

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.

SPECIFICATIONS

Material

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.

Electrical

Tolerance: ±5% (J type), ±1% (F type) (other tolerances available).

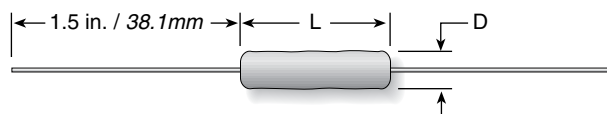
Power rating: Based on 25°C free air rating (other wattages available).

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



Ohmicone® Silicone-Ceramic Conformal Axial Term. Wirewound, 1% and 5% Tol. Std.



Series	Wattage	Ohms	Dimensions (in. / mm)		Voltage	Lead ga.
			Length	Diam.		
41	1.0	0.10-6K	0.437 / 11.1	0.125 / 3.2	150	24
42	2.0	0.10-8K	0.406 / 10.3	0.219 / 5.6	100	20
43	3.0	0.10-20K	0.593 / 15.1	0.218 / 5.5	200	20
45	5.0	0.10-70K	0.937 / 23.8	0.343 / 8.7	460	18
47	7.0	0.10-80K	1.280 / 32.5	0.343 / 8.7	670	18
40	10.0	0.10-150K	1.642 / 41.7	0.406 / 10.3	1000	18

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

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.

ORDERING INFO

40 Series
Ohmicone®
Silicone Ceramic
Conformal Axial
Term. Wirewound

Non-Inductive
Winding
Optional (blank
= std. winding)

RoHS
Compliant

41NJR10E

Wattage	Tolerance	Resistance Value
1 = 1W	F = 1%	R10 = 0.10Ω
2	J = 5%	1R0 = 1.0Ω
3		10R = 10.0Ω
5		250 = 250Ω
7		1K0 = 1,000Ω
0 = 10W		4K5 = 4,500Ω
		50K = 50,000Ω

STANDARD PART NUMBERS FOR 40 SERIES

Wattage and Tolerance											Wattage and Tolerance											Wattage and Tolerance													
Ohmic value		1% Tolerance					5% Tolerance					Ohmic value		1% Tolerance					5% Tolerance					Ohmic value		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	— 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	✓	✱				✓	✱	✱		✓ = Standard values													
50	— 50R	✓					✓				1,500	— 1K5	✓					✓				✱ = Non-standard values subject to mini- mum handling charge per item													
56	— 56R	✓					✓				1,800	— 1K8	✓	✱				✓	✱	✱		Check product availability at www.ohmite.com													
62	— 62R	✓					✓		✱		2,000	— 2K0	✓					✓	✱	✱															

✓ = Standard values
✦ = Non-standard values subject to minimum handling charge per item

Check product availability at www.ohmite.com