

# 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

### 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		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 ✦ = Non-standard values subject to minimum handling charge per item											
50	R50	✓	✓	✓	✓	✓	✓	✓	✓	✓	1,500	1K5	✓	✓	✓	✓	✓	✓	✓	✓												
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.

