

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).

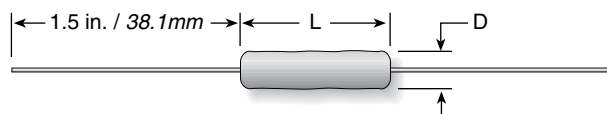
Power rating: Based on 25°C free air rating (other wattages available).

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	✓		✓																			

Check product availability at www.ohmite.com