

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 ▶ Suffix ▼	1	3	5	10	1	2	3	5	10	Ohmic value	Part No. Prefix ▶ Suffix ▼	1	3	5	10	1	2	3	5	10	Ohmic value	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	—R100	✓				✓					220	—220	✓				✓					4,700	—4K7					✓				
1.5	—R150	✓				✓					225	—225	✱				✓					5,000	—5K0					✓				
2	—R200	✓				✓					250	—250	✓				✓					6,000	—6K0					✓				
2.2	—R220	✓				✓					270	—270					✓					6,800	—6K8					✓				
3	—R300	✓				✓					300	—300	✓				✓					7,000	—7K0					✓				
4	—R400	✓				✓					330	—330					✓					7,500	—7K5					✓				
5	—R500	✓				✓					350	—350	✱				✓					8,000	—8K0					✓				
7.5	—R750										390	—390	✱				✓					9,000	—9K0					✓				
10	—R1000	✓				✓					400	—400					✓					10,000	—10K					✓				
12	—R1200	✱				✓					450	—450					✓					12,000	—12K					✓				
15	—R1500	✓				✓					470	—470	✓				✓					13,000	—13K					✓				
18	—R1800	✱				✱					500	—500	✓				✓					15,000	—15K					✓				
20	—R2000	✓				✓					560	—560	✓				✓					17,000	—17K					✓				
22	—R2200	✓				✓					600	—600	✓				✓					20,000	—20K					✓				
25	—R2500	✓				✓					680	—680					✓					22,000	—22K					✓				
27	—R2700	✱				✓					750	—750	✓				✓					25,000	—25K					✓				
30	—R3000	✓				✓					800	—800	✓				✓					30,000	—30K					✓				
33	—R3300	✓				✓					820	—820					✓					33,000	—33K					✓				
35	—R3500	✓				✓					900	—900					✓					35,000	—35K					✓				
39	—R3900	✓				✓					1,000	—1K0	✓				✓					40,000	—40K					✓				
40	—R4000					✓					1,100	—1K1	✱				✓					50,000	—50K					✓				
47	—R4700	✓				✓					1,200	—1K2	✓				✓					✓ = Standard values										
50	—R5000	✓				✓					1,500	—1K5	✓				✓					✱ = Non-standard values subject to minimum handling charge per item										
56	—R5600	✓				✓					1,800	—1K8					✓															
62	—R6200	✓				✓					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

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

Tape & reel
optional
pc/reel:
41: 5000
42: 1250
43: 1250
45: 1000
47: 500
40: 500