

# 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)

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## 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           | 1R0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 220         | 220                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 4,700  | 4K7         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 1.5         | 1R5                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 225         | 225                        | ✱ | ✱ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 5,000  | 5K0         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 2           | 2R0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 250         | 250                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 6,000  | 6K0         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 2.2         | 2R2                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 270         | 270                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 6,800  | 6K8         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 3           | 3R0                        | ✓ | ✓ | ✓ | ✱  | ✓            | ✓ | ✓ | ✓ | ✓  | 300         | 300                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 7,000  | 7K0         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 4           | 4R0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 330         | 330                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 7,500  | 7K5         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 5           | 5R0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 350         | 350                        | ✱ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 8,000  | 8K0         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 7.5         | 7R5                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 390         | 390                        | ✱ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 9,000  | 9K0         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 10          | 10R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 400         | 400                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 10,000 | 10K         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 12          | 12R                        | ✱ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 450         | 450                        | ✱ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 12,000 | 12K         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 15          | 15R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 470         | 470                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 13,000 | 13K         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 18          | 18R                        | ✱ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 500         | 500                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 15,000 | 15K         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 20          | 20R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 560         | 560                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 17,000 | 17K         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 22          | 22R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 600         | 600                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 20,000 | 20K         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 25          | 25R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 680         | 680                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 22,000 | 22K         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 27          | 27R                        | ✱ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 750         | 750                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 25,000 | 25K         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 30          | 30R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 800         | 800                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 30,000 | 30K         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 33          | 33R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 820         | 820                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 33,000 | 33K         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 35          | 35R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 900         | 900                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 35,000 | 35K         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 39          | 39R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 1,000       | 1K0                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 40,000 | 40K         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 40          | 40R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 1,100       | 1K1                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | 50,000 | 50K         | ✓                          | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ |   |   |    |
| 47          | 47R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 1,200       | 1K2                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |        |             |                            |   |   |   |    |              |   |   |   |    |
| 50          | 50R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 1,500       | 1K5                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |        |             |                            |   |   |   |    |              |   |   |   |    |
| 56          | 56R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 1,800       | 1K8                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ |        |             |                            |   |   |   |    |              |   |   |   |    |
| 62          | 62R                        | ✓ | ✓ | ✓ | ✓  | ✓            | ✓ | ✓ | ✓ | ✓  | 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.

✓ = Standard values  
✱ = Non-standard values subject to minimum handling charge per item

40 Series Ohmicone® Silicone Ceramic Conformal Axial Term. Wirewound

Non-Inductive Winding optional (blank= std. winding)

RoHS Compliant

**41 N J R 10 E - T** - Tape & reel optional pc/reel:

|                |                  |                   |          |
|----------------|------------------|-------------------|----------|
| <b>Wattage</b> | <b>Tolerance</b> | <b>Resistance</b> |          |
| 1 = 1W         | F = 1%           | R10 = 0.10Ω       | 41: 5000 |
| 2              | J = 5%           | 1R0 = 1.0Ω        | 42: 1250 |
| 3              |                  | 10R = 10.0Ω       | 43: 1250 |
| 5              |                  | 250 = 250Ω        | 45: 1000 |
| 7              |                  | 1K0 = 1,000Ω      | 47: 500  |
| 0 = 10W        |                  | 4K5 = 4,500Ω      | 40: 500  |
|                |                  | 50K = 50,000Ω     |          |



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.