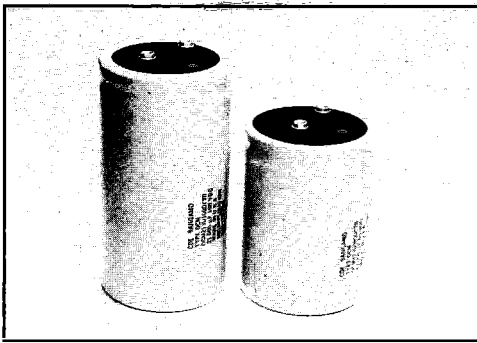


High Capacitance Computer Grade

Type DCM - Best Value Capacitance/Type DCMX - Maximum Capacitance



These aluminum electrolytic capacitors are designed for power supply filters, welding equipment, computer hold up power and other industrial applications where large capacitance, low ESR and high ripple current are required.

Performance Highlights:

- Capacitance 66 uF to 1,100,000 uF
- Voltage 6.3 Vdc to 450 Vdc
- Operating temperature -40°C to +85°C
- 1000 hours full-ripple life test at +85°C
- 100 hours shelf life test at +85°C

- Standard capacitance tolerances
 < 200 Vdc = -10 to +75%
 ≥ 200 Vdc = -10 to +50%
 Leakage current ≤ 0.005CV uA (6 mA max)

Ratings:

| Capacitance uF | ESR max ohms | | Ripple amps 85°C | | Nominal Case Size D x L (inches) | Catalog Number |
|------------------------------|-----------------|--------|---------------------|-------|--|-------------------|
| | 120Hz, | 20kHz | 120Hz, | 20kHz | | |
| 6.3 Vdc - 8 Vdc Surge | | | | | | |
| 23000 | 0.0510 | 0.0350 | 4.9 | 7.1 | 1 1/2 x 1 1/2 | DCM233U6R3AK2B |
| 34000 | 0.0340 | 0.0240 | 6.3 | 9.0 | 1 1/2 x 2 1/2 | DCM343U6R3AA2B |
| 34000 | 0.0510 | 0.0350 | 4.9 | 7.1 | 1 1/2 x 1 1/2 | DCMX343U6R3AK2B |
| 49000 | 0.0240 | 0.0170 | 7.8 | 10.8 | 1 1/2 x 2 1/2 | DCM493U6R3AH2B |
| 51000 | 0.0300 | 0.0210 | 6.8 | 9.6 | 1 1/2 x 2 1/2 | DCMX513U6R3AA2B |
| 65000 | 0.0190 | 0.0130 | 8.9 | 12.1 | 1 1/2 x 3 1/2 | DCM653U6R3AB2B |
| 73000 | 0.0230 | 0.0160 | 8.0 | 11.2 | 1 1/2 x 2 1/2 | DCMX733U6R3AH2B |
| 95000 | 0.0140 | 0.0100 | 10.4 | 13.6 | 1 1/2 x 4 1/2 | DCM953U6R3AC2B |
| 95000 | 0.0190 | 0.0130 | 8.9 | 12.1 | 1 1/2 x 3 1/2 | DCMX953U6R3AB2B |
| 130000 | 0.0140 | 0.0110 | 12.0 | 14.9 | 2 x 3 1/2 | DCM134U6R3BB2B |
| 140000 | 0.0110 | 0.0081 | 11.2 | 13.8 | 1 1/2 x 5 1/2 | DCM144U6R3AF2B |
| 140000 | 0.0140 | 0.0100 | 10.4 | 13.6 | 1 1/2 x 4 1/2 | DCMX144U6R3AC2B |
| 160000 | 0.0120 | 0.0095 | 11.6 | 13.6 | 1 1/2 x 4 1/2 | DCM164U6R3EC2B |
| 190000 | 0.0130 | 0.0100 | 12.6 | 15.7 | 2 x 4 1/2 | DCMX194U6R3BB2B |
| 200000 | 0.0100 | 0.0074 | 14.7 | 17.9 | 2 x 4 1/2 | DCM204U6R3BC2B |
| 210000 | 0.0110 | 0.0086 | 10.9 | 13.4 | 1 1/2 x 5 1/2 | DCMX214U6R3AF2B |
| 230000 | 0.0094 | 0.0073 | 13.1 | 15.4 | 1 1/2 x 4 1/2 | DCMX234U6R3EC2B |
| 300000 | 0.0100 | 0.0073 | 14.7 | 17.9 | 2 x 4 1/2 | DCMX304U6R3BC2B |
| 310000 | 0.0069 | 0.0053 | 16.9 | 20.0 | 2 x 5 1/2 | DCM314U6R3BF2B |
| 330000 | 0.0068 | 0.0054 | 19.6 | 22.6 | 2 1/2 x 4 1/2 | DCM334U6R3CC2B |
| 450000 | 0.0069 | 0.0053 | 16.9 | 20.0 | 2 x 5 1/2 | DCMX454U6R3BF2B |
| 470000 | 0.0064 | 0.0054 | 20.7 | 22.4 | 3 x 4 1/2 | DCM474U6R3DC2B |
| 480000 | 0.0068 | 0.0054 | 19.6 | 22.6 | 2 1/2 x 4 1/2 | DCMX484U6R3CC2B |
| 500000 | 0.0049 | 0.0044 | 22.9 | 25.9 | 2 1/2 x 5 1/2 | DCM504U6R3CF2B |
| 560000 | 0.0049 | 0.0054 | 18.9 | 19.8 | 3 x 5 1/2 | DCM564U6R3DE2B |
| 670000 | 0.0062 | 0.0053 | 20.7 | 22.4 | 3 x 4 1/2 | DCMX674U6R3DC2B |
| 710000 | 0.0047 | 0.0041 | 24.5 | 26.2 | 3 x 5 1/2 | DCM714U6R3DF2B |
| 740000 | 0.0045 | 0.0040 | 24.7 | 26.4 | 3 x 5 1/2 | DCMX744U6R3DP2B |
| 740000 | 0.0049 | 0.0039 | 22.9 | 25.9 | 2 1/2 x 5 1/2 | DCM744U6R3CF2B |
| 900000 | 0.0049 | 0.0043 | 23.5 | 25.2 | 3 x 5 1/2 | DCMX904U6R3DE2B |
| 900000 | 0.0045 | 0.0040 | 24.5 | 26.2 | 3 x 5 1/2 | DCMX105U6R3DF2B |
| 1100000 | 0.0044 | 0.0039 | 24.7 | 26.4 | 3 x 5 1/2 | DCMX115U6R3DP2B |
| 7.5 Vdc - 9 Vdc Surge | | | | | | |
| 21000 | 0.0510 | 0.0350 | 4.8 | 7.1 | 1 1/2 x 1 1/2 | DCM213U7R5AK2B |
| 31000 | 0.0350 | 0.0240 | 6.2 | 9.0 | 1 1/2 x 2 1/2 | DCM313U7R5AA2B |
| 33000 | 0.0510 | 0.0350 | 4.8 | 7.1 | 1 1/2 x 1 1/2 | DCMX333U7R5AK2B |
| 45000 | 0.0240 | 0.0170 | 7.7 | 10.8 | 1 1/2 x 2 1/2 | DCM453U7R5AH2B |

| Capacitance uF | ESR max ohms | | Ripple amps 85°C | | Nominal Case Size D x L (inches) | Catalog Number |
|------------------------------|-----------------|--------|---------------------|-------|--|-------------------|
| | 120Hz, | 20kHz | 120Hz, | 20kHz | | |
| 7.5 Vdc - 9 Vdc Surge | | | | | | |
| 49000 | 0.0300 | 0.0210 | 6.7 | 9.6 | 1 1/2 x 2 1/2 | DCMX493U7R5AA2B |
| 59000 | 0.0190 | 0.0130 | 8.8 | 12.1 | 1 1/2 x 3 1/2 | DCM593U7R5AB2B |
| 71000 | 0.0230 | 0.0160 | 7.9 | 11.2 | 1 1/2 x 2 1/2 | DCMX713U7R5AH2B |
| 87000 | 0.0140 | 0.0100 | 10.3 | 13.6 | 1 1/2 x 4 1/2 | DCM873U7R5AC2B |
| 92000 | 0.0190 | 0.0130 | 8.8 | 12.1 | 1 1/2 x 3 1/2 | DCMX923U7R5AB2B |
| 120000 | 0.0140 | 0.0110 | 11.9 | 14.9 | 2 x 3 1/2 | DCM124U7R5BB2B |
| 130000 | 0.0110 | 0.0081 | 11.1 | 13.8 | 1 1/2 x 5 1/2 | DCM134U7R5AF2B |
| 140000 | 0.0140 | 0.0100 | 10.3 | 13.6 | 1 1/2 x 4 1/2 | DCMX144U7R5AC2B |
| 140000 | 0.0120 | 0.0095 | 11.5 | 13.6 | 1 1/2 x 4 1/2 | DCM144U7R5EC2B |
| 180000 | 0.0100 | 0.0074 | 14.6 | 17.9 | 2 x 4 1/2 | DCM184U7R5BC2B |
| 190000 | 0.0130 | 0.0100 | 12.5 | 15.7 | 2 x 3 1/2 | DCMX194U7R5BB2B |
| 200000 | 0.0120 | 0.0086 | 10.8 | 13.4 | 1 1/2 x 5 1/2 | DCM204U7R5AF2B |
| 220000 | 0.0095 | 0.0073 | 13.1 | 15.4 | 1 1/2 x 4 1/2 | DCMX224U7R5EC2B |
| 280000 | 0.0070 | 0.0053 | 16.8 | 20.0 | 2 x 5 1/2 | DCM284U7R5BF2B |
| 290000 | 0.0100 | 0.0073 | 14.6 | 17.9 | 2 x 4 1/2 | DCMX294U7R5BC2B |
| 300000 | 0.0069 | 0.0054 | 19.5 | 22.6 | 2 1/2 x 4 1/2 | DCM304U7R5CC2B |
| 430000 | 0.0064 | 0.0055 | 20.6 | 22.4 | 3 x 4 1/2 | DCM434U7R5DC2B |
| 440000 | 0.0069 | 0.0053 | 16.8 | 20.0 | 2 x 5 1/2 | DCMX444U7R5BF2B |
| 460000 | 0.0049 | 0.0040 | 22.8 | 25.9 | 2 1/2 x 5 1/2 | DCM464U7R5CF2B |
| 470000 | 0.0068 | 0.0054 | 19.5 | 22.6 | 2 1/2 x 4 1/2 | DCMX474U7R5CC2B |
| 510000 | 0.0066 | 0.0059 | 18.9 | 19.8 | 3 x 5 1/2 | DCM514U7R5DE2B |
| 650000 | 0.0047 | 0.0041 | 24.4 | 26.2 | 3 x 5 1/2 | DCM654U7R5DF2B |
| 650000 | 0.0062 | 0.0053 | 20.6 | 22.4 | 3 x 4 1/2 | DCMX654U7R5DC2B |
| 680000 | 0.0045 | 0.0040 | 24.7 | 26.4 | 3 x 5 1/2 | DCM684U7R5DP2B |
| 710000 | 0.0049 | 0.0039 | 22.8 | 25.9 | 2 1/2 x 5 1/2 | DCMX714U7R5CF2B |
| 870000 | 0.0050 | 0.0043 | 23.4 | 25.2 | 3 x 5 1/2 | DCMX874U7R5DE2B |
| 980000 | 0.0046 | 0.0040 | 24.4 | 26.2 | 3 x 5 1/2 | DCMX984U7R5DF2B |
| 1000000 | 0.0044 | 0.0039 | 24.7 | 26.4 | 3 x 5 1/2 | DCMX105U7R5DP2B |
| 10 Vdc - 12 Vdc Surge | | | | | | |
| *6000 | 0.1300 | 0.0830 | 3.5 | 6.2 | 1 1/2 x 2 1/2 | DCM602U010AA2B |
| *7200 | 0.1100 | 0.0710 | 3.7 | 6.4 | 1 1/2 x 2 1/2 | DCM722U010AA2B |
| 17000 | 0.0510 | 0.0350 | 4.8 | 7.1 | 1 1/2 x 1 1/2 | DCM173U010AK2B |
| 25000 | 0.0350 | 0.0240 | 6.2 | 9.0 | 1 1/2 x 2 1/2 | DCM253U010AA2B |
| 29000 | 0.0510 | 0.0350 | 4.8 | 7.1 | 1 1/2 x 1 1/2 | DCMX293U010AK2B |
| 36000 | 0.0240 | 0.0170 | 7.7 | 10.8 | 1 1/2 x 2 1/2 | DCM363U010AH2B |
| 43000 | 0.0300 | 0.0210 | 6.7 | 9.6 | 1 1/2 x 2 1/2 | DCMX433U010AA2B |
| 47000 | 0.0190 | 0.0130 | 8.8 | 12.1 | 1 1/2 x 3 1/2 | DCM473U010AB2B |

* Stock Rating

Best-Value Table

Here's how to decide which screw-terminal capacitor is best for your application. Our capacitor types are ranked below on six characteristics. 100% is the best score, and all lower-scoring types are ranked against the 100% best type.

Select types for review which have high scores on your most important characteristics and then compare specifications to make your final choice. For other characteristics and product strengths, refer to the Application Chart in this section.

You can get combination rankings by multiplying scores together. As an illustration, suppose that you want to rank our types by lowest cost ripple capability. Just multiply the low cost score by the high ripple current score to find that the Type 500R is the best value with a score of 67.2%. ($0.84 \times 0.80 = 0.672$ or 67.2%) compared to the 550's next-best score of 65%. ($1.00 \times 0.65 = 0.65$ or 65%).

| Type | High Capacitance | Low ESR | Low Hi-Frequency Impedance | High Ripple Current | Long Life | Low Cost |
|------|------------------|---------|----------------------------|---------------------|-----------|----------|
| DCM | 61% | 65% | 94% | 56% | 10% | 100% |
| DCMX | 100% | 65% | 94% | 56% | 10% | 87% |
| 500 | 58% | 25% | 83% | 69% | 25% | 85% |
| 500X | 88% | 19% | 83% | 69% | 25% | 74% |
| 500R | 87% | 21% | 83% | 84% | 27% | 80% |
| 550 | 67% | 79% | 94% | 100% | 23% | 65% |
| 101 | 51% | 93% | 94% | 89% | 36% | 63% |
| 101X | 87% | 93% | 94% | 89% | 36% | 55% |
| 139R | 6.2% | 100% | 100% | 47% | 10% | 83% |
| 125 | 5.8% | 60% | 97% | 49% | 100% | 23% |

High Capacitance

100% means highest available capacitance.

Low ESR

100% means lowest ESR per unit capacitance and is most representative of low voltage ratings.

Low Hi-Frequency Impedance

100% means lowest impedance at 10 to 20 kHz.

High Ripple Current

100% means highest available ripple current.

Long Life

100% means longest life based on life test capability and dc leakage current and adjusted for extended-life test data.

Low Cost

100% means lowest 1000 piece price per unit capacitance and is most representative of 10,000 uf and 10 Vdc.

Not for new design use DCMC series

