

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)

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ORDERING INFORMATION

Standard part numbers

Wattage and Tolerance											Wattage and Tolerance											Wattage and Tolerance										
1% Tolerance						5% Tolerance					1% Tolerance						5% Tolerance					1% Tolerance						5% Tolerance				
Ohmic value	Part No. Prefix	1	3	5	10	1	2	3	5	10	Ohmic value	Part No. Prefix	1	3	5	10	1	2	3	5	10	Ohmic value	Part No. Prefix	1	3	5	10	1	2	3	5	10
Suffix		41F	43F	45F	40F	41J	42J	43J	45J	40J	Suffix		41F	43F	45F	40F	41J	42J	43J	45J	40J	Suffix		41F	43F	45F	40F	41J	42J	43J	45J	40J
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

41NJR10E-T — Tape & reel
optional
pc/reel:

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

41: 5000
42: 1250
43: 1250
45: 1000
47: 500
40: 500