.75        | R75                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 200         | 200                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 4,500                                                               | 4K5                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 1           | R10                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 220         | 220                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 4,700                                                               | 4K7                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 1.5         | R15                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 225         | 225                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 5,000                                                               | 5K0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 2           | R20                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 250         | 250                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 6,000                                                               | 6K0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 2.2         | R22                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 270         | 270                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 6,800                                                               | 6K8                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 3           | R30                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 300         | 300                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 7,000                                                               | 7K0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 4           | R40                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 330         | 330                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 7,500                                                               | 7K5                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 5           | R50                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 350         | 350                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 8,000                                                               | 8K0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 7.5         | R75                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 390         | 390                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 9,000                                                               | 9K0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 10          | R10                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 400         | 400                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 10,000                                                              | 10K                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 12          | R12                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 450         | 450                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 12,000                                                              | 12K                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 15          | R15                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 470         | 470                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 13,000                                                              | 13K                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 18          | R18                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 500         | 500                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 15,000                                                              | 15K                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 20          | R20                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 560         | 560                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 17,000                                                              | 17K                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 22          | R22                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 600         | 600                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 20,000                                                              | 20K                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 25          | R25                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 680         | 680                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 22,000                                                              | 22K                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 27          | R27                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 750         | 750                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 25,000                                                              | 25K                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 30          | R30                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 800         | 800                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 30,000                                                              | 30K                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 33          | R33                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 820         | 820                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 33,000                                                              | 33K                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 35          | R35                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 900         | 900                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 35,000                                                              | 35K                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 39          | R39                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 1,000       | 1K0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 40,000                                                              | 40K                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 40          | R40                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 1,100       | 1K1                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 50,000                                                              | 50K                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |    |
| 47          | R47                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 1,200       | 1K2                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | ✓ = Standard values                                                 |                            |   |   |   |    |              |   |   |   |    |
| 50          | R50                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 1,500       | 1K5                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | ✦ = Non-standard values subject to minimum handling charge per item |                            |   |   |   |    |              |   |   |   |    |
| 56          | R56                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 1,800       | 1K8                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  |                                                                     |                            |   |   |   |    |              |   |   |   |    |
| 62          | R62                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 2,000       | 2K0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  |                                                                     |                            |   |   |   |    |              |   |   |   |    |

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





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.