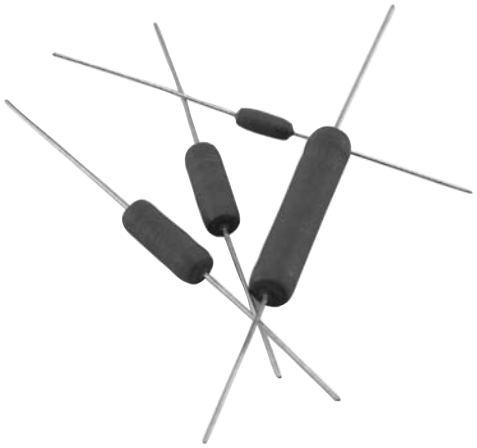
# 40 Series

## 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 |

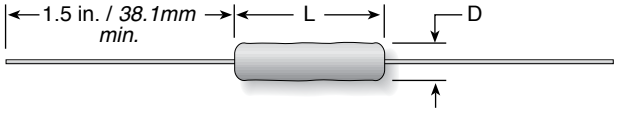
Non-Inductive versions available. Insert “N” before tolerance code.
Example: 42NJ27R

## CHARACTERISTICS

| | |
|---|---|
| **Coating** | Conformal silicone-ceramic. |
| **Core** | Ceramic. |
| **Terminals** | Solder-coated copper clad axial. RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu |
| **Derating** | Linearly from 100% @ +25°C to 0% @ +275°C. |
| **Tolerance** | ±5% (J type), ±1% (F type) (other tolerances available). |
| **Power rating** | Based on 25°C free air rating |
| **Overload** | Under 5 watts: 5 times rated wattage for 5 seconds. 5 watts and over: 10 times rated wattage for 5 seconds. |
| **Temperature coefficient** | Under 1Ω: ±90 ppm/°C; 1Ω to 9.99Ω: ±50 ppm/°C; 10Ω and over: ±20 ppm/°C |
| **Operating temp. range** | -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 | Part No. Prefix ➤ / Suffix ▼ | Wattage and Tolerance: 1% Tolerance 1 | 3 | 5 | 10 | 5% Tolerance 1 | 2 | 3 | 5 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 41F | 43F | 45F | 40F | 41J | 42J | 43J | 45J | 40J |
| 0.1 | R10 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 0.15 | R15 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 0.2 | R20 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 0.25 | R25 | | | | | ✔ | | ✔ | ✔ | |
| 0.3 | R30 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 0.33 | R33 | | | | | ✔ | | ✔ | ✔ | |
| 0.4 | R40 | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 0.5 | R50 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 0.75 | R75 | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 1 | 1R0 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 1.5 | 1R5 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 2 | 2R0 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 2.2 | 2R2 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 3 | 3R0 | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 4 | 4R0 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 5 | 5R0 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 7.5 | 7R5 | ✔ | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ |
| 10 | 10R | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 12 | 12R | ✤ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 15 | 15R | ✔ | ✔ | ✔ | ✤ | ✔ | ✤ | ✔ | ✔ | ✔ |
| 18 | 18R | ✤ | ✔ | ✤ | ✤ | ✤ | ✤ | ✔ | ✔ | ✔ |
| 20 | 20R | ✔ | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ |
| 22 | 22R | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 25 | 25R | ✔ | ✔ | ✔ | ✤ | ✤ | ✔ | ✔ | ✔ | ✔ |
| 27 | 27R | ✤ | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ |
| 30 | 30R | ✔ | ✔ | ✔ | ✔ | ✤ | ✔ | ✤ | ✔ | ✔ |
| 33 | 33R | ✔ | ✔ | ✤ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ |
| 35 | 35R | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ | ✤ | ✔ | ✤ |
| 39 | 39R | ✔ | ✔ | ✤ | ✤ | ✤ | ✔ | ✔ | ✔ | ✤ |
| 40 | 40R | ✔ | ✔ | ✔ | ✔ | ✤ | ✤ | ✤ | ✔ | ✔ |
| 47 | 47R | ✔ | ✔ | ✤ | ✤ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 50 | 50R | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 56 | 56R | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 62 | 62R | ✔ | ✔ | ✔ | ✔ | ✤ | ✔ | ✤ | ✔ | ✔ |
| 68 | 68R | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✤ |
| 75 | 75R | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 82 | 82R | ✤ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✤ |
| 100 | 100 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 120 | 120 | ✤ | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✤ |
| 125 | 125 | ✔ | ✤ | ✤ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ |
| 150 | 150 | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 180 | 180 | ✔ | ✔ | ✤ | ✔ | ✤ | ✔ | ✔ | ✔ | ✤ |
| 200 | 200 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 220 | 220 | ✔ | ✔ | ✤ | ✤ | ✔ | ✤ | ✔ | ✔ | ✔ |
| 225 | 225 | ✤ | ✤ | ✤ | ✔ | ✤ | ✤ | ✤ | ✔ | ✤ |
| 250 | 250 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 270 | 270 | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ |
| 300 | 300 | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 330 | 330 | ✔ | ✤ | ✤ | ✤ | ✤ | ✔ | ✔ | ✔ | ✔ |
| 350 | 350 | ✤ | ✔ | ✤ | ✔ | ✤ | ✤ | ✔ | ✔ | ✤ |
| 390 | 390 | ✤ | ✔ | ✤ | ✤ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 400 | 400 | ✔ | ✔ | ✔ | ✤ | ✔ | ✤ | ✔ | ✔ | ✔ |
| 450 | 450 | ✤ | ✔ | ✔ | ✤ | ✤ | ✤ | ✤ | ✤ | ✤ |
| 470 | 470 | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ | ✤ |
| 500 | 500 | ✔ | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✤ |
| 560 | 560 | ✔ | ✔ | ✔ | ✔ | ✔ | ✤ | ✤ | ✔ | ✔ |
| 600 | 600 | ✔ | ✔ | ✔ | ✔ | ✤ | ✤ | ✔ | ✔ | ✔ |
| 680 | 680 | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ | ✔ | ✤ |
| 750 | 750 | ✔ | ✔ | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✤ |
| 800 | 800 | ✔ | ✔ | ✔ | ✔ | ✤ | ✤ | ✔ | ✤ | ✤ |
| 820 | 820 | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ | ✤ |
| 900 | 900 | ✔ | ✔ | ✤ | ✤ | ✤ | ✤ | ✔ | ✔ | ✤ |
| 1,000 | 1K0 | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 1,100 | 1K1 | ✤ | ✤ | ✔ | ✔ | ✤ | ✔ | ✤ | ✔ | ✤ |
| 1,200 | 1K2 | ✔ | ✤ | ✔ | ✔ | ✤ | ✤ | ✔ | ✔ | ✔ |
| 1,500 | 1K5 | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✤ | ✔ |
| 1,800 | 1K8 | ✔ | ✤ | ✤ | ✔ | ✔ | ✤ | ✔ | ✔ | ✤ |
| 2,000 | 2K0 | ✔ | ✔ | ✔ | ✔ | ✤ | ✤ | ✔ | ✔ | ✔ |
| 2,200 | 2K2 | ✔ | ✔ | ✔ | ✔ | ✤ | ✤ | ✔ | ✔ | ✔ |
| 2,500 | 2K5 | ✔ | ✔ | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ |
| 2,700 | 2K7 | ✤ | ✤ | ✔ | ✔ | ✤ | ✤ | ✔ | ✔ | ✤ |
| 3,000 | 3K0 | ✔ | ✔ | ✔ | ✔ | ✤ | ✔ | ✔ | ✔ | ✔ |
| 3,300 | 3K3 | | ✤ | ✤ | ✤ | | | ✔ | ✔ | ✤ |
| 3,500 | 3K5 | | ✔ | ✔ | ✤ | | | ✤ | ✔ | ✤ |
| 3,900 | 3K9 | | ✔ | ✔ | ✔ | | | ✔ | ✔ | ✔ |
| 4,000 | 4K0 | | ✔ | ✤ | ✔ | | | ✤ | ✔ | ✤ |
| 4,500 | 4K5 | | ✤ | ✤ | ✔ | | | ✤ | ✔ | ✤ |
| 4,700 | 4K7 | | ✔ | ✔ | ✤ | | | ✤ | ✔ | ✤ |
| 5,000 | 5K0 | | ✔ | ✔ | ✔ | | | ✔ | ✔ | ✔ |
| 6,000 | 6K0 | | ✤ | ✔ | ✤ | | | ✔ | ✔ | ✤ |
| 6,800 | 6K8 | | ✔ | ✔ | ✤ | | | ✔ | ✔ | ✤ |
| 7,000 | 7K0 | | ✔ | ✔ | ✤ | | | ✤ | ✤ | ✤ |
| 7,500 | 7K5 | | ✔ | ✔ | ✤ | | | ✔ | ✔ | ✔ |
| 8,000 | 8K0 | | ✔ | ✤ | ✔ | | | ✤ | ✔ | ✤ |
| 9,000 | 9K0 | | ✤ | ✔ | ✤ | | | ✤ | ✤ | ✤ |
| 10,000 | 10K | | ✔ | ✔ | ✔ | | | ✔ | ✔ | ✔ |
| 12,000 | 12K | | | ✤ | ✔ | | | | | |
| 13,000 | 13K | | | ✔ | ✤ | | | | | |
| 15,000 | 15K | | | ✔ | ✔ | | | | | |
| 17,000 | 17K | | | ✔ | ✤ | | | | | |
| 20,000 | 20K | | | ✔ | ✔ | | | | | |
| 22,000 | 22K | | | ✔ | ✔ | | | | | |
| 25,000 | 25K | | | ✔ | ✔ | | | | | |
| 30,000 | 30K | | | ✔ | ✤ | | | | | |
| 33,000 | 33K | | | | ✔ | | | | | |
| 35,000 | 35K | | | | ✤ | | | | | |
| 40,000 | 40K | | | | ✔ | | | | | |
| 50,000 | 50K | | | | ✔ | | | | | |

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**

**4 1 N J R 1 0 E - T** — **Tape & reel** *optional* pc/reel:
41: 5000
42: 1250
43: 1250
45: 1000
47: 500
40: 500

**Wattage**
1 = 1W
2
3
5
7
0 = 10W

**Tolerance**
F= 1%
J = 5%

**Resistance**
R10 = 0.10Ω
1R0 = 1.0Ω
10R = 10.0Ω
250 = 250Ω
1K0 = 1,000Ω
4K5 = 4,500Ω
50K = 50,000Ω

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

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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:**

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