

# 40 Series

## Ohmite® 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

| Wattage and Tolerance |                            |              |   |   |    | Wattage and Tolerance |   |   |   |             |                            | Wattage and Tolerance |   |   |   |              |    |   |   |             |                            |              |   |    |   |              |   |   |    |   |   |  |
|-----------------------|----------------------------|--------------|---|---|----|-----------------------|---|---|---|-------------|----------------------------|-----------------------|---|---|---|--------------|----|---|---|-------------|----------------------------|--------------|---|----|---|--------------|---|---|----|---|---|--|
| Ohmic value           | Part No. Prefix > Suffix < | 1% Tolerance |   |   |    | 5% Tolerance          |   |   |   | Ohmic value | Part No. Prefix > Suffix < | 1% Tolerance          |   |   |   | 5% Tolerance |    |   |   | Ohmic value | Part No. Prefix > Suffix < | 1% Tolerance |   |    |   | 5% Tolerance |   |   |    |   |   |  |
|                       |                            | 1            | 3 | 5 | 10 | 1                     | 2 | 3 | 5 |             |                            | 10                    | 1 | 2 | 3 | 5            | 10 | 1 | 2 |             |                            | 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





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;
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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

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