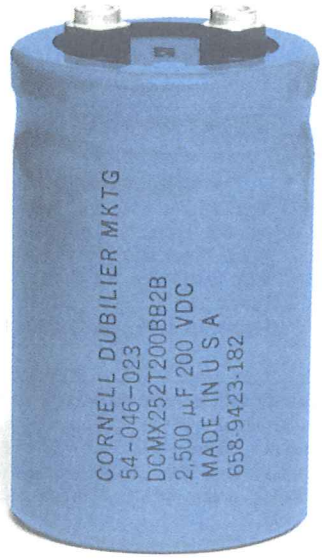
# Computer Grade, -40°C +85°C, High Capacitance, Type DCMX






**Best Value Screw Terminal Type**

Type DCMX capacitors are the choice for power supply filters and energy storage applications such as welding equipment, computer hold-up power where high capacitance, low ESR and the ability to handle large ripple currents are the hallmarks.

**Capacitance:** 110µF to 1.5F
**Capacitance Tolerance:** -10% +75%
**Voltage:** 6.3 to 500Vdc
**Operating Temperature:** -40°C to +85°C
**Life Test:** 2,000 hours @ +85°C
**Ripple Test:** 1,000 hours at full load @ +85°C
**Shelf Test:** 100 hours @ +85°C
**DCL:** $\leq 6\sqrt{CV}$ µA (6mA maximum)

| Cap. µF | Catalog Number | ESR Max mΩ @25°C 120 Hz | ESR Max mΩ @25°C 20kHz | Ripple A @85°C 120Hz | Ripple A @85°C 20kHz | Nominal Size (in.) D x L |
|---|---|---|---|---|---|---|
| **6.3 Vdc - 8 Vdc Surge** | | | | | | |
| 34,000 | DCMX343U6R3AK2B | 51.0 | 35.0 | 4.9 | 7.1 | 1 3/8 x 1 5/8 |
| 51,000 | DCMX513U6R3AA2B | 30.0 | 21.0 | 6.8 | 9.6 | 1 3/8 x 2 1/8 |
| 73,000 | DCMX733U6R3AH2B | 23.0 | 16.0 | 8.0 | 11.2 | 1 3/8 x 2 5/8 |
| 95,000 | DCMX953U6R3AB2B | 14.0 | 10.0 | 10.4 | 13.6 | 1 3/8 x 3 1/8 |
| 140,000 | DCMX144U6R3AC2B | 11.0 | 8.1 | 11.2 | 13.8 | 1 3/8 x 4 1/8 |
| 190,000 | DCMX194U6R3BB2B | 13.0 | 10.0 | 12.6 | 15.7 | 2 x 3 1/8 |
| 210,000 | DCMX214U6R3AF2B | 11.0 | 8.6 | 10.9 | 13.4 | 1 3/8 x 5 5/8 |
| 230,000 | DCMX234U6R3EC2B | 9.4 | 7.3 | 13.1 | 15.4 | 1 3/4 x 4 1/8 |
| 300,000 | DCMX304U6R3BC2B | 10.0 | 7.3 | 14.7 | 17.9 | 2 x 4 1/8 |
| 310,000 | DCMX314U6R3BF2B | 6.9 | 5.3 | 16.9 | 20.0 | 2 x 5 5/8 |
| 480,000 | DCMX480U6R3CC2B | 6.8 | 5.4 | 19.6 | 22.6 | 2 1/2 x 4 1/8 |
| 500,000 | DCMX504U6R3CF2B | 4.9 | 4.0 | 22.9 | 25.9 | 2 1/2 x 5 5/8 |
| 670,000 | DCMX674U6R3DC2B | 6.2 | 5.3 | 20.7 | 22.4 | 3 x 4 1/8 |
| 900,000 | DCMX904U6R3DE2B | 4.9 | 4.3 | 23.5 | 25.2 | 3 x 5 1/8 |
| 1,000,000 | DCMX105U6R3DF2B | 4.5 | 4.0 | 24.5 | 26.2 | 3 x 5 5/8 |
| 1,100,000 | DCMX115U6R3DP2B | 4.4 | 3.9 | 24.7 | 26.4 | 3 x 5 7/8 |
| **7.5Vdc - 9 Vdc Surge** | | | | | | |
| 33,000 | DCMX333U7R5AK2B | 51.0 | 35.0 | 4.8 | 7.1 | 1 3/8 x 1 5/8 |
| 49,000 | DCMX493U7R5AA2B | 30.0 | 21.0 | 6.7 | 9.6 | 1 3/8 x 2 1/8 |
| 71,000 | DCMX713U7R5AH2B | 23.0 | 16.0 | 7.9 | 11.2 | 1 3/8 x 2 5/8 |
| 92,000 | DCMX923U7R5AB2B | 19.0 | 13.0 | 8.8 | 12.1 | 1 3/8 x 3 1/8 |
| 140,000 | DCMX144U7R5AC2B | 14.0 | 10.0 | 10.3 | 13.6 | 1 3/8 x 4 1/8 |
| 190,000 | DCMX194U7R5BB2B | 13.0 | 10.0 | 12.5 | 15.7 | 2 x 3 1/8 |
| 200,000 | DCMX204U7R5AF2B | 12.0 | 8.6 | 10.8 | 13.4 | 1 3/8 x 5 5/8 |
| 220,000 | DCMX224U7R5EC2B | 9.5 | 7.3 | 13.1 | 15.4 | 1 3/4 x 4 1/8 |
| 290,000 | DCMX294U7R5BC2B | 10.0 | 7.3 | 14.6 | 17.9 | 2 x 4 1/8 |
| 440,000 | DCMX444U7R5BF2B | 6.9 | 5.3 | 16.8 | 20.0 | 2 x 5 5/8 |
| 470,000 | DCMX470U7R5CC2B | 6.8 | 5.4 | 19.5 | 22.6 | 2 1/2 x 4 1/8 |
| 650,000 | DCMX654U7R5DC2B | 4.7 | 4.1 | 24.4 | 26.2 | 3 x 4 1/8 |
| 710,000 | DCMX714U7R5CF2B | 4.9 | 3.9 | 22.8 | 25.9 | 2 1/2 x 5 5/8 |
| 870,000 | DCMX874U7R5DE2B | 5.0 | 4.3 | 23.4 | 25.2 | 3 x 5 1/8 |
| 980,000 | DCMX984U7R5DF2B | 4.6 | 4.0 | 24.4 | 26.2 | 3 x 5 5/8 |
| 1,000,000 | DCMX105U7R5DP2B | 4.4 | 3.9 | 24.7 | 26.4 | 3 x 5 7/8 |
| **10Vdc - 12 Vdc Surge** | | | | | | |
| 29,000 | DCMX293U010AK2B | 51.0 | 35.0 | 4.8 | 7.1 | 1 3/8 x 1 5/8 |
| 43,000 | DCMX433U010AA2B | 30.0 | 21.0 | 6.7 | 9.6 | 1 3/8 x 2 1/8 |
| 62,000 | DCMX623U010AH2B | 23.0 | 16.0 | 7.9 | 11.2 | 1 3/8 x 2 5/8 |
| 81,000 | DCMX813U010AB2B | 19.0 | 13.0 | 8.8 | 12.1 | 1 3/8 x 3 1/8 |
| **10Vdc - 12 Vdc Surge (continued)** | | | | | | |
| 120,000 | DCMX124U010AC2B | 14.0 | 10.0 | 10.3 | 13.6 | 1 3/8 x 4 1/8 |
| 170,000 | DCMX174U010BB2B | 13.0 | 10.0 | 12.5 | 15.7 | 2 x 3 1/8 |
| 180,000 | DCMX184U010AF2B | 12.0 | 8.6 | 10.8 | 13.4 | 1 3/8 x 5 5/8 |
| 200,000 | DCMX204U010EC2B | 9.5 | 7.3 | 13.1 | 15.4 | 1 3/4 x 4 1/8 |
| 250,000 | DCMX254U010BC2B | 10.0 | 7.4 | 14.6 | 17.9 | 2 x 4 1/8 |
| 390,000 | DCMX394U010BF2B | 6.9 | 5.3 | 16.8 | 20.0 | 2 x 5 5/8 |
| 410,000 | DCMX414U010CC2B | 6.8 | 5.4 | 19.5 | 22.6 | 2 1/2 x 4 1/8 |
| 580,000 | DCMX584U010DC2B | 6.3 | 5.4 | 20.6 | 22.4 | 3 x 4 1/8 |
| 630,000 | DCMX634U010CF2B | 4.9 | 4.0 | 22.8 | 25.9 | 2 1/2 x 5 5/8 |
| 780,000 | DCMX784U010DE2B | 5.0 | 4.4 | 23.4 | 25.2 | 3 x 5 1/8 |
| 880,000 | DCMX884U010DF2B | 4.6 | 4.0 | 24.4 | 26.2 | 3 x 5 5/8 |
| 920,000 | DCMX924U010DP2B | 4.5 | 3.9 | 24.7 | 26.4 | 3 x 5 7/8 |
| **16Vdc - 20 Vdc Surge** | | | | | | |
| 21,000 | DCMX213U016AK2B | 51.0 | 33.5 | 4.8 | 7.0 | 1 3/8 x 1 5/8 |
| 35,000 | DCMX353U016AA2B | 30.0 | 20.6 | 6.7 | 9.6 | 1 3/8 x 2 1/8 |
| 49,000 | DCMX493U016AH2B | 23.0 | 15.1 | 7.9 | 11.2 | 1 3/8 x 2 5/8 |
| 62,000 | DCMX623U016AB2B | 19.0 | 12.1 | 8.8 | 12.1 | 1 3/8 x 3 1/8 |
| 90,000 | DCMX903U016AC2B | 13.8 | 9.0 | 10.3 | 13.6 | 1 3/8 x 4 1/8 |
| 130,000 | DCMX134U016AF2B | 10.3 | 7.1 | 12.6 | 16.9 | 1 3/8 x 5 5/8 |
| 130,000 | DCMX134U016BB2B | 10.6 | 7.2 | 12.5 | 15.6 | 2 x 3 1/8 |
| 160,000 | DCMX164U016EC2B | 9.7 | 7.0 | 13.1 | 16.0 | 1 3/4 x 4 1/8 |
| 190,000 | DCMX194U016BC2B | 6.9 | 5.2 | 19.5 | 22.6 | 2 x 4 1/8 |
| 290,000 | DCMX294U016BF2B | 5.4 | 3.9 | 21.1 | 26.1 | 2 x 5 5/8 |
| 310,000 | DCMX314U016CC2B | 4.9 | 3.5 | 22.7 | 28.2 | 2 1/2 x 4 1/8 |
| 470,000 | DCMX474U016CF2B | 3.5 | 2.6 | 30.4 | 37.3 | 2 1/2 x 5 5/8 |
| 470,000 | DCMX474U016DC2B | 4.5 | 3.6 | 26.8 | 31.6 | 3 x 4 1/8 |
| 620,000 | DCMX624U016DE2B | 3.6 | 2.9 | 32.3 | 38.0 | 3 x 5 1/8 |
| 700,000 | DCMX704U016DF2B | 3.3 | 2.6 | 35.0 | 41.0 | 3 x 5 5/8 |
| 740,000 | DCMX744U016DP2B | 3.1 | 2.5 | 35.8 | 41.8 | 3 x 5 7/8 |
| 980,000 | DCMX984U016DG2B | 6.5 | 6.3 | 23.8 | 30.4 | 3 x 8 5/8 |
| **20Vdc - 25 Vdc Surge** | | | | | | |
| 250,000 | DCMX254U020DJ2D | 5.8 | 29.0 | 5.0 | 33.0 | 3 x 3 5/8 |
| 500,000 | DCMX504U020DF2D | 3.9 | 37.0 | 3.4 | 42.0 | 3 x 5 5/8 |
| 1,000,000 | DCMX105U020DP2D | 3.4 | 40.0 | 3.0 | 45.0 | 3 x 5 7/8 |
| 1,500,000 | DCMX155U020DG2D | 3.2 | 41.0 | 2.8 | 45.0 | 3 x 8 5/8 |
| **25Vdc - 30 Vdc Surge** | | | | | | |
| 13,000 | DCMX133U025AK2B | 54.0 | 33.5 | 4.6 | 6.9 | 1 3/8 x 1 5/8 |
| 22,000 | DCMX223U025AA2B | 32.0 | 20.6 | 6.4 | 9.5 | 1 3/8 x 2 1/8 |
| 31,000 | DCMX313U025AH2B | 24.0 | 15.1 | 7.6 | 11.0 | 1 3/8 x 2 5/8 |
| 40,000 | DCMX403U025AB2B | 20.0 | 12.1 | 8.4 | 11.9 | 1 3/8 x 3 1/8 |
| 58,000 | DCMX583U025AC2B | 14.0 | 9.0 | 10.0 | 13.5 | 1 3/8 x 4 1/8 |
| 82,000 | DCMX823U025BB2B | 11.4 | 12.2 | 15.5 | 15.5 | 2 x 3 1/8 |
| 85,000 | DCMX853U025AF2B | 11.1 | 7.1 | 12.2 | 16.9 | 1 3/8 x 5 5/8 |
| 100,000 | DCMX104U025EC2B | 10.0 | 7.0 | 12.7 | 16.0 | 1 3/4 x 4 1/8 |
| 120,000 | DCMX124U025BC2B | 7.9 | 5.2 | 15.5 | 20.3 | 2 x 4 1/8 |
| 190,000 | DCMX194U025BF2B | 5.8 | 3.9 | 20.4 | 26.1 | 2 x 5 5/8 |
| 200,000 | DCMX204U025CC2B | 5.2 | 3.5 | 22.0 | 28.2 | 2 1/2 x 4 1/8 |

Use this Guide to select the best computer grade capacitor for your application. The six columns in the middle rank CDE capacitors by characteristic. Those Types that are superior in a given category are indicated by a star ★.The best have two stars ★★. Consider these for your most important criteria and then compare final specifications before making your selection.

| CDE Type | Page | Temp.°C Range | Vdc Range | Life Test Hours | Life Test @°C | High Cap | Low ESR | Low Hi-Freq Imped | High Ripple | Long Life | Low Cost | Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DCMX | 90 | -40 +85 | 6.3 - 450 | 1000 | +85 | ★ | ★ | ★ | ★ | | ★★ | Max Cap, Best Value, Standard Life & Ripple |
| 500X | 94 | -40 +95 | 6.3 - 450 | 2000 | +95 | ★★ | | ★ | ★ | | ★ | Max Cap, Long Life, Max Ripple, Low ESR |
| 550 | 100 | -40 +105 | 200 - 400 | 1000 | +105 | ★ | ★ | ★ | ★ | ★ | ★ | Motor Control, Ultra High Ripple, High Voltage |
| 101X | 102 | -55 +105 | 6.3-55 | 2000 | +105 | ★ | ★ | ★ | ★ | ★ | ★ | Wide Temp Range, MIL-C-39018/04, 06, 10 equivalent |
| 139R | 99 | -55 +85 | 6.3 - 55 | 1000 | +85 | | ★★ | ★★ | | | ★ | Lowest ESR |
| 125 | 105 | -55 +125 | 6.3 - 40 | 2000 | +125 | | ★ | ★ | | ★★ | | Highest Temp, Highest Reliability, Longest Life |



**Capacitance:** Use capacitance bridge with a maximum rms signal voltage of 1 Volt at 120Hz. Capacitance is within tolerance at +25°C.

**Equivalent Series Resistance (ESR):** Use ESR bridge (with accuracy of ±2% at +25°C) at 120Hz. ESR to be no more than value in table.

**DC Leakage Current (DCL):** Pre-condition within 24-48 hours of test by applying rated Vdc for 30 minutes (minimum). Measure at +25°C with rated voltage applied through a current limiting resistor. Measure DCL 5 minutes after capacitor reaches rated Vdc. DCL must not exceed specified maximum value.

**Storage:** From -55°C to maximum operating temperature up to 200,000 feet above sea level.

**Surge Test:** Connect capacitor in series with resistor as follows:
**C**=0-2500µF **R**=1000Ω
**C**=2500-25kµF **R**=500Ω
**C**=≥ 25,001µF **R**=100Ω
Subject the series combination to rated surge voltage. For capacitors rated at +85°C, apply surge voltage for 30 seconds. Allow capacitor to discharge through resistor. Apply voltage again after 9.5 minutes. Repeat 10 minute cycle for 24 hours. For capacitors rated at +105°C, apply voltage for 30 seconds and off for 5.5 minutes for 1,000 cycles. Following surge test allow capacitors to cool to room temperature and measure DCL. DCL is not to increase from initial requirement and no electrolyte shall have leaked.

**Load Life Test:** Use a circulating air oven set to capacitor(s)' maximum operating temperature. Separate capacitors to maintain temperature –0°C +3°C. Apply rated Vdc for rated life ±12 hours using regulated power supply free from turn-on/turn-off voltage transients. At end of test, return capacitors to room temperature for 24 hours (min).

DCL is not to exceed initial requirement.
Capacitance must not be less than 85% of initial measured value.
ESR must not be greater than:

| Type | % of Initial Requirement |
|---|---|
| DCMX | 175 |
| 500X/550 | 175 |
| 101X | 100 |
| 139R | 175 |
| 125 | 175 |

**Full Ripple Life Test:** Use a circulating air oven as in Load Life Test. Apply DC voltage with rated ripple current from AC source and reduce DC voltage unit sum of DC voltage and peak AC voltage equals capacitor's rated voltage. At end of life test return capacitors to room temperature for 24 hours (min). Capacitance, ESR and DCL must meet Load Life Test requirements.

**Shelf Life Test:** Use a circulating air oven as above for rated shelf life ±6 hours. Allow capacitors to cool to room temperature and stabilize for a minimum of 16 hours. Capacitance, ESR and DCL will meet initial requirements.

**Vibration:** Clamp capacitor to a vibrating platform and subject it to a simple harmonic motion with a maximum peak-to-peak amplitude of 0.06" and maximum acceleration of 10g. Vary the frequency linearly between 10 and 55Hz. Entire range of 10-55Hz must be traversed in one minute. Vibrate capacitor for 1-1/2 hours with the direction of motion being parallel to the axis of the capacitor. Then move the capacitor so the direction of motion is perpendicular to the axis of the capacitor and continue the vibration for an additional 1-1/2 hours. During the last 30 minutes of the test connect the capacitor to a bridge and observe for 3 minutes. There will be no evidence of loosening of the capacitor element within the case when shaken by hand following the test. No indication of intermittent contact, open or shorting is allowed during the 3 minute observation period.

**Container Seal:** Following the vibration test, test each capacitor for seal tightness as follows: Subject the capacitors to two successive temperature cycles in circulating air. One temperature cycle is:
A. 85°C for 30 minutes; B. 25°C for 30 minutes;
C. -40°C for 30 minutes; D. 25°C for 30 minutes.
Following the second cycle, immerse the capacitor in 90-95°C water for five minutes. A failure is a continuous chain of bubbles when immersed.

**Vent Test:** Apply reverse DC voltage to a capacitor at 15-25 Amperes. If the capacitor is open or shorts and the vent has not operated, test additional capacitors. The vent must operate and there must be no explosion.

**Low Temperature Performance:** Measure capacitors at 120Hz and at these low temperatures. The maximum multiple of the 25°C impedance is:

| CDE Type | Test Temp -°C | Rated Vdc | Cap % of 25°C | Max Multiple of 25°C Impedance |
|---|---|---|---|---|
| DCMX/ | 20 | 0-10 | 60 | 20 |
| 500X/ | | 11-50 | 65 | 8 |
| 550 | | 51-100 | 70 | 4 |
| | | >100 | 70 | 3 |
| 101X/ | 55 | 0-9 | 65 | 6 |
| 139R/ | | 10-40 | 75 | 3 |
| 125 | | 40 | 80 | 2 |

**Ripple Current:** Ripple current is the AC current flowing through the capacitor. Maximum ripple is determined by the core temperature rise of the capacitor. The ability of a capacitor to handle AC current is also limited by the voltage rating, external surface area and the current carrying capability of the electrode connections of the capacitor. The heat energy warming the capacitor core is $I^2R$ where "R" is the ESR. The maximum permitted ripple current at operating temperature is:

$$I = \sqrt{\Delta T/\Theta ESR}$$

Where: I = Max Ripple Current, rms Amperes
ΔT = Max permitted core temperature rise over Ambient Temperature
Θ = Thermal resistance between core and case and case to Ambient in °C/W.

CDE Computer Grade capacitors have low thermal resistance from core to case because the capacitor section is pressed against the top and bottom of the case and securely anchored with integral spikes. Unlike conventional construction using pitch or wax for anchoring, thermal resistance between core and case can often be neglected. The case temperature at the bottom of the capacitor can be considered to be the core temperature. Use the ripple current multipliers that follow as a guide and make sure case temperature does not exceed rated temperature in high-ripple applications. The multipliers are based on the above relationship and change in ESR with frequency.

*Ripple Current Multiplier Table appears on page 107.*

# Computer Grade, -40°C +85°C, High Capacitance, Type DCMX

| Cap. µF | Catalog Number | ESR Max mΩ @25°C 120 Hz | 20kHz | Ripple A @85°C 120Hz | 20kHz | Nominal Size (in.) D x L |
|---|---|---|---|---|---|---|

## 25Vdc - 30 Vdc Surge (continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| 300,000 | DCMX304U025DC2B | 4.7 | 3.6 | 26.2 | 31.6 | 3 x 4 1/8 |
| 310,000 | DCMX314U025CF2B | 3.7 | 2.6 | 29.6 | 37.3 | 2 1/2 x 5 5/8 |
| 400,000 | DCMX404U025DE2B | 3.7 | 2.9 | 31.6 | 38.0 | 3 x 5 1/8 |
| 450,000 | DCMX454U025DF2B | 3.4 | 2.6 | 34.3 | 41.0 | 3 x 5 5/8 |
| 480,000 | DCMX484U025DP2B | 3.3 | 2.5 | 35.0 | 41.8 | 3 x 5 7/8 |
| 740,000 | DCMX744U025DG2B | 2.5 | 2.0 | 48.3 | 56.5 | 3 x 8 5/8 |

## 40Vdc - 50 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 7,800 | DCMX782U040AK2B | 57.0 | 34.2 | 4.3 | 6.0 | 1 3/8 x 1 5/8 |
| 13,000 | DCMX133U040AA2B | 33.0 | 21.0 | 6.0 | 8.3 | 1 3/8 x 2 1/8 |
| 18,000 | DCMX183U040AH2B | 25.0 | 17.0 | 7.1 | 9.7 | 1 3/8 x 2 5/8 |
| 23,000 | DCMX233U040AB2B | 21.0 | 14.0 | 7.9 | 10.6 | 1 3/8 x 3 1/8 |
| 34,000 | DCMX343U040AC2B | 15.0 | 10.0 | 9.4 | 12.9 | 1 3/8 x 4 1/8 |
| 47,000 | DCMX473U040BB2B | 14.1 | 7.3 | 11.0 | 15.4 | 2 x 3 1/8 |
| 49,000 | DCMX493U040AF2B | 13.0 | 7.2 | 11.0 | 16.7 | 1 3/8 x 5 5/8 |
| 61,000 | DCMX613U040EC2B | 11.0 | 7.1 | 11.4 | 15.9 | 1 3/4 x 4 1/8 |
| 71,000 | DCMX713U040BC2B | 9.8 | 5.2 | 14.0 | 20.2 | 2 x 4 1/8 |
| 110,000 | DCMX114U040BF2B | 7.0 | 4.0 | 18.6 | 26.0 | 2 x 5 5/8 |
| 120,000 | DCMX124U040CC2B | 6.3 | 3.6 | 20.0 | 28.0 | 2 1/2 x 4 1/8 |
| 180,000 | DCMX184U040CF2B | 4.5 | 2.6 | 27.0 | 37.1 | 2 1/2 x 5 5/8 |
| 180,000 | DCMX184U040DC2B | 5.5 | 3.6 | 24.3 | 31.5 | 3 x 4 1/8 |
| 230,000 | DCMX234U040DE2B | 4.3 | 2.9 | 29.5 | 37.8 | 3 x 5 1/8 |
| 260,000 | DCMX264U040DF2B | 3.9 | 2.7 | 32.1 | 40.8 | 3 x 5 5/8 |
| 280,000 | DCMX284U040DP2B | 3.7 | 2.6 | 32.7 | 41.6 | 3 x 5 7/8 |
| 430,000 | DCMX434U040DG2B | 2.8 | 2.0 | 45.6 | 56.3 | 3 x 8 5/8 |

## 50Vdc - 65 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 5,800 | DCMX582U050AK2B | 62.0 | 34.2 | 4.0 | 5.9 | 1 3/8 x 1 5/8 |
| 9,600 | DCMX962U050AA2B | 36.0 | 21.0 | 5.6 | 8.1 | 1 3/8 x 2 1/8 |
| 13,000 | DCMX133U050AH2B | 27.0 | 15.4 | 6.7 | 9.6 | 1 3/8 x 2 5/8 |
| 17,000 | DCMX173U050AB2B | 22.4 | 12.3 | 7.5 | 10.5 | 1 3/8 x 3 1/8 |
| 25,000 | DCMX253U050AC2B | 16.0 | 9.2 | 8.9 | 12.9 | 1 3/8 x 4 1/8 |
| 35,000 | DCMX353U050BB2B | 15.7 | 7.3 | 10.5 | 15.4 | 2 x 3 1/8 |
| 37,000 | DCMX373U050AF2B | 11.9 | 7.2 | 11.8 | 16.7 | 1 3/8 x 5 5/8 |
| 45,000 | DCMX453U050EC2B | 12.0 | 7.1 | 11.0 | 15.9 | 1 3/4 x 4 1/8 |
| 53,000 | DCMX533U050BC2B | 10.8 | 5.2 | 13.3 | 20.2 | 2 x 4 1/8 |
| 79,000 | DCMX793U050BF2B | 7.7 | 4.0 | 17.7 | 26.0 | 2 x 5 5/8 |
| 87,000 | DCMX873U050CC2B | 7.0 | 3.6 | 19.1 | 28.0 | 2 1/2 x 4 1/8 |
| 130,000 | DCMX134U050CF2B | 4.9 | 2.6 | 25.8 | 37.1 | 2 1/2 x 5 5/8 |
| 130,000 | DCMX134U050DC2B | 5.9 | 3.6 | 23.4 | 31.5 | 3 x 4 1/8 |
| 170,000 | DCMX174U050DE2B | 4.6 | 2.9 | 28.5 | 37.8 | 3 x 5 1/8 |
| 190,000 | DCMX194U050DF2B | 4.2 | 2.7 | 31.0 | 40.8 | 3 x 5 5/8 |
| 210,000 | DCMX214U050DP2B | 4.0 | 2.6 | 31.6 | 41.6 | 3 x 5 7/8 |
| 320,000 | DCMX324U050DG2B | 6.1 | 5.2 | 30.7 | 35.1 | 3 x 8 5/8 |

## 63Vdc - 75 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 4,100 | DCMX412U063AK2B | 73.0 | 39.0 | 3.6 | 5.8 | 1 3/8 x 1 5/8 |
| 6,100 | DCMX612U063AA2B | 43.0 | 23.0 | 5.0 | 8.0 | 1 3/8 x 2 1/8 |
| 8,900 | DCMX892U063AH2B | 32.0 | 18.0 | 6.0 | 9.4 | 1 3/8 x 2 5/8 |
| 1,200 | DCMX122U063AB2B | 27.0 | 15.0 | 6.7 | 10.3 | 1 3/8 x 3 1/8 |
| 14,000 | DCMX143U063AC2B | 19.0 | 11.0 | 8.1 | 11.9 | 1 3/8 x 4 1/8 |
| 19,000 | DCMX193U063BB2B | 21.0 | 13.0 | 9.2 | 12.4 | 2 x 3 1/8 |
| 20,000 | DCMX203U063AF2B | 15.0 | 8.8 | 9.3 | 12.5 | 1 3/8 x 5 5/8 |
| 28,000 | DCMX283U063EC2B | 14.0 | 9.0 | 10.3 | 13.0 | 1 3/4 x 4 1/8 |
| 36,000 | DCMX363U063BC2B | 14.0 | 8.7 | 11.5 | 15.2 | 2 x 4 1/8 |
| 55,000 | DCMX553U063BF2B | 10.0 | 6.2 | 14.6 | 17.5 | 2 x 5 5/8 |
| 60,000 | DCMX603U063CC2B | 10.0 | 6.6 | 15.6 | 19.2 | 2 1/2 x 4 1/8 |
| 91,000 | DCMX913U063CF2B | 6.8 | 4.8 | 20.0 | 25.9 | 2 1/2 x 5 5/8 |
| 89,000 | DCMX893U063DC2B | 10.0 | 7.5 | 18.0 | 21.9 | 3 x 4 1/8 |
| 120,000 | DCMX124U063DE2B | 7.4 | 5.9 | 21.3 | 26.6 | 3 x 5 1/8 |
| 140,000 | DCMX144U063DF2B | 6.7 | 5.3 | 23.2 | 28.9 | 3 x 5 5/8 |
| 150,000 | DCMX154U063DP2B | 6.5 | 5.1 | 23.7 | 29.5 | 3 x 5 7/8 |
| 210,000 | DCMX214U063DG2B | 12.0 | 8.4 | 21.3 | 27.6 | 3 x 8 5/8 |

## 75Vdc - 95 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 3,000 | DCMX302U075AK2B | 100 | 52.0 | 3.2 | 5.6 | 1 3/8 x 1 5/8 |
| 5,000 | DCMX502U075AA2B | 58.0 | 30.0 | 4.4 | 4.7 | 1 3/8 x 2 1/8 |
| 7,000 | DCMX702U075AH2B | 44.0 | 23.0 | 5.3 | 9.1 | 1 3/8 x 2 5/8 |
| 9,000 | DCMX902U075AB2B | 36.0 | 19.0 | 5.9 | 10.0 | 1 3/8 x 3 1/8 |
| 13,000 | DCMX133U075AC2B | 26.0 | 14.0 | 7.2 | 11.6 | 1 3/8 x 4 1/8 |
| 18,000 | DCMX183U075BB2B | 23.1 | 14.0 | 8.9 | 12.9 | 2 x 3 1/8 |
| 19,000 | DCMX193U075AF2B | 18.9 | 12.0 | 7.8 | 11.2 | 1 3/8 x 5 5/8 |
| 23,000 | DCMX233U075EC2B | 16.9 | 11.0 | 9.8 | 13.0 | 1 3/4 x 4 1/8 |
| 27,000 | DCMX273U075BC2B | 15.9 | 11.0 | 11.0 | 15.0 | 2 x 4 1/8 |
| 41,000 | DCMX413U075BF2B | 11.3 | 7.4 | 14.6 | 17.5 | 2 x 5 5/8 |
| 45,000 | DCMX453U075CC2B | 11.6 | 7.6 | 14.7 | 19.2 | 2 1/2 x 4 1/8 |
| 68,000 | DCMX683U075CF2B | 8.1 | 5.4 | 20.0 | 25.9 | 2 1/2 x 5 5/8 |
| 68,000 | DCMX683U075DC2B | 10.1 | 7.5 | 18.0 | 21.9 | 3 x 4 1/8 |
| 90,000 | DCMX903U075DE2B | 8.2 | 5.9 | 21.3 | 26.6 | 3 x 5 1/8 |
| 100,000 | DCMX104U075DF2B | 7.4 | 5.3 | 23.2 | 28.9 | 3 x 5 5/8 |
| 110,000 | DCMX114U075DP2B | 7.1 | 5.1 | 23.7 | 29.5 | 3 x 5 7/8 |
| 140,000 | DCMX144U075DG2B | 12.0 | 8.4 | 21.3 | 27.6 | 3 x 8 5/8 |

## 100Vdc - 125 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 1,700 | DCMX172U100AK2B | 120 | 53.0 | 2.8 | 5.4 | 1 3/8 x 1 5/8 |
| 3,100 | DCMX312U100AA2B | 68.0 | 31.0 | 4.0 | 7.5 | 1 3/8 x 2 1/8 |
| 4,500 | DCMX452U100AH2B | 51.0 | 24.0 | 4.8 | 8.8 | 1 3/8 x 2 5/8 |
| 5,900 | DCMX592U100AB2B | 42.0 | 20.0 | 5.4 | 9.7 | 1 3/8 x 3 1/8 |
| 8,600 | DCMX862U100AC2B | 29.4 | 14.0 | 6.5 | 11.3 | 1 3/8 x 4 1/8 |
| 12,000 | DCMX123U100BB2B | 26.0 | 18.5 | 7.7 | 9.7 | 2 x 3 1/8 |
| 13,000 | DCMX133U100AF2B | 24.0 | 12.0 | 7.2 | 12.1 | 1 3/8 x 5 5/8 |
| 16,000 | DCMX163U100EC2B | 18.6 | 11.0 | 8.9 | 12.8 | 1 3/4 x 4 1/8 |
| 18,000 | DCMX183U100BC2B | 17.5 | 12.6 | 10.5 | 13.0 | 2 x 4 1/8 |
| 28,000 | DCMX283U100BF2B | 12.2 | 11.0 | 14.0 | 17.3 | 2 x 5 5/8 |
| 30,000 | DCMX303U100CC2B | 11.0 | 8.0 | 15.2 | 18.8 | 2 1/2 x 4 1/8 |
| 45,000 | DCMX453U100DC2B | 9.9 | 7.9 | 18.1 | 21.4 | 3 x 4 1/8 |
| 46,000 | DCMX463U100CF2B | 8.0 | 5.5 | 20.1 | 25.5 | 2 1/2 x 5 5/8 |
| 60,000 | DCMX603U100DE2B | 8.8 | 6.1 | 20.6 | 26.2 | 3 x 5 1/8 |
| 68,000 | DCMX683U100DF2B | 7.9 | 5.5 | 22.5 | 28.5 | 3 x 5 5/8 |
| 74,000 | DCMX743U100DP2B | 7.4 | 5.1 | 23.3 | 29.4 | 3 x 5 7/8 |
| 96,000 | DCMX963U100DG2B | 13.2 | 8.6 | 20.9 | 27.4 | 3 x 8 5/8 |

## 150Vdc - 180 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 760 | DCMX761U150AK2B | 184 | 102 | 2.3 | 3.6 | 1 3/8 x 1 5/8 |
| 1,100 | DCMX112U150AA2B | 102 | 57.2 | 3.2 | 5.0 | 1 3/8 x 2 1/8 |
| 1,600 | DCMX162U150AH2B | 71.0 | 39.9 | 3.8 | 6.0 | 1 3/8 x 2 5/8 |
| 2,100 | DCMX212U150AB2B | 74.0 | 44.0 | 4.3 | 6.7 | 1 3/8 x 3 1/8 |
| 3,100 | DCMX312U150AC2B | 37.7 | 21.6 | 5.8 | 8.4 | 1 3/8 x 4 1/8 |
| 4,400 | DCMX442U150BB2B | 32.2 | 20.5 | 7.0 | 9.2 | 2 x 3 1/8 |
| 4,700 | DCMX472U150AF2B | 26.4 | 15.5 | 7.9 | 11.4 | 1 3/8 x 5 5/8 |
| 5,300 | DCMX532U150EC2B | 23.3 | 14.4 | 8.3 | 11.2 | 1 3/4 x 4 1/8 |
| 6,700 | DCMX672U150BC2B | 21.5 | 13.9 | 9.4 | 12.4 | 2 x 4 1/8 |
| 10,000 | DCMX103U150BF2B | 14.9 | 9.8 | 12.7 | 16.5 | 2 x 5 5/8 |
| 11,000 | DCMX113U150CC2B | 17.3 | 12.7 | 12.1 | 14.9 | 2 1/2 x 4 1/8 |
| 17,000 | DCMX173U150CF2B | 12.7 | 8.8 | 16.0 | 20.2 | 2 1/2 x 5 5/8 |
| 17,000 | DCMX173U150DC2B | 20.2 | 14.2 | 12.7 | 15.9 | 3 x 4 1/8 |
| 22,000 | DCMX223U150DE2B | 15.4 | 10.9 | 15.6 | 19.5 | 3 x 5 1/8 |
| 25,000 | DCMX253U150DF2B | 11.8 | 9.8 | 18.4 | 21.3 | 3 x 5 5/8 |
| 26,000 | DCMX263U150DP2B | 11.0 | 9.1 | 19.1 | 22.1 | 3 x 5 7/8 |
| 43,000 | DCMX433U150DG2B | 14.0 | 8.9 | 19.9 | 26.8 | 3 x 8 5/8 |

## 200Vdc - 250 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 440 | DCMX441U200AK2B | 184 | 102 | 1.9 | 2.7 | 1 3/8 x 1 5/8 |
| 800 | DCMX801U200AA2B | 102 | 57.2 | 2.7 | 4.0 | 1 3/8 x 2 1/8 |
| 1,200 | DCMX122U200AH2B | 71.0 | 39.9 | 3.5 | 5.1 | 1 3/8 x 2 5/8 |
| 1,500 | DCMX152U200AB2B | 54.6 | 30.9 | 4.3 | 6.3 | 1 3/8 x 3 1/8 |
| 2,200 | DCMX222U200AC2B | 37.7 | 21.6 | 5.8 | 8.4 | 1 3/8 x 4 1/8 |
| 3,100 | DCMX312U200BB2B | 32.2 | 20.5 | 7.0 | 9.2 | 2 x 3 1/8 |
| 3,300 | DCMX332U200AF2B | 26.4 | 15.5 | 7.9 | 11.4 | 1 3/8 x 5 5/8 |

# Computer Grade, -40°C +85°C, High Capacitance, Type DCMX



## 200Vdc - 250 Vdc Surge (continued)

| Cap. µF | Catalog Number | ESR Max mΩ @25°C 120 Hz | ESR Max mΩ @25°C 20kHz | Ripple A @85°C 120Hz | Ripple A @85°C 20kHz | Nominal Size (in.) D x L |
|---|---|---|---|---|---|---|
| 4,000 | DCMX402U200EC2B | 23.3 | 14.4 | 8.3 | 11.2 | 1 3/4 x 4 1/8 |
| 4,700 | DCMX472U200BC2B | 21.5 | 13.9 | 9.4 | 12.4 | 2 x 4 1/8 |
| 7,200 | DCMX722U200BF2B | 14.9 | 9.8 | 12.7 | 16.5 | 2 x 5 5/8 |
| 7,800 | DCMX782U200CC2B | 17.3 | 12.7 | 12.1 | 14.9 | 2 1/2 x 4 1/8 |
| 12,000 | DCMX123U200CF2B | 12.7 | 8.8 | 16.0 | 20.2 | 2 1/2 x 5 5/8 |
| 12,000 | DCMX123U200DC2B | 20.2 | 14.2 | 12.7 | 15.9 | 3 x 4 1/8 |
| 16,000 | DCMX163U200DE2B | 15.4 | 10.9 | 15.6 | 19.5 | 3 x 5 1/8 |
| 18,000 | DCMX183U200DF2B | 11.8 | 9.8 | 18.4 | 21.3 | 3 x 5 5/8 |
| 19,000 | DCMX193U200DP2B | 11.0 | 9.1 | 19.1 | 22.1 | 3 x 5 7/8 |
| 25,000 | DCMX253U200DG2B | 14.5 | 8.9 | 19.9 | 26.8 | 3 x 8 5/8 |

## 250Vdc - 300 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 340 | DCMX341U250AK2B | 246 | 107 | 1.8 | 2.7 | 1 3/8 x 1 5/8 |
| 620 | DCMX621U250AA2B | 137 | 59.9 | 2.3 | 3.9 | 1 3/8 x 2 1/8 |
| 900 | DCMX901U250AH2B | 94.8 | 41.8 | 3.0 | 5.0 | 1 3/8 x 2 5/8 |
| 1,200 | DCMX122U250AB2B | 72.8 | 32.4 | 3.7 | 6.1 | 1 3/8 x 3 1/8 |
| 1,700 | DCMX172U250AC2B | 50.1 | 22.6 | 5.0 | 8.2 | 1 3/8 x 4 1/8 |
| 2,400 | DCMX242U250BB2B | 41.2 | 21.2 | 6.2 | 9.0 | 2 x 3 1/8 |
| 2,600 | DCMX262U250AF2B | 34.7 | 16.2 | 6.9 | 11.1 | 1 3/8 x 5 5/8 |
| 3,100 | DCMX312U250EC2B | 30.2 | 14.9 | 7.3 | 11.0 | 1 3/4 x 4 1/8 |
| 3,700 | DCMX372U250BC2B | 27.4 | 14.4 | 8.4 | 12.2 | 2 x 4 1/8 |
| 5,600 | DCMX562U250BF2B | 18.7 | 10.2 | 11.3 | 16.2 | 2 x 5 5/8 |
| 6,000 | DCMX602U250CC2B | 22.3 | 13.0 | 10.6 | 14.7 | 2 1/2 x 4 1/8 |
| 9,000 | DCMX902U250DC2B | 23.0 | 14.4 | 11.9 | 15.8 | 3 x 4 1/8 |
| 9,200 | DCMX922U250CF2B | 15.2 | 9.0 | 14.6 | 20.0 | 2 1/2 x 5 5/8 |
| 12,000 | DCMX123U250DE2B | 17.4 | 11.0 | 14.6 | 19.4 | 3 x 5 1/8 |
| 14,000 | DCMX143U250DF2B | 13.4 | 9.9 | 17.3 | 21.2 | 3 x 5 5/8 |
| 15,000 | DCMX153U250DP2B | 12.5 | 9.3 | 17.9 | 21.9 | 3 x 5 7/8 |
| 19,000 | DCMX193U250DG2B | 16.3 | 9.0 | 18.8 | 26.7 | 3 x 8 5/8 |

## 300Vdc - 350 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 260 | DCMX261U300AK2B | 373 | 238 | 1.3 | 1.8 | 1 3/8 x 1 5/8 |
| 430 | DCMX431U300AA2B | 228 | 146 | 1.8 | 2.5 | 1 3/8 x 2 1/8 |
| 620 | DCMX621U300AH2B | 158 | 101 | 2.3 | 3.2 | 1 3/8 x 2 5/8 |
| 810 | DCMX811U300AB2B | 122 | 77.8 | 2.9 | 4.0 | 1 3/8 x 3 1/8 |
| 1,200 | DCMX122U300AC2B | 83.2 | 53.5 | 3.9 | 5.4 | 1 3/8 x 4 1/8 |
| 1,600 | DCMX162U300BB2B | 66.9 | 45.3 | 4.8 | 6.2 | 2 x 3 1/8 |
| 1,800 | DCMX182U300AF2B | 57.1 | 37.1 | 5.4 | 7.4 | 1 3/8 x 5 5/8 |
| 2,000 | DCMX202U300EC2B | 53.3 | 35.4 | 5.5 | 7.1 | 1 3/4 x 4 1/8 |
| 2,500 | DCMX252U300BC2B | 44.1 | 30.0 | 6.6 | 8.4 | 2 x 4 1/8 |
| 3,800 | DCMX382U300BF2B | 29.7 | 20.4 | 9.0 | 11.4 | 2 x 5 5/8 |
| 4,100 | DCMX412U300CC2B | 27.3 | 18.7 | 9.6 | 12.3 | 2 1/2 x 4 1/8 |
| 6,200 | DCMX622U300DC2B | 28.8 | 23.0 | 10.6 | 12.5 | 3 x 4 1/8 |
| 6,300 | DCMX632U300CF2B | 18.2 | 12.6 | 13.3 | 16.9 | 2 1/2 x 5 5/8 |
| 8,300 | DCMX832U300DE2B | 21.7 | 17.4 | 13.1 | 15.4 | 3 x 5 1/8 |
| 9,400 | DCMX942U300DF2B | 19.4 | 15.6 | 14.4 | 16.9 | 3 x 5 5/8 |
| 10,000 | DCMX103U300DP2B | 18.0 | 14.5 | 14.9 | 17.5 | 3 x 5 7/8 |
| 15,000 | DCMX153U300DG2B | 14.8 | 12.1 | 19.8 | 23.1 | 3 x 8 5/8 |

## 350Vdc - 400 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 200 | DCMX201U350AK2B | 485 | 323 | 1.1 | 1.5 | 1 3/8 x 1 5/8 |
| 330 | DCMX331U350AA2B | 297 | 198 | 1.6 | 2.1 | 1 3/8 x 2 1/8 |
| 480 | DCMX481U350AH2B | 206 | 137 | 2.0 | 2.8 | 1 3/8 x 2 5/8 |
| 620 | DCMX621U350AB2B | 158 | 105 | 2.5 | 3.4 | 1 3/8 x 3 1/8 |
| 920 | DCMX921U350AC2B | 108 | 72.2 | 3.4 | 4.6 | 1 3/8 x 4 1/8 |
| 1,300 | DCMX132U350BB2B | 85.0 | 58.9 | 4.3 | 5.4 | 2 x 3 1/8 |
| 1,400 | DCMX142U350AF2B | 73.8 | 49.7 | 4.7 | 6.4 | 1 3/8 x 5 5/8 |
| 1,500 | DCMX152U350EC2B | 68.2 | 46.7 | 4.9 | 6.2 | 1 3/4 x 4 1/8 |
| 1,900 | DCMX192U350BC2B | 55.9 | 38.9 | 5.9 | 7.4 | 2 x 4 1/8 |
| 2,900 | DCMX292U350BF2B | 37.4 | 26.3 | 8.0 | 10.1 | 2 x 5 5/8 |
| 3,200 | DCMX322U350CC2B | 39.4 | 29.0 | 8.0 | 9.8 | 2 1/2 x 4 1/8 |
| 4,800 | DCMX482U350CF2B | 26.3 | 19.5 | 11.1 | 13.6 | 2 1/2 x 5 5/8 |
| 4,800 | DCMX482U350DC2B | 33.6 | 26.7 | 9.8 | 11.6 | 3 x 4 1/8 |
| 6,400 | DCMX642U350DE2B | 25.2 | 20.1 | 12.2 | 14.4 | 3 x 5 1/8 |

## 350Vdc - 400 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 7,200 | DCMX722U350DF2B | 22.5 | 18.0 | 13.3 | 15.7 | 3 x 5 5/8 |
| 7,900 | DCMX792U350DP2B | 20.8 | 16.7 | 13.9 | 16.3 | 3 x 5 7/8 |
| 12,000 | DCMX123U350DG2B | 17.0 | 13.8 | 18.4 | 21.6 | 3 x 8 5/8 |

## 400Vdc - 450 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 180 | DCMX181U400AK2B | 523 | 333 | 1.1 | 1.5 | 1 3/8 x 1 5/8 |
| 290 | DCMX291U400AA2B | 320 | 204 | 1.5 | 2.1 | 1 3/8 x 2 1/8 |
| 420 | DCMX421U400AH2B | 222 | 141 | 2.0 | 2.7 | 1 3/8 x 2 5/8 |
| 550 | DCMX551U400AB2B | 170 | 109 | 2.4 | 3.4 | 1 3/8 x 3 1/8 |
| 810 | DCMX811U400AC2B | 116 | 74.4 | 3.3 | 4.5 | 1 3/8 x 4 1/8 |
| 1,100 | DCMX112U400BB2B | 91.0 | 60.5 | 4.1 | 5.4 | 2 x 3 1/8 |
| 1,200 | DCMX122U400AF2B | 79.4 | 51.2 | 4.6 | 6.3 | 1 3/8 x 5 5/8 |
| 1,300 | DCMX132U400EC2B | 73.2 | 48.0 | 4.7 | 6.1 | 1 3/4 x 4 1/8 |
| 1,700 | DCMX172U400BC2B | 59.8 | 39.9 | 5.7 | 7.3 | 2 x 4 1/8 |
| 2,600 | DCMX262U400BF2B | 40.0 | 26.9 | 7.8 | 10.0 | 2 x 5 5/8 |
| 2,800 | DCMX282U400CC2B | 41.7 | 29.7 | 7.8 | 9.7 | 2 1/2 x 4 1/8 |
| 4,200 | DCMX422U400DC2B | 35.2 | 27.1 | 9.6 | 11.5 | 3 x 4 1/8 |
| 4,300 | DCMX432U400CF2B | 27.9 | 20.0 | 10.8 | 13.4 | 2 1/2 x 5 5/8 |
| 5,700 | DCMX572U400DE2B | 26.4 | 20.4 | 11.9 | 14.3 | 3 x 5 1/8 |
| 6,400 | DCMX642U400DF2B | 23.6 | 18.3 | 13.0 | 15.6 | 3 x 5 5/8 |
| 7,000 | DCMX702U400DP2B | 21.8 | 16.9 | 13.5 | 16.2 | 3 x 5 7/8 |
| 11,000 | DCMX113U400DG2B | 14.8 | 11.6 | 19.8 | 23.5 | 3 x 8 5/8 |

## 450Vdc - 500 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 150 | DCMX151U450AK2B | 681 | 463 | 0.9 | 1.3 | 1 3/8 x 1 5/8 |
| 240 | DCMX241U450AA2B | 416 | 283 | 1.3 | 1.8 | 1 3/8 x 2 1/8 |
| 350 | DCMX351U450AH2B | 288 | 196 | 1.7 | 2.3 | 1 3/8 x 2 5/8 |
| 460 | DCMX461U450AB2B | 221 | 151 | 2.1 | 2.8 | 1 3/8 x 3 1/8 |
| 680 | DCMX681U450AC2B | 151 | 103 | 2.9 | 3.9 | 1 3/8 x 4 1/8 |
| 930 | DCMX931U450BB2B | 116 | 81.4 | 3.7 | 4.6 | 2 x 3 1/8 |
| 1,000 | DCMX102U450AF2B | 103 | 70.5 | 4.0 | 5.3 | 1 3/8 x 5 5/8 |
| 1,100 | DCMX112U450EC2B | 94.1 | 65.3 | 4.1 | 5.3 | 1 3/4 x 4 1/8 |
| 1,400 | DCMX142U450BC2B | 76.3 | 53.5 | 5.0 | 6.3 | 2 x 4 1/8 |
| 2,200 | DCMX222U450BF2B | 50.8 | 35.9 | 6.9 | 8.6 | 2 x 5 5/8 |
| 2,300 | DCMX232U450CC2B | 51.8 | 37.9 | 7.0 | 8.6 | 2 1/2 x 4 1/8 |
| 3,500 | DCMX352U450DC2B | 41.9 | 32.6 | 8.8 | 10.5 | 3 x 4 1/8 |
| 3,600 | DCMX362U450CF2B | 34.5 | 25.4 | 9.7 | 11.9 | 2 1/2 x 5 5/8 |
| 4,700 | DCMX472U450DE2B | 31.4 | 24.5 | 10.9 | 13.0 | 3 x 5 1/8 |
| 5,300 | DCMX532U450DF2B | 28.0 | 21.9 | 12.0 | 14.3 | 3 x 5 5/8 |
| 5,800 | DCMX582U450DP2B | 25.9 | 20.3 | 12.4 | 14.8 | 3 x 5 7/8 |
| 9,000 | DCMX902U450DG2B | 17.4 | 13.8 | 18.2 | 21.6 | 3 x 8 5/8 |

## 500Vdc - 550 Vdc Surge

| | | | | | | |
|---|---|---|---|---|---|---|
| 110 | DCMX111U500AK2B | 2106 | 1856 | 0.5 | 0.6 | 1 3/8 x 1 5/8 |
| 190 | DCMX191U500AA2B | 1287 | 1134 | 0.8 | 0.9 | 1 3/8 x 2 1/8 |
| 270 | DCMX271U500AH2B | 891 | 786 | 1.0 | 1.2 | 1 3/8 x 2 5/8 |
| 280 | DCMX281U500EA2B | 872 | 770 | 1.1 | 1.2 | 1 3/4 x 2 1/8 |
| 350 | DCMX351U500AB2B | 682 | 601 | 1.2 | 1.4 | 1 3/8 x 3 1/8 |
| 350 | DCMX351U500BA2B | 692 | 612 | 1.3 | 1.5 | 2 x 2 1/8 |
| 410 | DCMX411U500EH2B | 592 | 523 | 1.4 | 1.6 | 1 3/4 x 2 5/8 |
| 430 | DCMX431U500AJ2B | 552 | 487 | 1.4 | 1.7 | 1 3/8 x 3 5/8 |
| 520 | DCMX521U500AC2B | 464 | 409 | 1.6 | 1.9 | 1 3/8 x 4 1/8 |
| 520 | DCMX521U500BH2B | 470 | 416 | 1.7 | 1.9 | 2 x 2 5/8 |
| 560 | DCMX561U500EB2B | 434 | 383 | 1.7 | 2.0 | 1 3/4 x 3 1/8 |
| 600 | DCMX601U500AD2B | 401 | 353 | 1.9 | 2.2 | 1 3/8 x 4 5/8 |
| 680 | DCMX681U500AE2B | 352 | 311 | 2.1 | 2.4 | 1 3/8 x 5 1/8 |
| 710 | DCMX711U500EJ2B | 343 | 303 | 2.1 | 2.3 | 1 3/4 x 3 5/8 |
| 710 | DCMX711U500BB2B | 345 | 305 | 2.1 | 2.4 | 2 x 3 1/8 |
| 760 | DCMX761U500AF2B | 315 | 278 | 2.3 | 2.7 | 1 3/8 x 5 5/8 |
| 860 | DCMX861U500EC2B | 284 | 250 | 2.4 | 2.7 | 1 3/4 x 4 1/8 |
| 900 | DCMX901U500BJ2B | 272 | 241 | 2.5 | 2.8 | 2 x 3 5/8 |
| 1,000 | DCMX102U500ED2B | 242 | 213 | 2.7 | 3.1 | 1 3/4 x 4 5/8 |
| 1,100 | DCMX112U500BC2B | 225 | 199 | 3.1 | 3.3 | 2 x 4 1/8 |
| 1,200 | DCMX122U500EE2B | 211 | 186 | 3.1 | 3.4 | 1 3/4 x 5 1/8 |

# Computer Grade, -55°C +85°C, High Capacitance, Type DCMX

## 500Vdc - 550 Vdc Surge (continued)

| Cap. µF | Catalog Number | ESR Max mΩ @25°C 120 Hz | ESR Max mΩ @25°C 20kHz | Ripple A @85°C 120Hz | Ripple A @85°C 20kHz | Nominal Size (in.) D x L |
|---|---|---|---|---|---|---|
| 1,200 | DCMX122U500CB2B | 218 | 195 | 3.1 | 3.4 | 2 1/2 x 3 1/8 |
| 1,300 | DCMX132U500EF2B | 187 | 165 | 3.4 | 3.8 | 1 3/4 x 5 5/8 |
| 1,300 | DCMX132U500BD2B | 192 | 170 | 3.3 | 3.7 | 2 x 4 5/8 |
| 1,500 | DCMX152U500BE2B | 168 | 148 | 3.7 | 4.1 | 2 x 5 1/8 |
| 1,500 | DCMX152U500CJ2B | 172 | 153 | 3.6 | 4.1 | 2 1/2 x 3 5/8 |
| 1,700 | DCMX172U500BF2B | 149 | 132 | 4.0 | 4.5 | 2 x 5 5/8 |
| 1,800 | DCMX182U500CC2B | 142 | 126 | 4.2 | 4.7 | 2 1/2 x 4 1/8 |
| 2,100 | DCMX212U500CD2B | 121 | 108 | 4.8 | 5.3 | 2 1/2 x 4 5/8 |
| 2,200 | DCMX222U500DA2B | 124 | 111 | 4.8 | 5.4 | 3 x 3 5/8 |
| 2,400 | DCMX242U500CE2B | 106 | 94.1 | 5.3 | 6.0 | 2 1/2 x 5 1/8 |
| 2,700 | DCMX272U500CF2B | 93.9 | 83.5 | 5.9 | 6.6 | 2 1/2 x 5 5/8 |
| 2,700 | DCMX272U500DC2B | 103 | 91.8 | 5.6 | 6.3 | 3 x 4 1/8 |
| 3,100 | DCMX312U500DD2B | 87.4 | 78.4 | 6.3 | 7.0 | 3 x 4 5/8 |
| 3,600 | DCMX362U500DE2B | 76.3 | 68.4 | 7.0 | 7.8 | 3 x 5 1/8 |
| 4,100 | DCMX412U500DF2B | 67.8 | 60.8 | 7.7 | 8.6 | 3 x 5 5/8 |
| 6,900 | DCMX692U500DG2B | 41.0 | 36.9 | 11.9 | 13.2 | 3 x 8 5/8 |

### Ordering Information for Type DCMX

DCMX 492 U 063 AA 2 B S

**Type:** DCMX
**Capacitance:** 100 = 10µF; 101 = 100µF; 492 = 4900µF; 433 = 43,000µF
**Tolerance:** M = ±20; U = -10% +75%; T = -10% + 50%
**Voltage:** 6R3 = 6.3Vdc; 063 = 63Vdc; 100 = 100Vdc
**Case Code:** See table
**Insulation:** 0 = None; 1 = Polyester; 2 = PVC
**Terminal:** A = Low Post; B = High Post; D = High Current, Low Post; E = High Current, High Post
**Can Style:** Blank = Standard Can; S = Stud Bottom (See drawing)

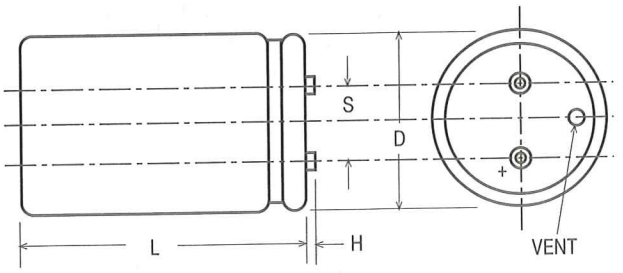
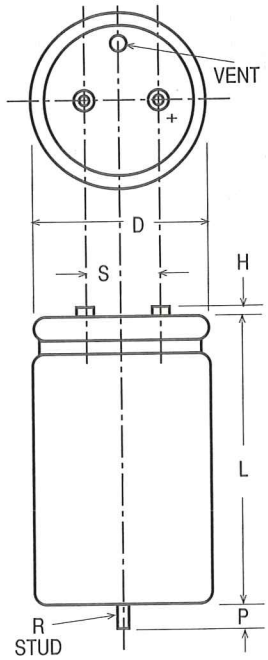





Table 2 - Terminals

| Style | Code | H" (mm) | Thread | Max Amps |
|---|---|---|---|---|
| Low Post | A | 0.094" (2.39) | 10-32 | 30 |
| High Post | B | 0.281" (7.14) | 10-32 | 30 |
| High Current, Low Post | D | 0.125" (3.18) | 1/4-28 | 50 |
| High Current, High Post | E | 0.281" (7.14 | 1/4-28 | 50 |

With Stud-Mount Feature

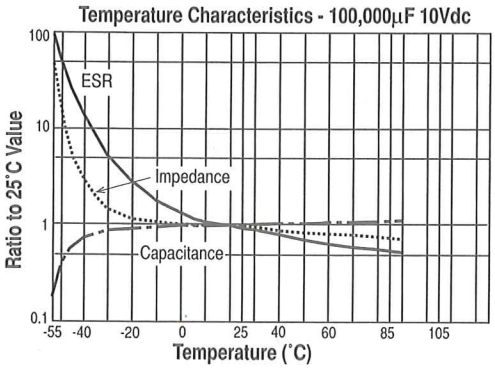


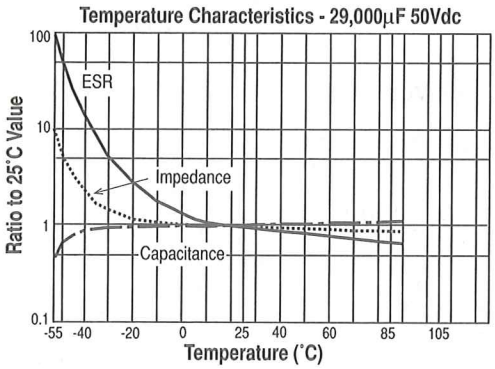

| Case Diam | R Thread | P ± 0.039" (± 1.0 mm) |
|---|---|---|
| A* | M8 | 0.047" (12.0) |
| B* | M12 | 0.630" (16.0) |
| C* | M12 | 0.630" (16.0) |
| D* | M12 | 0.630" (16.0) |
| E* | NA | NA |

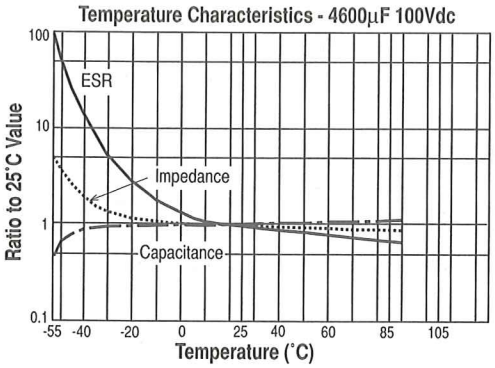
*Add Case Height Code from table
Note: With the stud-mount feature an insulating disk is inserted in the bottom under the outer insulating sleeve (if any).

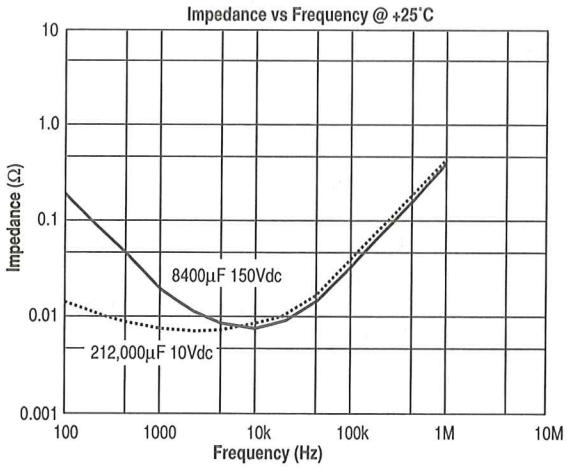
Uninsulated Case Dimensions for Types DCMX, 500X, 550, 101X, 139R & 125
For insulated case, add 0.24" (0.610 mm) to Diameter and 0.610" (0.762 mm) to height.

| Case Code | Dimensions in Inches D±.031 | L±.062 | S ±.015 | H max | Typ. Wt Oz | Dimensions in millimeters D ±.78 | L±1.57 | S ±.78 | H max | Typ. Wt gr |
|---|---|---|---|---|---|---|---|---|---|---|
| AK | 1.375 | 1.625 | 0.500 | | 1.9 | 34.93 | 41.28 | 12.7 | | 53.86 |
| AA | 1.375 | 2.125 | 0.500 | | 2.0 | 34.93 | 53.98 | 12.7 | | 56.70 |
| AH | 1.375 | 2.625 | 0.500 | | 2.7 | 34.93 | 66.68 | 12.7 | | 76.54 |
| AB | 1.375 | 3.125 | 0.500 | | 3.3 | 34.93 | 79.38 | 12.7 | | 93.55 |
| AJ | 1.375 | 3.625 | 0.500 | | 3.8 | 34.93 | 92.08 | 12.7 | | 107.73 |
| AC | 1.375 | 4.125 | 0.500 | See | 4.4 | 34.93 | 104.78 | 12.7 | See | 124.74 |
| AD | 1.375 | 4.625 | 0.500 | Table | 5.1 | 34.93 | 117.48 | 12.7 | Table | 144.58 |
| AE | 1.375 | 5.125 | 0.500 | 2 | 5.7 | 34.93 | 130.18 | 12.7 | 2 | 192.77 |
| AF | 1.375 | 5.625 | 0.500 | | 6.4 | 34.93 | 142.88 | 12.7 | | 229.63 |
| EA | 1.750 | 2.125 | 0.750 | | 2.7 | 44.45 | 53.98 | 19.05 | | 76.34 |
| EH | 1.750 | 2.625 | 0.750 | | 3.8 | 44.45 | 68.68 | 19.05 | | 107.73 |
| EB | 1.750 | 3.125 | 0.750 | | 5.1 | 44.45 | 79.38 | 19.05 | | 144.58 |
| EJ | 1.750 | 3.625 | 0.750 | | 6.8 | 44.45 | 92.08 | 19.05 | | 192.77 |
| EC | 1.750 | 4.125 | 0.750 | | 8.1 | 44.45 | 104.78 | 19.05 | | 229.63 |
| ED | 1.750 | 4.625 | 0.750 | | 9.9 | 44.45 | 117.48 | 19.05 | | 255.14 |
| EE | 1.750 | 5.125 | 0.750 | | 9.5 | 44.45 | 130.18 | 19.05 | | 269.32 |
| EF | 1.750 | 5.625 | 0.750 | | 10.5 | 44.45 | 142.82 | 19.05 | | 297.66 |
| BA | 2.000 | 2.125 | 0.875 | | 2.7 | 50.80 | 53.98 | 22.23 | | 153.08 |
| BH | 2.000 | 2.625 | 0.875 | | 5.4 | 50.80 | 66.68 | 22.23 | | 172.93 |
| BB | 2.000 | 3.125 | 0.875 | | 6.1 | 50.80 | 79.38 | 22.23 | | 192.77 |
| BJ | 2.000 | 3.625 | 0.875 | | 6.8 | 50.80 | 92.08 | 22.23 | | 232.46 |
| BC | 2.000 | 4.125 | 0.875 | | 8.2 | 50.80 | 104.78 | 22.23 | | 269.32 |
| BD | 2.000 | 4.625 | 0.875 | | 9.6 | 50.80 | 117.48 | 22.23 | | 292.00 |
| BE | 2.000 | 5.125 | 0.875 | | 10.3 | 50.80 | 130.18 | 22.23 | | 303.33 |
| BF | 2.000 | 5.625 | 0.875 | | 13.0 | 50.80 | 142.88 | 22.23 | | 368.54 |
| CB | 2.500 | 3.125 | 1.125 | | 10.4 | 63.50 | 79.38 | 28.58 | | 294.83 |
| CJ | 2.500 | 3.625 | 1.125 | | 12.7 | 63.50 | 92.08 | 28.58 | | 360.83 |
| CC | 2.500 | 4.125 | 1.125 | | 15.0 | 63.50 | 104.78 | 28.58 | | 425.24 |
| CD | 2.500 | 4.625 | 1.125 | | 17.2 | 63.50 | 117.48 | 28.58 | | 487.60 |
| CE | 2.500 | 5.125 | 1.125 | | 19.3 | 63.50 | 130.18 | 28.58 | | 547.14 |
| CF | 2.500 | 5.625 | 1.125 | | 21.4 | 63.50 | 142.88 | 28.58 | | 606.67 |
| DJ | 3.000 | 3.625 | 1.250 | | 20.0 | 76.20 | 92.08 | 31.75 | | 566.98 |
| DC | 3.000 | 4.125 | 1.250 | | 22.2 | 76.20 | 104.78 | 31.75 | | 629.35 |
| DD | 3.000 | 4.625 | 1.250 | | 25.5 | 76.20 | 117.48 | 31.75 | | 722.98 |
| DE | 3.000 | 5.125 | 1.250 | | 30.0 | 76.20 | 130.18 | 31.75 | | 850.47 |
| DF | 3.000 | 5.625 | 1.250 | | 31.9 | 76.20 | 142.88 | 31.75 | | 904.33 |
| DP | 3.000 | 5.875 | 1.250 | | 32.9 | 76.20 | 149.23 | 31.75 | | 931.26 |
| DG | 3.000 | 8.625 | 1.250 | | 43.3 | 76.20 | 219.03 | 31.75 | | 1227.49 |



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