

High Energy Wirewound

Axial Terminal / Surface Mount / Heat Sinkable Packaging



Ohmite Manufacturing's family of High Energy Wirewound Resistors employ special winding techniques to maximize the effective joule rating of each resistor. Most wirewound resistors are wound with the objective of meeting the stated power (wattage) rating and keeping cost low through the use of automatic winding equipment. Typically, manufacturers will allow substitution of resistance wire, depending on material availability. On tight tolerance wirewounds some type of abrasive adjustment to the resistance wire is often used to maximize production yields. Both of these procedures can adversely affect the joule rating and fusing current of a wirewound resistor, and this is often the reason that the manufacturer does not publish a fixed joule rating.

Ohmite High Energy Wirewounds are wound so as to maintain the tightest possible pitch (space between windings) and thereby maximize the mass of the resistive element. Since no wire substitutions are allowed, and no abrasive adjusting is permitted



in this family, Ohmite can publish a fixed joule rating and fusing current for each part number in the series.

This technique can be applied to any wirewound product. In order to provide the broadest selection of packaging, Ohmite has developed standard offerings in three different package types-axial, SMD, and heat sinkable. Other sizes and types can be quoted on request, such as tubular power resistors.

SERIES SPECIFICATIONS

| Series | Type | Watts | Tolerance | Voltage |
|-------------|---------------|-------|-----------|---------|
| 33Jxxx | Axial | 3 | 5% | 200 |
| 35Jxxx | Axial | 5 | 5% | 460 |
| 30Jxxx | Axial | 10 | 5% | 1000 |
| 825JxxxH | Heat Sinkable | 25 | 5% | 520 |
| RH3R0DBxxxJ | Surface Mount | 3 | 5% | 200 |

DIMENSIONS



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PERFORMANCE CHARACTERISTICS



(continued)

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ORDERING INFORMATION

Standard Part Numbers

| Part Number | Ohms | Power | Energy (J) | Fusing Energy (J) | Current to fuse (A) | Power to fuse (W) |
|--------------|------|-------|------------|-------------------|---------------------|-------------------|
| 33J1R0 | 1 | 3 | 12.70 | 53.26 | 23.93 | 572.60 |
| 33J5R0 | 5 | 3 | 6.25 | 26.20 | 10.03 | 502.96 |
| 33J10R | 10 | 3 | 4.94 | 20.73 | 7.08 | 501.70 |
| 33J15R | 15 | 3 | 4.66 | 19.55 | 5.95 | 531.47 |
| 33J20R | 20 | 3 | 3.91 | 16.40 | 5.00 | 500.45 |
| 33J25R | 25 | 3 | 3.07 | 12.89 | 4.20 | 441.79 |
| 33J30R | 30 | 3 | 2.97 | 12.46 | 3.92 | 460.80 |
| 33J50R | 50 | 3 | 2.43 | 10.20 | 2.97 | 440.68 |
| 33J100 | 100 | 3 | 1.92 | 8.07 | 2.10 | 439.58 |
| 35J1R5 | 1.5 | 5 | 76.55 | 321.19 | 40.32 | 2438.48 |
| 35J2R5 | 2.5 | 5 | 64.65 | 271.23 | 31.59 | 2494.75 |
| 35J7R5 | 7.5 | 5 | 37.66 | 158.01 | 16.90 | 2141.89 |
| 35J12R | 12 | 5 | 37.90 | 158.99 | 14.20 | 2420.25 |
| 35J18R | 18 | 5 | 28.80 | 120.84 | 11.13 | 2228.50 |
| 35J22R | 22 | 5 | 27.48 | 115.29 | 10.03 | 2213.02 |
| 35J36R | 36 | 5 | 22.78 | 95.59 | 7.86 | 2222.93 |
| 35J47R | 47 | 5 | 23.22 | 97.42 | 7.08 | 2358.00 |
| 35J75R | 75 | 5 | 18.77 | 78.77 | 5.55 | 2309.77 |
| 30J2R0 | 2 | 10 | 162.30 | 680.93 | 47.98 | 4603.79 |
| 30J4R7 | 4.7 | 10 | 150.86 | 632.92 | 33.88 | 5395.94 |
| 30J6R8 | 6.8 | 10 | 137.27 | 575.91 | 28.47 | 5513.41 |
| 30J15R | 15 | 10 | 119.76 | 502.47 | 20.11 | 6065.77 |
| 30J27R | 27 | 10 | 85.27 | 357.74 | 14.20 | 5445.56 |
| 30J33R | 33 | 10 | 65.54 | 274.98 | 11.93 | 4700.40 |
| 30J50R | 50 | 10 | 62.45 | 262.03 | 10.03 | 5029.59 |
| 30J82R | 82 | 10 | 51.90 | 217.74 | 7.86 | 5063.34 |
| 30J100 | 100 | 10 | 49.41 | 207.28 | 7.08 | 5017.03 |
| 30J150 | 150 | 10 | 46.61 | 195.54 | 5.95 | 5314.71 |
| 825J1R0H | 1 | 25 | 51.04 | 214.12 | 40.32 | 1625.65 |
| 825J5R0H | 5 | 25 | 39.92 | 167.49 | 20.11 | 2021.92 |
| 825J10RH | 10 | 25 | 31.58 | 132.50 | 14.20 | 2016.87 |
| 825J25RH | 25 | 25 | 19.64 | 82.40 | 8.43 | 1776.01 |
| 825J36RH | 36 | 25 | 17.79 | 74.62 | 7.08 | 1806.13 |
| 825J47RH | 47 | 25 | 18.71 | 78.49 | 6.60 | 2049.57 |
| 825J75RH | 75 | 25 | 14.66 | 61.49 | 5.00 | 1876.69 |
| 825J100H | 100 | 25 | 12.29 | 51.56 | 4.20 | 1767.15 |
| 825J150H | 150 | 25 | 11.59 | 48.64 | 3.53 | 1872.00 |
| RH3R0DBR500J | 0.5 | 3 | 12.93 | 54.25 | 31.59 | 498.95 |
| RH3R0DB1R00J | 1 | 3 | 10.23 | 42.91 | 22.31 | 497.70 |
| RH3R0DB2R70J | 2.7 | 3 | 6.87 | 28.82 | 13.24 | 473.33 |
| RH3R0DB4R70J | 4.7 | 3 | 5.87 | 24.63 | 10.03 | 472.78 |
| RH3R0DB6R80J | 6.8 | 3 | 5.34 | 22.41 | 8.43 | 483.07 |
| RH3R0DB7R50J | 7.5 | 3 | 4.75 | 19.91 | 7.86 | 463.11 |
| RH3R0DB10R0J | 10 | 3 | 3.98 | 16.70 | 6.60 | 436.08 |
| RH3R0DB15R0J | 15 | 3 | 3.75 | 15.75 | 5.55 | 461.95 |
| RH3R0DB25R0J | 25 | 3 | 3.07 | 12.89 | 4.20 | 441.79 |
| RH3R0DB47R0J | 47 | 3 | 2.28 | 9.59 | 2.97 | 414.24 |
| RH3R0DB68R0J | 68 | 3 | 2.08 | 8.72 | 2.49 | 423.26 |
| RH3R0DB75R0J | 75 | 3 | 2.29 | 9.62 | 2.49 | 466.83 |

RoHS compliant product available; Add "E" suffix to part number to specify.

Other values available, contact Ohmite for details.