

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).

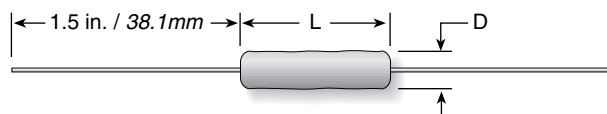
Power rating: Based on 25°C free air rating (other wattages available).

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												
		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	— 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