

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).

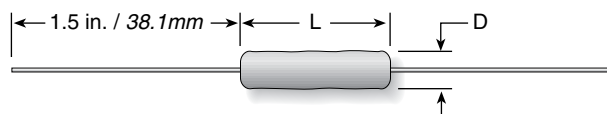
Power rating: Based on 25°C free air rating (other wattages available).

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