

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.

## SPECIFICATIONS

### MATERIAL

**Coating:** Conformal silicone-ceramic.

**Core:** Ceramic.

**Terminals:** Solder-coated copper clad axial lead.

### 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 1W: ±90 ppm/°C  
1W to 9.99W: ±50 ppm/°C  
10W and over: ±20 ppm/°C

## FEATURES

- Economical
- Applications include commercial, industrial and communications equipment
- Stability under high temperature conditions
- All-welded construction
- Meets outgassing limits of NASA SP-R-0022A and ASTM E-595
- CECC sizes available
- Non-inductive available

# 40 Series

## Ohmicon® Silicone-Ceramic Conformal Axial Lead Wirewound Resistors

### 1% and 5% Tolerances Standard



Series	Wattage	Ohms	Dimensions (in. / mm)			
			Length	Diam.	Voltage	
41	1.0	0.10-6.7K	0.437 / 11.1	0.125 / 3.2	150	24
42	2.0	0.10-8.7K	0.406 / 10.3	0.219 / 5.6	100	20
43	3.0	0.10-22K	0.593 / 15.1	0.218 / 5.5	200	20
45	5.0	0.10-81K	0.937 / 23.8	0.343 / 8.7	460	18
47	7.0	0.10-119K	1.280 / 32.5	0.343 / 8.7	670	18
40	10.0	0.10-223K	1.642 / 41.7	0.406 / 10.3	1000	18

## STOCK PART NUMBERS FOR STANDARD RESISTANCE VALUES

Ohmic value	Wattage and Tolerance										Wattage and Tolerance									
	1% Tolerance					5% Tolerance					1% Tolerance					5% Tolerance				
	Part No.	Prefix ↗	1	3	5	10	Part No.	Prefix ↗	1	3	5	10	Part No.	Prefix ↗	1	3	5	10		
0.1	R10	✓	*	*	*	*	41J	✓	42J	2	43J	3	40J	10	68	✓	✓	✓	✓	✓
0.15	R15	✓	✓	*	*	✓	75	✓	✓	*	✓	✓	✓	✓	75R	✓	✓	✓	✓	✓
0.2	R20	✓	*	*	*	✓	82	✓	✓	*	✓	✓	✓	✓	82R	✓	✓	✓	✓	✓
0.25	R25	✓	*	*	*	✓	100	✓	✓	*	✓	✓	✓	✓	100	✓	✓	✓	✓	✓
0.3	R30	✓	✓	✓	✓	✓	120	✓	✓	*	✓	✓	✓	✓	120	✓	✓	✓	✓	✓
0.33	R33	✓	*	*	*	✓	125	✓	✓	*	✓	✓	✓	✓	125	✓	✓	✓	✓	✓
0.4	R40	✓	✓	✓	✓	✓	150	✓	✓	*	✓	✓	✓	✓	150	✓	✓	✓	✓	✓
0.5	R50	✓	*	*	*	✓	180	✓	✓	*	✓	✓	✓	✓	180	✓	✓	✓	✓	✓
0.75	R75	✓	*	*	*	✓	200	✓	✓	*	✓	✓	✓	✓	200	✓	✓	✓	✓	✓
1	R10	*	✓	✓	✓	✓	220	✓	✓	*	✓	✓	✓	✓	220	✓	✓	✓	✓	✓
1.5	R15	✓	✓	✓	✓	✓	225	✓	✓	*	✓	✓	✓	✓	225	✓	✓	✓	✓	✓
2	R20	✓	✓	✓	✓	✓	250	✓	✓	*	✓	✓	✓	✓	250	✓	✓	✓	✓	✓
2.2	R22	✓	✓	✓	✓	✓	270	✓	✓	*	✓	✓	✓	✓	270	✓	✓	✓	✓	✓
3	R30	✓	✓	✓	*	✓	300	✓	✓	*	✓	✓	✓	✓	300	✓	✓	✓	✓	✓
4	R40	✓	✓	✓	✓	✓	330	✓	✓	*	✓	✓	✓	✓	330	✓	✓	✓	✓	✓
5	R50	✓	✓	✓	✓	✓	350	✓	✓	*	✓	✓	✓	✓	350	✓	✓	✓	✓	✓
7.5	R75	✓	✓	✓	✓	✓	390	✓	✓	*	✓	✓	✓	✓	390	✓	✓	✓	✓	✓
10	R10	✓	✓	✓	✓	✓	400	✓	✓	*	✓	✓	✓	✓	400	✓	✓	✓	✓	✓
12	R12	*	✓	*	*	✓	450	✓	✓	*	✓	✓	✓	✓	450	✓	✓	✓	✓	✓
15	R15	✓	✓	*	*	✓	470	*	✓	*	✓	✓	✓	✓	470	✓	✓	✓	✓	✓
18	R18	*	✓	*	*	✓	500	✓	✓	*	✓	✓	✓	✓	500	✓	✓	✓	✓	✓
20	R20	✓	✓	✓	✓	✓	560	✓	✓	*	✓	✓	✓	✓	560	✓	✓	✓	✓	✓
22	R22	✓	✓	✓	*	✓	600	✓	✓	*	✓	✓	✓	✓	600	✓	✓	✓	✓	✓
25	R25	✓	✓	✓	*	✓	680	✓	✓	*	✓	✓	✓	✓	680	✓	✓	✓	✓	✓
27	R27	*	✓	*	*	✓	750	✓	✓	*	✓	✓	✓	✓	750	✓	✓	✓	✓	✓
30	R30	✓	✓	✓	✓	✓	800	✓	✓	*	✓	✓	✓	✓	800	✓	✓	✓	✓	✓
33	R33	✓	✓	*	*	✓	820	✓	✓	*	✓	✓	✓	✓	820	✓	✓	✓	✓	✓
35	R35	✓	*	*	*	✓	900	✓	✓	*	✓	✓	✓	✓	900	✓	✓	✓	✓	✓
39	R39	✓	✓	*	*	✓	1,000	✓	✓	*	✓	✓	✓	✓	1,000	✓	✓	✓	✓	✓
40	R40	✓	✓	*	*	✓	1,100	✓	✓	*	✓	✓	✓	✓	1,100	✓	✓	✓	✓	✓
47	R47	✓	✓	*	*	✓	1,200	✓	✓	*	✓	✓	✓	✓	1,200	✓	✓	✓	✓	✓
50	R50	✓	✓	✓	✓	✓	1,500	✓	✓	*	✓	✓	✓	✓	1,500	✓	✓	✓	✓	✓
56	R56	✓	✓	*	*	✓	1,800	✓	✓	*	✓	✓	✓	✓	1,800	✓	✓	✓	✓	✓
62	R62	✓	✓	✓	✓	✓	2,000	✓	✓	*	✓	✓	✓	✓	2,000	✓	✓	✓	✓	✓

Shaded values involve very fine resistance wire and should not be used in critical applications without burn-in and/or thermal cycling.

■ = Most popular stock values

✓ = Stock values

⊕ = Non-stock values subject to minimum handling charge per item

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