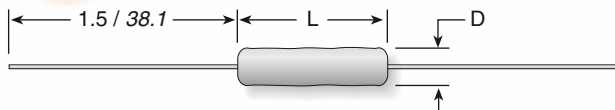


# 80 Series

Commercial Grade Acrasil®, Silicone-Ceramic  
Conformal Axial Terminal Wirewound  
1% Tol. (5% avail.)

# RW Series

Military Grade 80 Series MIL-R-26 Qualified



| Comm. Grade | Military Grade | Watts | Ohms     | Dimensions (in. / mm) |              | Lead ga. |
|-------------|----------------|-------|----------|-----------------------|--------------|----------|
|             |                |       |          | Length                | Diam.        |          |
| 81F         | RW70U          | 1     | 0.1-6K   | 0.437 / 11.1          | 0.125 / 3.2  | 150 24   |
| 82          |                | 2     | 0.1-8K   | 0.406 / 10.3          | 0.219 / 5.6  | 100 20   |
| 83F         | RW79U          | 3     | 0.1-20K  | 0.593 / 15.1          | 0.218 / 5.5  | 200 20   |
| 83J         | RW69V          |       |          |                       |              |          |
| 85F         | RW74U          | 5     | 0.1-75K  | 0.937 / 23.8          | 0.343 / 8.7  | 460 18   |
| 85J         | RW67V          |       |          |                       |              |          |
| 80F         | RW78U          | 10    | 0.1-150K | 1.842 / 46.8          | 0.406 / 10.3 | 1000 18  |
| 80J         | RW68V          |       |          |                       |              |          |

Non-Inductive versions available. Insert "N" before tolerance code. Example: 83NF2K21

Ohmite's highest quality conformal axial terminal silicone-ceramic coated resistors for applications requiring high precision and stability. These resistors have a low temperature coefficient and maintain a high degree of stability under demanding conditions.

## FEATURES

- Designed for precision power applications
- All-welded construction
- RW Series "Mil" value resistors marked with "Mil" in accordance with MIL-R-26 specifications

## SPECIFICATIONS

### Material

Coating: Silicone-ceramic.

Core: Ceramic.

Terminals: Solder-coated copper clad axial.

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.
- Maximum ohmic values:** See chart.
- 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  
1 to 9.99Ω: ±50 ppm/°C  
10Ω and over: ±20 ppm/°C
- Dielectric withstanding voltage:** 500 VAC: 1 watt rating  
1000 VAC: 2, 3, 5, 7 and 10 watt rating

## ORDERING INFORMATION

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

**81NJR10**

80 Series  
Acrasil®  
Silicone Ceramic  
Conformal Axial  
Term. Wirewound

Wattage  
1 = 1W  
2  
3  
5  
0 = 10W

Tolerance  
F = 1%  
J = 5%

Resistance Value  
R10 = 0.10Ω  
1R0 = 1.0Ω  
10R = 10.0Ω  
250 = 250Ω  
1K0 = 1,000Ω  
4K5 = 4,500Ω  
50K = 50,000Ω

Military Grade

**RW74U1001F**

RW Series  
Military grade

Resistance Value  
R100 = 0.1Ω  
1R00 = 1.0Ω  
10R0 = 10.0Ω  
1000 = 1000Ω  
1001 = 1000Ω

Tolerance  
F = 1%  
J = 5%

This product will not be made available as RoHS Compliant.

For RoHS Compliant equivalent, see 40 Series.

## COMMERCIAL GRADE PART NUMBERS

| Ohmic value |      |        |   |        |   |  | Wattage  |      |        |   |        |   |  | Ohmic value |      |        |   |        |   |  | Wattage  |      |        |   |        |   |  | Ohmic value |      |        |   |        |   |  | Wattage  |      |        |   |        |   |  | Ohmic value |      |        |   |        |   |  | Wattage |  |  |  |  |  |  |
|-------------|------|--------|---|--------|---|--|----------|------|--------|---|--------|---|--|-------------|------|--------|---|--------|---|--|----------|------|--------|---|--------|---|--|-------------|------|--------|---|--------|---|--|----------|------|--------|---|--------|---|--|-------------|------|--------|---|--------|---|--|---------|--|--|--|--|--|--|
| Part No.    |      | Prefix |   | Suffix |   |  | Part No. |      | Prefix |   | Suffix |   |  | Part No.    |      | Prefix |   | Suffix |   |  | Part No. |      | Prefix |   | Suffix |   |  | Part No.    |      | Prefix |   | Suffix |   |  | Part No. |      | Prefix |   | Suffix |   |  | Part No.    |      | Prefix |   | Suffix |   |  |         |  |  |  |  |  |  |
| 0.1         | R10  | ✓      | ✓ | ✓      | ✓ |  | 2.21     | 2R21 | ✓      | ✓ | ✓      | ✓ |  | 51.1        | 51R1 | ✓      | ✓ | ✓      | ✓ |  | 1,210    | 1K21 | ✓      | ✓ | ✓      | ✓ |  | 27,400      | 27K4 | ✓      | ✓ | ✓      | ✓ |  | 30,100   | 30K1 | ✓      | ✓ | ✓      | ✓ |  | 33,200      | 33K2 | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.11        | R11  | ✓      | ✓ | ✓      | ✓ |  | 2.49     | 2R49 | ✓      | ✓ | ✓      | ✓ |  | 56.2        | 56R2 | ✓      | ✓ | ✓      | ✓ |  | 1,330    | 1K33 | ✓      | ✓ | ✓      | ✓ |  | 30,100      | 30K1 | ✓      | ✓ | ✓      | ✓ |  | 33,200   | 33K2 | ✓      | ✓ | ✓      | ✓ |  | 37,400      | 37K4 | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.121       | R121 | ✓      | ✓ | ✓      | ✓ |  | 2.74     | 2R74 | ✓      | ✓ | ✓      | ✓ |  | 61.9        | 61R9 | ✓      | ✓ | ✓      | ✓ |  | 1,500    | 1K5  | ✓      | ✓ | ✓      | ✓ |  | 33,200      | 33K2 | ✓      | ✓ | ✓      | ✓ |  | 37,400   | 37K4 | ✓      | ✓ | ✓      | ✓ |  | 38,300      | 38K3 | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.133       | R133 | ✓      | ✓ | ✓      | ✓ |  | 3.01     | 3R01 | ✓      | ✓ | ✓      | ✓ |  | 68.1        | 68R1 | ✓      | ✓ | ✓      | ✓ |  | 1,620    | 1K62 | ✓      | ✓ | ✓      | ✓ |  | 37,400      | 37K4 | ✓      | ✓ | ✓      | ✓ |  | 38,300   | 38K3 | ✓      | ✓ | ✓      | ✓ |  | 40,200      | 40K2 | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.15        | R15  | ✓      | ✓ | ✓      | ✓ |  | 3.32     | 3R32 | ✓      | ✓ | ✓      | ✓ |  | 75          | 75R  | ✓      | ✓ | ✓      | ✓ |  | 1,820    | 1K82 | ✓      | ✓ | ✓      | ✓ |  | 38,300      | 38K3 | ✓      | ✓ | ✓      | ✓ |  | 40,200   | 40K2 | ✓      | ✓ | ✓      | ✓ |  | 45,300      | 45K3 | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.162       | R162 | ✓      | ✓ | ✓      | ✓ |  | 3.74     | 3R74 | ✓      | ✓ | ✓      | ✓ |  | 82.5        | 82R5 | ✓      | ✓ | ✓      | ✓ |  | 2,000    | 2K0  | ✓      | ✓ | ✓      | ✓ |  | 40,200      | 40K2 | ✓      | ✓ | ✓      | ✓ |  | 45,300   | 45K3 | ✓      | ✓ | ✓      | ✓ |  | 49,900      | 49K9 | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.182       | R182 | ✓      | ✓ | ✓      | ✓ |  | 4.02     | 4R02 | ✓      | ✓ | ✓      | ✓ |  | 90.9        | 90R9 | ✓      | ✓ | ✓      | ✓ |  | 2,210    | 2K21 | ✓      | ✓ | ✓      | ✓ |  | 45,300      | 45K3 | ✓      | ✓ | ✓      | ✓ |  | 49,900   | 49K9 | ✓      | ✓ | ✓      | ✓ |  | 51,100      | 51K1 | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.2         | R20  | ✓      | ✓ | ✓      | ✓ |  | 4.53     | 4R53 | ✓      | ✓ | ✓      | ✓ |  | 100         | 100  | ✓      | ✓ | ✓      | ✓ |  | 2,490    | 2K49 | ✓      | ✓ | ✓      | ✓ |  | 49,900      | 49K9 | ✓      | ✓ | ✓      | ✓ |  | 51,100   | 51K1 | ✓      | ✓ | ✓      | ✓ |  | 56,200      | 56K2 | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.221       | R221 | ✓      | ✓ | ✓      | ✓ |  | 4.99     | 4R99 | ✓      | ✓ | ✓      | ✓ |  | 110         | 110  | ✓      | ✓ | ✓      | ✓ |  | 2,740    | 2K74 | ✓      | ✓ | ✓      | ✓ |  | 51,100      | 51K1 | ✓      | ✓ | ✓      | ✓ |  | 56,200   | 56K2 | ✓      | ✓ | ✓      | ✓ |  | 61,900      | 61K9 | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.249       | R249 | ✓      | ✓ | ✓      | ✓ |  | 5.11     | 5R11 | ✓      | ✓ | ✓      | ✓ |  | 121         | 121  | ✓      | ✓ | ✓      | ✓ |  | 3,010    | 3K01 | ✓      | ✓ | ✓      | ✓ |  | 56,200      | 56K2 | ✓      | ✓ | ✓      | ✓ |  | 61,900   | 61K9 | ✓      | ✓ | ✓      | ✓ |  | 68,100      | 68K1 | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.274       | R274 | ✓      | ✓ | ✓      | ✓ |  | 5.62     | 5R62 | ✓      | ✓ | ✓      | ✓ |  | 133         | 133  | ✓      | ✓ | ✓      | ✓ |  | 3,320    | 3K32 | ✓      | ✓ | ✓      | ✓ |  | 61,900      | 61K9 | ✓      | ✓ | ✓      | ✓ |  | 68,100   | 68K1 | ✓      | ✓ | ✓      | ✓ |  | 75,000      | 75K  | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.301       | R301 | ✓      | ✓ | ✓      | ✓ |  | 6.19     | 6R19 | ✓      | ✓ | ✓      | ✓ |  | 150         | 150  | ✓      | ✓ | ✓      | ✓ |  | 3,740    | 3K74 | ✓      | ✓ | ✓      | ✓ |  | 68,100      | 68K1 | ✓      | ✓ | ✓      | ✓ |  | 75,000   | 75K  | ✓      | ✓ | ✓      | ✓ |  | 82,500      | 82K5 | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.332       | R332 | ✓      | ✓ | ✓      | ✓ |  | 6.81     | 6R81 | ✓      | ✓ | ✓      | ✓ |  | 162         | 162  | ✓      | ✓ | ✓      | ✓ |  | 4,020    | 4K02 | ✓      | ✓ | ✓      | ✓ |  | 75,000      | 75K  | ✓      | ✓ | ✓      | ✓ |  | 82,500   | 82K5 | ✓      | ✓ | ✓      | ✓ |  | 90,900      | 90K9 | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.374       | R374 | ✓      | ✓ | ✓      | ✓ |  | 7.5      | 7R5  | ✓      | ✓ | ✓      | ✓ |  | 182         | 182  | ✓      | ✓ | ✓      | ✓ |  | 4,530    | 4K53 | ✓      | ✓ | ✓      | ✓ |  | 82,500      | 82K5 | ✓      | ✓ | ✓      | ✓ |  | 90,900   | 90K9 | ✓      | ✓ | ✓      | ✓ |  | 100,000     | 100K | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.392       | R392 | ✓      | ✓ | ✓      | ✓ |  | 8.25     | 8R25 | ✓      | ✓ | ✓      | ✓ |  | 200         | 200  | ✓      | ✓ | ✓      | ✓ |  | 4,990    | 4K99 | ✓      | ✓ | ✓      | ✓ |  | 90,900      | 90K9 | ✓      | ✓ | ✓      | ✓ |  | 100,000  | 100K | ✓      | ✓ | ✓      | ✓ |  | 150,000     | 150K | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.402       | R402 | ✓      | ✓ | ✓      | ✓ |  | 9.09     | 9R09 | ✓      | ✓ | ✓      | ✓ |  | 221         | 221  | ✓      | ✓ | ✓      | ✓ |  | 5,110    | 5K11 | ✓      | ✓ | ✓      | ✓ |  | 100,000     | 100K | ✓      | ✓ | ✓      | ✓ |  | 150,000  | 150K | ✓      | ✓ | ✓      | ✓ |  | 200,000     | 200K | ✓      | ✓ | ✓      | ✓ |  |         |  |  |  |  |  |  |
| 0.453       | R453 | ✓      | ✓ | ✓      | ✓ |  | 10       | 10R  | ✓      | ✓ | ✓      | ✓ |  | 249         | 249  | ✓      | ✓ | ✓      | ✓ |  | 5,620    | 5K62 | ✓      | ✓ | ✓      | ✓ |  | 150,000     | 150K | ✓      | ✓ | ✓      | ✓ |  | 200,000  | 200K | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 0.499       | R499 | ✓      | ✓ | ✓      | ✓ |  | 11       | 11R  | ✓      | ✓ | ✓      | ✓ |  | 274         | 274  | ✓      | ✓ | ✓      | ✓ |  | 6,190    | 6K19 | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 0.511       | R511 | ✓      | ✓ | ✓      | ✓ |  | 12.1     | 12R1 | ✓      | ✓ | ✓      | ✓ |  | 301         | 301  | ✓      | ✓ | ✓      | ✓ |  | 6,810    | 6K81 | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 0.562       | R562 | ✓      | ✓ | ✓      | ✓ |  | 13.3     | 13R3 | ✓      | ✓ | ✓      | ✓ |  | 332         | 332  | ✓      | ✓ | ✓      | ✓ |  | 7,500    | 7K5  | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 0.619       | R619 | ✓      | ✓ | ✓      | ✓ |  | 15       | 15R  | ✓      | ✓ | ✓      | ✓ |  | 374         | 374  | ✓      | ✓ | ✓      | ✓ |  | 8,250    | 8K25 | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 0.681       | R681 | ✓      | ✓ | ✓      | ✓ |  | 16.2     | 16R2 | ✓      | ✓ | ✓      | ✓ |  | 402         | 402  | ✓      | ✓ | ✓      | ✓ |  | 9,090    | 9K09 | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 0.75        | R75  | ✓      | ✓ | ✓      | ✓ |  | 18.2     | 18R2 | ✓      | ✓ | ✓      | ✓ |  | 453         | 453  | ✓      | ✓ | ✓      | ✓ |  | 10,000   | 10K  | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 0.825       | R825 | ✓      | ✓ | ✓      | ✓ |  | 20       | 20R  | ✓      | ✓ | ✓      | ✓ |  | 499         | 499  | ✓      | ✓ | ✓      | ✓ |  | 10,500   | 10K5 | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 0.909       | R909 | ✓      | ✓ | ✓      | ✓ |  | 22.1     | 22R1 | ✓      | ✓ | ✓      | ✓ |  | 511         | 511  | ✓      | ✓ | ✓      | ✓ |  | 11,000   | 11K  | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 1           | 1R0  | ✓      | ✓ | ✓      | ✓ |  | 24.9     | 24R9 | ✓      | ✓ | ✓      | ✓ |  | 562         | 562  | ✓      | ✓ | ✓      | ✓ |  | 12,100   | 12K1 | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 1.1         | 1R1  | ✓      | ✓ | ✓      | ✓ |  | 27.4     | 27R4 | ✓      | ✓ | ✓      | ✓ |  | 619         | 619  | ✓      | ✓ | ✓      | ✓ |  | 13,300   | 13K3 | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 1.21        | 1R21 | ✓      | ✓ | ✓      | ✓ |  | 30.1     | 30R1 | ✓      | ✓ | ✓      | ✓ |  | 681         | 681  | ✓      | ✓ | ✓      | ✓ |  | 15,000   | 15K  | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 1.330       | 1R33 | ✓      | ✓ | ✓      | ✓ |  | 33.2     | 33R2 | ✓      | ✓ | ✓      | ✓ |  | 750         | 750  | ✓      | ✓ | ✓      | ✓ |  | 16,200   | 16K2 | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 1.5         | 1R5  | ✓      | ✓ | ✓      | ✓ |  | 37.4     | 37R4 | ✓      | ✓ | ✓      | ✓ |  | 825         | 825  | ✓      | ✓ | ✓      | ✓ |  | 18,200   | 18K2 | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 1.62        | 1R62 | ✓      | ✓ | ✓      | ✓ |  | 40.2     | 40R2 | ✓      | ✓ | ✓      | ✓ |  | 909         | 909  | ✓      | ✓ | ✓      | ✓ |  | 20,000   | 20K  | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 1.82        | 1R82 | ✓      | ✓ | ✓      | ✓ |  | 45.3     | 45R3 | ✓      | ✓ | ✓      | ✓ |  | 1,000       | 1K0  | ✓      | ✓ | ✓      | ✓ |  | 22,100   | 22K1 | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |
| 2           | 2R0  | ✓      | ✓ | ✓      | ✓ |  | 49.9     | 49R9 | ✓      | ✓ | ✓      | ✓ |  | 1,100       | 1K1  | ✓      | ✓ | ✓      | ✓ |  | 24,900   | 24K9 | ✓      | ✓ | ✓      | ✓ |  |             |      |        |   |        |   |  |          |      |        |   |        |   |  |             |      |        |   |        |   |  |         |  |  |  |  |  |  |

✓ = Standard values

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

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

Check product availability at [www.ohmite.com](http://www.ohmite.com)

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