

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

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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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		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

