

# Type 400C 95 °C, Long-Life, Computer Grade, Radial Leaded

## Twice the Life!



The Type 400C is the PC-mount equivalent for Type 500C screw-terminal computergrade capacitor. It's for bus filtering applications where long life is critical like telecom systems and industrial power supplies. Type 400C delivers 2 to 3 times the life of Type 4CMC, and above 250 V it has nearly the same capacitance. Its extended cathode foil assures cool operation with heatflow from the capacitor element to the can in all mounting orientations.

### Highlights

- More than 10 years life in most applications
- Ripple Currents to > 50 amps at 55 °C
- 3-leads
- Printed-circuit mounting
- Thermal-Pak™ extended cathode construction

### Specifications

|                               |                                                                    |
|-------------------------------|--------------------------------------------------------------------|
| <b>Operating Temperature:</b> | –40 °C to +95 °C                                                   |
| <b>Rated Voltage:</b>         | 100 to 500 Vdc                                                     |
| <b>Capacitance:</b>           | 170 µF to 29,000 µF ± 20%                                          |
| <b>DC Leakage Current:</b>    | ≤ 3 √CV µA, 4 mA max, 5 min.                                       |
| <b>Cold Impedance:</b>        | –20 °C multiple of 25 °C $Z \leq 4$ for 100 V<br>3 for 150 V & up. |

#### Ripple Current Multipliers:

##### Ambient Temperature

| 45 °C | 55 °C | 65 °C | 75 °C | 85 °C | 95 °C |
|-------|-------|-------|-------|-------|-------|
| 2.00  | 1.82  | 1.59  | 1.33  | 1.00  | 0.48  |

##### Frequency

|              | 50 Hz | 60 Hz | 120 Hz | 360 Hz | 1 kHz | 5 kHz & up |
|--------------|-------|-------|--------|--------|-------|------------|
| 100 to 160 V | 0.80  | 0.85  | 1.00   | 1.05   | 1.08  | 1.08       |
| 200 to 350 V | 0.80  | 0.83  | 1.00   | 1.15   | 1.20  | 1.20       |
| 400 to 500 V | 0.78  | 0.80  | 1.00   | 1.30   | 1.40  | 1.40       |

**EIA Ripple Life:** 3000 h at full load at 85 °C per EIA IS-749

ΔCapacitance ±20%

ESR 200% of limit

DCL 100% of limit

**Life Test:** 3000 h at 95 °C with rated voltage

ΔCapacitance ±20%

ESR 200% of limit

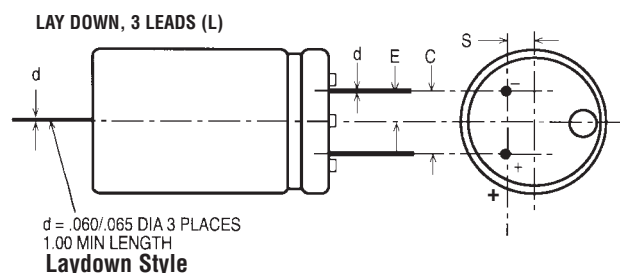
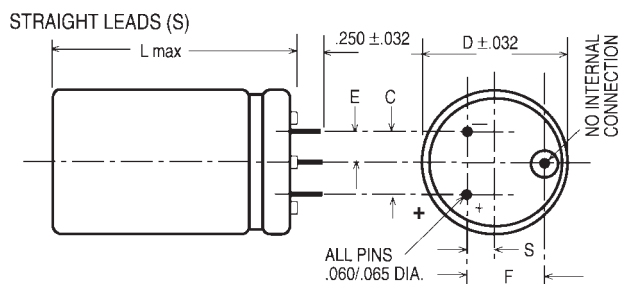
DCL 100% of limit

**Shelf Life Test:** 500 h at 95 °C. Capacitance, ESR and DCL meet initial requirements.

**Vibration:** 10 to 55 Hz, 0.06" and 10 g max, 2 h each plane.

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## Outline Drawings



## Case Dimensions

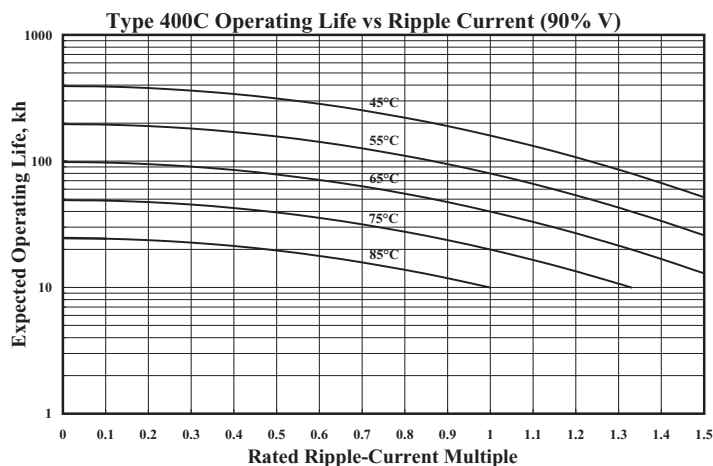
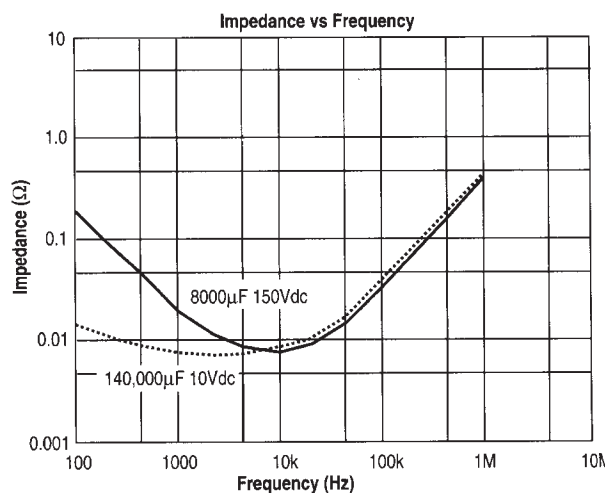
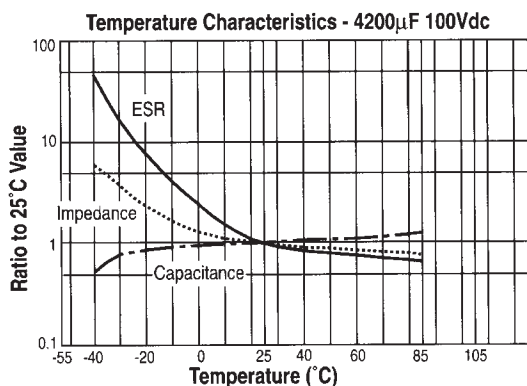
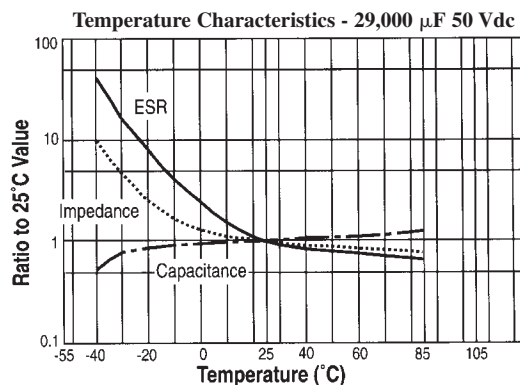
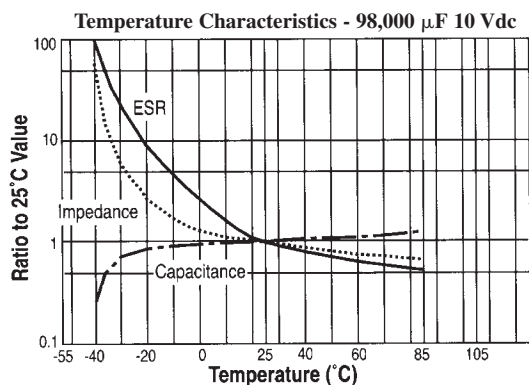
| Case | Inches   |       |          |          |          |          | Millimeters |        |         |         |         |         |
|------|----------|-------|----------|----------|----------|----------|-------------|--------|---------|---------|---------|---------|
| Code | D ± .031 | L MAX | C ± .015 | S ± .031 | E ± .031 | F ± .015 | D ± .78     | L MAX  | C ± .78 | S ± .78 | E ± .78 | F ± .38 |
| AK   | 1.375    | 1.75  | 0.50     | 0.175    | 0.25     | 0.55     | 34.93       | 44.45  | 12.70   | 4.45    | 6.35    | 13.97   |
| AA   | 1.375    | 2.25  | 0.50     | 0.175    | 0.25     | 0.55     | 34.93       | 57.15  | 12.70   | 4.45    | 6.35    | 13.97   |
| AH   | 1.375    | 2.75  | 0.50     | 0.175    | 0.25     | 0.55     | 34.98       | 69.85  | 12.70   | 4.45    | 6.35    | 13.97   |
| AB   | 1.375    | 3.25  | 0.50     | 0.175    | 0.25     | 0.55     | 34.93       | 82.55  | 12.70   | 4.45    | 6.35    | 13.97   |
| AJ   | 1.375    | 3.75  | 0.50     | 0.175    | 0.25     | 0.55     | 34.93       | 95.25  | 12.70   | 4.45    | 6.35    | 13.97   |
| AC   | 1.375    | 4.25  | 0.50     | 0.175    | 0.25     | 0.55     | 34.93       | 107.95 | 12.70   | 4.45    | 6.35    | 13.97   |
| AD   | 1.375    | 4.75  | 0.50     | 0.175    | 0.25     | 0.55     | 34.93       | 120.65 | 12.70   | 4.45    | 6.35    | 13.97   |
| AE   | 1.375    | 5.25  | 0.50     | 0.175    | 0.25     | 0.55     | 34.93       | 133.35 | 12.70   | 4.45    | 6.35    | 13.97   |
| AF   | 1.375    | 5.75  | 0.50     | 0.175    | 0.25     | 0.55     | 34.93       | 146.05 | 12.70   | 4.45    | 6.35    | 13.97   |
| EA   | 1.75     | 2.25  | 0.70     | 0.375    | 0.35     | 0.90     | 44.45       | 57.15  | 17.78   | 9.53    | 8.89    | 22.86   |
| EH   | 1.75     | 2.75  | 0.70     | 0.375    | 0.35     | 0.90     | 44.45       | 69.85  | 17.78   | 9.53    | 8.89    | 22.86   |
| EB   | 1.75     | 3.25  | 0.70     | 0.375    | 0.35     | 0.90     | 44.45       | 82.55  | 17.78   | 9.53    | 8.89    | 22.86   |
| EJ   | 1.75     | 3.75  | 0.70     | 0.375    | 0.35     | 0.90     | 44.45       | 95.25  | 17.78   | 9.53    | 8.89    | 22.86   |
| EC   | 1.75     | 4.25  | 0.70     | 0.375    | 0.35     | 0.90     | 44.45       | 107.95 | 17.78   | 9.53    | 8.89    | 22.86   |
| ED   | 1.75     | 4.75  | 0.70     | 0.375    | 0.35     | 0.90     | 44.45       | 120.65 | 17.78   | 9.53    | 8.89    | 22.86   |
| EE   | 1.75     | 5.25  | 0.70     | 0.375    | 0.35     | 0.90     | 44.45       | 133.35 | 17.78   | 9.53    | 8.89    | 22.86   |
| EF   | 1.75     | 5.75  | 0.70     | 0.375    | 0.35     | 0.90     | 44.45       | 146.05 | 17.78   | 9.53    | 8.89    | 22.86   |
| BA   | 2.00     | 2.25  | 0.80     | 0.425    | 0.40     | 1.00     | 50.80       | 57.15  | 20.32   | 10.80   | 10.16   | 25.40   |
| BH   | 2.00     | 2.75  | 0.80     | 0.425    | 0.40     | 1.00     | 50.80       | 69.85  | 20.32   | 10.80   | 10.16   | 25.40   |
| BB   | 2.00     | 3.25  | 0.80     | 0.425    | 0.40     | 1.00     | 50.80       | 82.55  | 20.32   | 10.80   | 10.16   | 25.40   |
| BJ   | 2.00     | 3.75  | 0.80     | 0.425    | 0.40     | 1.00     | 50.80       | 95.25  | 20.32   | 10.80   | 10.16   | 25.40   |
| BC   | 2.00     | 4.25  | 0.80     | 0.425    | 0.40     | 1.00     | 50.80       | 107.95 | 20.32   | 10.80   | 10.16   | 25.40   |
| BD   | 2.00     | 4.75  | 0.80     | 0.425    | 0.40     | 1.00     | 50.80       | 120.65 | 20.32   | 10.80   | 10.16   | 25.40   |
| BE   | 2.00     | 5.25  | 0.80     | 0.425    | 0.40     | 1.00     | 50.80       | 133.25 | 20.32   | 10.80   | 10.16   | 25.40   |
| BF   | 2.00     | 5.75  | 0.80     | 0.425    | 0.40     | 1.00     | 50.80       | 146.05 | 20.32   | 10.80   | 10.16   | 25.40   |

## Part Numbering System

|      |                               |                                            |                            |           |                                                                      |                                                    |
|------|-------------------------------|--------------------------------------------|----------------------------|-----------|----------------------------------------------------------------------|----------------------------------------------------|
| 400C | 262                           | M                                          | 100                        | AK        | 8                                                                    |                                                    |
| Type | Capacitance                   | Tolerance                                  | Voltage                    | Case Code | Insulation                                                           | Terminal                                           |
|      | 262 = 2600 µF<br>171 = 170 µF | M = ±20%<br>T = -10% +50%<br>U = -10% +75% | 100 = 100 V<br>450 = 450 V |           | 0 = bare can<br>8 = PVC and Standoffs<br>9 = Polyester and Standoffs | (blank) = Straight Leads<br>L = Lay Down (3 Leads) |

# Type 400C 95 °C, Long-Life, Computer Grade, Radial Leaded

## Typical Performance Curves



# Type 400C 95 °C, Long-Life, Computer Grade, Radial Leaded Ratings

| Cap.<br>(µF)            | Catalog Part<br>Number | ESR Max.<br>25 °C |        | Ripple Amps.<br>85 °C |        | Nominal<br>Size<br>D X L<br>(in) |
|-------------------------|------------------------|-------------------|--------|-----------------------|--------|----------------------------------|
|                         |                        | 120 Hz            | 20 kHz | 120 Hz                | 20 kHz |                                  |
|                         |                        | (mΩ)              | (mΩ)   | (A)                   | (A)    |                                  |
| 100 Vdc (125 Vdc Surge) |                        |                   |        |                       |        |                                  |
| 2600                    | 400C262M100AK8         | 74.00             | 50.20  | 3.60                  | 4.50   | 1 3/8 X 1 3/4                    |
| 3800                    | 400C382M100AA8         | 49.70             | 33.70  | 5.00                  | 6.20   | 1 3/8 X 2 1/4                    |
| 5000                    | 400C503M100AH8         | 36.30             | 24.60  | 6.00                  | 7.50   | 1 3/8 X 2 3/4                    |
| 5700                    | 400C572M100EA8         | 39.70             | 26.90  | 6.40                  | 8.00   | 1 3/4 X 2 1/4                    |
| 6800                    | 400C682M100AB8         | 28.10             | 19.10  | 7.40                  | 9.20   | 1 3/8 X 3 1/4                    |
| 7200                    | 400C722M100BA8         | 36.70             | 24.90  | 7.20                  | 9.00   | 2 X 2 1/4                        |
| 7800                    | 400C782M100EH8         | 28.40             | 19.30  | 8.10                  | 10.20  | 1 3/4 X 2 3/4                    |
| 8300                    | 400C832M100AJ8         | 23.20             | 15.70  | 8.50                  | 10.60  | 1 3/8 X 3 3/4                    |
| 9700                    | 400C972M100BH8         | 26.00             | 17.70  | 9.20                  | 11.50  | 2 X 2 3/4                        |
| 9900                    | 400C992M100AC8         | 19.80             | 13.50  | 9.70                  | 12.10  | 1 3/8 X 4 1/4                    |
| 10000                   | 400C103M100EB8         | 22.00             | 14.90  | 10.00                 | 12.50  | 1 3/4 X 3 1/4                    |
| 12000                   | 400C123M100AD8         | 17.50             | 11.80  | 10.80                 | 13.50  | 1 3/8 X 4 3/4                    |
| 13000                   | 400C133M100AE8         | 15.70             | 10.70  | 11.90                 | 14.90  | 1 3/8 X 5 1/4                    |
| 13000                   | 400C133M100EJ8         | 18.10             | 12.30  | 11.40                 | 14.20  | 1 3/4 X 3 3/4                    |
| 13000                   | 400C133M100BB8         | 20.20             | 13.70  | 11.00                 | 13.70  | 2 X 3 1/4                        |
| 15000                   | 400C153M100EC8         | 15.50             | 10.50  | 12.70                 | 15.90  | 1 3/4 X 4 1/4                    |
| 15000                   | 400C153M100AF8         | 17.90             | 12.20  | 11.70                 | 14.70  | 1 3/8 X 5 3/4                    |
| 16000                   | 400C163M100BJ8         | 16.60             | 11.30  | 13.60                 | 17.00  | 2 X 3 3/4                        |
| 17000                   | 400C173M100ED8         | 13.60             | 9.20   | 14.30                 | 17.90  | 1 3/4 X 4 3/4                    |
| 19000                   | 400C193M100BC8         | 14.20             | 9.70   | 14.70                 | 18.40  | 2 X 4 1/4                        |
| 20000                   | 400C203M100EE8         | 12.20             | 8.30   | 16.00                 | 20.00  | 1 3/4 X 5 1/4                    |
| 22000                   | 400C223M100EF8         | 11.10             | 7.60   | 17.90                 | 22.40  | 1 3/4 X 5 3/4                    |
| 22000                   | 400C223M100BD8         | 12.60             | 8.50   | 16.20                 | 20.20  | 2 X 4 3/4                        |
| 26000                   | 400C263M100BE8         | 11.00             | 7.50   | 17.90                 | 22.40  | 2 X 5 1/4                        |
| 29000                   | 400C293M100BF8         | 10.10             | 6.90   | 19.40                 | 24.20  | 2 X 5 3/4                        |
| 160 Vdc (200 Vdc Surge) |                        |                   |        |                       |        |                                  |
| 1400                    | 400C142M160AK8         | 88.20             | 53.90  | 4.10                  | 5.20   | 1 3/8 X 1 3/4                    |
| 2000                    | 400C202M160AA8         | 59.50             | 36.60  | 5.70                  | 7.20   | 1 3/8 X 2 1/4                    |
| 3000                    | 400C302M160EA8         | 46.30             | 32.20  | 7.10                  | 8.50   | 1 3/4 X 2 1/4                    |
| 3000                    | 400C302M160AH8         | 42.00             | 26.10  | 7.00                  | 8.80   | 1 3/8 X 2 3/4                    |
| 3800                    | 400C382M160AB8         | 32.80             | 20.70  | 8.50                  | 10.60  | 1 3/8 X 3 1/4                    |
| 3800                    | 400C382M160BA8         | 40.80             | 30.80  | 7.70                  | 8.80   | 2 X 2 1/4                        |
| 4100                    | 400C412M160EH8         | 32.90             | 22.70  | 8.90                  | 10.80  | 1 3/4 X 2 3/4                    |
| 4700                    | 400C472M160AJ8         | 27.20             | 17.40  | 9.70                  | 12.20  | 1 3/8 X 3 3/4                    |
| 5100                    | 400C512M160BH8         | 28.70             | 21.40  | 9.80                  | 11.40  | 2 X 2 3/4                        |
| 5400                    | 400C542M160EB8         | 25.60             | 17.80  | 10.90                 | 13.10  | 1 3/4 X 3 1/4                    |
| 5500                    | 400C552M160AC8         | 23.50             | 15.30  | 11.00                 | 13.70  | 1 3/8 X 4 1/4                    |
| 6100                    | 400C612M160AD8         | 21.50             | 14.00  | 12.00                 | 14.90  | 1 3/8 X 4 3/4                    |
| 6700                    | 400C672M160EJ8         | 21.20             | 14.90  | 12.40                 | 14.80  | 1 3/4 X 3 3/4                    |
| 6800                    | 400C682M160BB8         | 22.40             | 16.80  | 11.70                 | 13.60  | 2 X 3 1/4                        |
| 7000                    | 400C702M160AE8         | 19.50             | 12.90  | 13.30                 | 16.30  | 1 3/8 X 5 1/4                    |
| 7700                    | 400C772M160AF8         | 18.00             | 12.10  | 14.50                 | 17.70  | 1 3/8 X 5 3/4                    |
| 8000                    | 400C802M160EC8         | 18.20             | 12.90  | 13.90                 | 16.50  | 1 3/4 X 4 1/4                    |
| 8500                    | 400C852M160BJ8         | 18.50             | 14.00  | 14.50                 | 16.60  | 2 X 3 3/4                        |
| 9200                    | 400C922M160ED8         | 16.20             | 11.60  | 15.50                 | 18.40  | 1 3/4 X 4 3/4                    |
| 10000                   | 400C103M160EE8         | 14.60             | 10.60  | 17.30                 | 20.40  | 1 3/4 X 5 1/4                    |
| 10000                   | 400C103M160BC8         | 16.00             | 12.20  | 15.70                 | 18.00  | 2 X 4 1/4                        |
| 12000                   | 400C123M160EF8         | 13.40             | 9.90   | 19.30                 | 22.50  | 1 3/4 X 5 3/4                    |
| 12000                   | 400C123M160BD8         | 14.20             | 10.80  | 17.20                 | 19.60  | 2 X 4 3/4                        |
| 14000                   | 400C143M160BE8         | 12.50             | 9.70   | 18.90                 | 21.40  | 2 X 5 1/4                        |
| 15000                   | 400C153M160BF8         | 11.60             | 9.10   | 20.40                 | 23.00  | 2 X 5 3/4                        |
| 200 Vdc (250 Vdc Surge) |                        |                   |        |                       |        |                                  |
| 920                     | 400C921M200AK8         | 126.00            | 71.30  | 3.40                  | 4.50   | 1 3/8 X 1 3/4                    |
| 1400                    | 400C142M200AA8         | 84.50             | 48.20  | 4.70                  | 6.30   | 1 3/8 X 2 1/4                    |
| 2000                    | 400C202M200EA8         | 61.70             | 39.30  | 6.10                  | 7.60   | 1 3/4 X 2 1/4                    |
| 2000                    | 400C202M200AH8         | 59.30             | 34.20  | 5.80                  | 7.70   | 1 3/8 X 2 3/4                    |
| 2600                    | 400C262M200AB8         | 46.10             | 26.80  | 7.10                  | 9.30   | 1 3/8 X 3 1/4                    |
| 2600                    | 400C262M200BA8         | 51.80             | 35.90  | 6.80                  | 8.20   | 2 X 2 1/4                        |
| 2800                    | 400C282M200EH8         | 44.10             | 27.90  | 7.70                  | 9.70   | 1 3/4 X 2 3/4                    |
| 3200                    | 400C322M200AJ8         | 38.00             | 22.40  | 8.20                  | 10.70  | 1 3/8 X 3 3/4                    |
| 3500                    | 400C352M200BH8         | 36.70             | 25.10  | 8.70                  | 10.50  | 2 X 2 3/4                        |

| Cap.<br>(µF)                   | Catalog Part<br>Number | ESR Max.<br>25 °C |        | Ripple Amps.<br>85 °C |        | Nominal<br>Size<br>D X L<br>(in) |
|--------------------------------|------------------------|-------------------|--------|-----------------------|--------|----------------------------------|
|                                |                        | 120 Hz            | 20 kHz | 120 Hz                | 20 kHz |                                  |
| 3700                           | 400C372M200EB8         | 34.20             | 21.80  | 9.50                  | 11.90  | 1 3/4 X 3 1/4                    |
| 3800                           | 400C382M200AC8         | 32.50             | 19.50  | 9.40                  | 12.10  | 1 3/8 X 4 1/4                    |
| 4200                           | 400C422M200AD8         | 29.80             | 17.80  | 10.20                 | 13.20  | 1 3/8 X 4 3/4                    |
| 4500                           | 400C452M200EJ8         | 28.10             | 18.10  | 10.80                 | 13.50  | 1 3/4 X 3 3/4                    |
| 4700                           | 400C472M200BB8         | 28.50             | 19.60  | 10.40                 | 12.50  | 2 X 3 1/4                        |
| 4800                           | 400C482M200AE8         | 26.80             | 16.30  | 11.30                 | 14.50  | 1 3/8 X 5 1/4                    |
| 5300                           | 400C532M200AF8         | 24.50             | 15.10  | 12.40                 | 15.80  | 1 3/8 X 5 3/4                    |
| 5400                           | 400C542M200EC8         | 24.10             | 15.60  | 12.10                 | 15.00  | 1 3/4 X 4 1/4                    |
| 5700                           | 400C572M200BJ8         | 23.50             | 16.30  | 12.80                 | 15.40  | 2 X 3 3/4                        |
| 6300                           | 400C632M200ED8         | 21.20             | 13.90  | 13.60                 | 16.80  | 1 3/4 X 4 3/4                    |
| 6800                           | 400C682M200BC8         | 20.10             | 14.10  | 14.00                 | 16.70  | 2 X 4 1/4                        |
| 7100                           | 400C712M200EE8         | 19.00             | 12.60  | 15.20                 | 18.60  | 1 3/4 X 5 1/4                    |
| 7800                           | 400C782M200BD8         | 17.80             | 12.50  | 15.30                 | 18.30  | 2 X 4 3/4                        |
| 8000                           | 400C802M200EF8         | 17.40             | 11.70  | 17.00                 | 20.70  | 1 3/4 X 5 3/4                    |
| 9300                           | 400C932M200BE8         | 15.60             | 11.20  | 16.90                 | 20.00  | 2 X 5 1/4                        |
| 10000                          | 400C103M200BF8         | 14.30             | 10.40  | 18.30                 | 21.50  | 2 X 5 3/4                        |
| <b>250 Vdc (300 Vdc Surge)</b> |                        |                   |        |                       |        |                                  |
| 670                            | 400C671M250AK8         | 160.00            | 87.20  | 3.00                  | 4.10   | 1 3/8 X 1 3/4                    |
| 1000                           | 400C102M250AH8         | 75.10             | 41.50  | 5.20                  | 7.00   | 1 3/8 X 2 3/4                    |
| 1000                           | 400C102M250AA8         | 107.00            | 58.80  | 4.20                  | 5.70   | 1 3/8 X 2 1/4                    |
| 1500                           | 400C152M250EA8         | 75.70             | 45.90  | 5.50                  | 7.10   | 1 3/4 X 2 1/4                    |
| 1900                           | 400C192M250AB8         | 58.20             | 32.50  | 6.30                  | 8.50   | 1 3/8 X 3 1/4                    |
| 1900                           | 400C192M250BA8         | 61.90             | 40.50  | 6.20                  | 7.70   | 2 X 2 1/4                        |
| 2000                           | 400C202M250EH8         | 54.30             | 32.60  | 7.00                  | 9.00   | 1 3/4 X 2 3/4                    |
| 2300                           | 400C232M250AJ8         | 47.80             | 26.90  | 7.30                  | 9.80   | 1 3/8 X 3 3/4                    |
| 2500                           | 400C252M250BH8         | 44.10             | 28.50  | 7.90                  | 9.90   | 2 X 2 3/4                        |
| 2700                           | 400C272M250EB8         | 42.00             | 25.40  | 8.50                  | 11.00  | 1 3/4 X 3 1/4                    |
| 2700                           | 400C272M250AC8         | 40.80             | 23.30  | 8.40                  | 11.10  | 1 3/8 X 4 1/4                    |
| 3000                           | 400C302M250AD8         | 37.30             | 21.30  | 9.20                  | 12.10  | 1 3/8 X 4 3/4                    |
| 3300                           | 400C332M250EJ8         | 34.50             | 21.00  | 9.70                  | 12.50  | 1 3/4 X 3 3/4                    |
| 3400                           | 400C342M250BB8         | 34.10             | 22.20  | 9.50                  | 11.80  | 2 X 3 1/4                        |
| 3500                           | 400C352M250AE8         | 33.40             | 19.30  | 10.10                 | 13.30  | 1 3/8 X 5 1/4                    |
| 3800                           | 400C382M250AF8         | 30.40             | 17.90  | 11.20                 | 14.60  | 1 3/8 X 5 3/4                    |
| 3900                           | 400C392M250EC8         | 29.40             | 18.10  | 10.90                 | 13.90  | 1 3/4 X 4 1/4                    |
| 4200                           | 400C422M250BJ8         | 28.00             | 18.40  | 11.80                 | 14.50  | 2 X 3 3/4                        |
| 4600                           | 400C462M250ED8         | 25.70             | 16.00  | 12.30                 | 15.60  | 1 3/4 X 4 3/4                    |
| 4900                           | 400C492M250BC8         | 23.90             | 15.90  | 12.80                 | 15.70  | 2 X 4 1/4                        |
| 5100                           | 400C512M250EE8         | 23.00             | 14.50  | 13.80                 | 17.40  | 1 3/4 X 5 1/4                    |
| 5700                           | 400C572M250BD8         | 21.10             | 14.10  | 14.10                 | 17.20  | 2 X 4 3/4                        |
| 5800                           | 400C582M250EF8         | 21.00             | 13.30  | 15.40                 | 19.40  | 1 3/4 X 5 3/4                    |
| 6800                           | 400C682M250BE8         | 18.40             | 12.50  | 15.60                 | 19.00  | 2 X 5 1/4                        |
| 7500                           | 400C752M250BF8         | 16.80             | 11.50  | 16.90                 | 20.40  | 2 X 5 3/4                        |
| <b>300 Vdc (350 Vdc Surge)</b> |                        |                   |        |                       |        |                                  |
| 490                            | 400C491M300AK8         | 240.00            | 118.00 | 2.20                  | 3.10   | 1 3/8 X 1 3/4                    |
| 740                            | 400C741M300AA8         | 161.00            | 79.40  | 3.10                  | 4.40   | 1 3/8 X 2 1/4                    |
| 1000                           | 400C102M300AH8         | 112.00            | 55.80  | 3.80                  | 5.40   | 1 3/8 X 2 3/4                    |
| 1200                           | 400C122M300EA8         | 102.00            | 51.50  | 4.40                  | 6.20   | 1 3/4 X 2 1/4                    |
| 1400                           | 400C142M300AB8         | 86.20             | 43.40  | 4.70                  | 6.60   | 1 3/8 X 3 1/4                    |
| 1500                           | 400C152M300BA8         | 92.10             | 47.20  | 5.00                  | 7.00   | 2 X 2 1/4                        |
| 1700                           | 400C172M300EH8         | 75.00             | 36.90  | 5.50                  | 7.80   | 1 3/4 X 2 3/4                    |
| 1700                           | 400C172M300AJ8         | 70.30             | 35.90  | 5.40                  | 7.60   | 1 3/8 X 3 3/4                    |
| 2000                           | 400C202M300AC8         | 59.60             | 30.80  | 6.20                  | 8.60   | 1 3/8 X 4 1/4                    |
| 2100                           | 400C212M300BH8         | 66.10             | 33.30  | 6.40                  | 9.00   | 2 X 2 3/4                        |
| 2200                           | 400C222M300EB8         | 57.70             | 28.70  | 6.70                  | 9.50   | 1 3/4 X 3 1/4                    |
| 2400                           | 400C242M300AD8         | 51.90             | 27.30  | 6.90                  | 9.50   | 1 3/8 X 4 3/4                    |
| 2700                           | 400C272M300AE8         | 46.10             | 24.60  | 7.70                  | 10.50  | 1 3/8 X 5 1/4                    |
| 2700                           | 400C272M300EJ8         | 47.10             | 23.70  | 7.70                  | 10.80  | 1 3/4 X 3 3/4                    |
| 2800                           | 400C282M300BB8         | 50.90             | 25.90  | 7.70                  | 10.70  | 2 X 3 1/4                        |
| 3000                           | 400C302M300AF8         | 41.60             | 22.60  | 8.50                  | 11.60  | 1 3/8 X 5 3/4                    |
| 3200                           | 400C322M300EC8         | 41.60             | 21.20  | 8.60                  | 12.10  | 1 3/4 X 4 1/4                    |
| 3400                           | 400C342M300BJ8         | 41.60             | 21.40  | 9.50                  | 13.20  | 2 X 3 3/4                        |
| 3800                           | 400C382M300ED8         | 36.20             | 18.70  | 9.80                  | 13.60  | 1 3/4 X 4 3/4                    |
| 4100                           | 400C412M300BC8         | 35.90             | 18.40  | 10.30                 | 14.30  | 2 X 4 1/4                        |

# Type 400C 95 °C, Long-Life, Computer Grade, Radial Leaded

| Cap.<br>(µF)                   | Catalog Part<br>Number | ESR Max.<br>25 °C |                | Ripple Amps.<br>85 °C |               | Nominal<br>Size<br>D X L<br>(in) |
|--------------------------------|------------------------|-------------------|----------------|-----------------------|---------------|----------------------------------|
|                                |                        | 120 Hz<br>(mΩ)    | 20 kHz<br>(mΩ) | 120 Hz<br>(A)         | 20 kHz<br>(A) |                                  |
| 4200                           | 400C422M300EE8         | 32.20             | 16.90          | 11.00                 | 15.20         | 1 3/4 X 5 1/4                    |
| 4700                           | 400C472M300BD8         | 31.10             | 16.30          | 11.40                 | 15.70         | 2 X 4 3/4                        |
| 4800                           | 400C482M300EF8         | 29.10             | 15.50          | 12.30                 | 16.90         | 1 3/4 X 5 3/4                    |
| 5600                           | 400C562M300BE8         | 26.70             | 14.40          | 12.70                 | 17.30         | 2 X 5 1/4                        |
| 6200                           | 400C622M300BF8         | 24.30             | 13.20          | 13.80                 | 18.70         | 2 X 5 3/4                        |
| <b>350 Vdc (400 Vdc Surge)</b> |                        |                   |                |                       |               |                                  |
| 360                            | 400C361M350AK8         | 295.00            | 138.00         | 2.00                  | 2.90          | 1 3/8 X 1 3/4                    |
| 540                            | 400C541M350AA8         | 197.00            | 92.90          | 2.80                  | 4.00          | 1 3/8 X 2 1/4                    |
| 800                            | 400C801M350AH8         | 137.00            | 65.10          | 3.40                  | 5.00          | 1 3/8 X 2 3/4                    |
| 920                            | 400C921M350EA8         | 123.00            | 58.20          | 4.00                  | 5.80          | 1 3/4 X 2 1/4                    |
| 1000                           | 400C102M350AB8         | 105.00            | 50.60          | 4.20                  | 6.10          | 1 3/8 X 3 1/4                    |
| 1100                           | 400C112M350BA8         | 109.00            | 52.40          | 4.60                  | 6.60          | 2 X 2 1/4                        |
| 1200                           | 400C122M350EH8         | 90.50             | 41.90          | 5.00                  | 7.30          | 1 3/4 X 2 3/4                    |
| 1200                           | 400C122M350AJ8         | 85.80             | 41.70          | 4.90                  | 7.00          | 1 3/8 X 3 3/4                    |
| 1500                           | 400C152M350BH8         | 78.60             | 37.10          | 5.80                  | 8.50          | 2 X 2 3/4                        |
| 1500                           | 400C152M350AC8         | 72.60             | 35.70          | 5.60                  | 8.00          | 1 3/8 X 4 1/4                    |
| <b>450 Vdc (500 Vdc Surge)</b> |                        |                   |                |                       |               |                                  |
| 1600                           | 400C162M350EB8         | 69.50             | 32.50          | 6.10                  | 8.90          | 1 3/4 X 3 1/4                    |
| 1700                           | 400C172M350AD8         | 63.10             | 31.40          | 6.30                  | 8.90          | 1 3/8 X 4 3/4                    |
| 2000                           | 400C202M350EJ8         | 56.70             | 26.80          | 7.00                  | 10.20         | 1 3/4 X 3 3/4                    |
| 2000                           | 400C202M350BB8         | 60.50             | 28.80          | 7.00                  | 10.20         | 2 X 3 1/4                        |
| 2000                           | 400C202M350AE8         | 55.90             | 28.30          | 7.00                  | 9.80          | 1 3/8 X 5 1/4                    |
| 2200                           | 400C222M350AF8         | 50.40             | 25.90          | 7.70                  | 10.80         | 1 3/8 X 5 3/4                    |
| 2400                           | 400C242M350EC8         | 49.90             | 23.90          | 7.90                  | 11.40         | 1 3/4 X 4 1/4                    |
| 2500                           | 400C252M350BJ8         | 49.40             | 23.80          | 8.70                  | 12.60         | 2 X 3 3/4                        |
| 2800                           | 400C282M350ED8         | 43.40             | 21.00          | 8.90                  | 12.80         | 1 3/4 X 4 3/4                    |
| 3000                           | 400C302M350BC8         | 42.50             | 20.40          | 9.40                  | 13.60         | 2 X 4 1/4                        |
| 3100                           | 400C312M350EE8         | 38.50             | 18.90          | 10.00                 | 14.30         | 1 3/4 X 5 1/4                    |
| 3400                           | 400C342M350BD8         | 36.80             | 18.00          | 10.50                 | 15.00         | 2 X 4 3/4                        |
| 3500                           | 400C352M350EF8         | 34.70             | 17.30          | 11.30                 | 16.00         | 1 3/4 X 5 3/4                    |
| 4100                           | 400C412M350BE8         | 31.50             | 15.80          | 11.70                 | 16.50         | 2 X 5 1/4                        |
| 4500                           | 400C452M350BF8         | 28.60             | 14.50          | 12.70                 | 17.90         | 2 X 5 3/4                        |
| <b>400 Vdc (450 Vdc Surge)</b> |                        |                   |                |                       |               |                                  |
| 300                            | 400C301M400AK8         | 341.00            | 116.00         | 1.80                  | 3.20          | 1 3/8 X 1 3/4                    |
| 450                            | 400C451M400AA8         | 228.00            | 77.70          | 2.60                  | 4.40          | 1 3/8 X 2 1/4                    |
| 600                            | 400C601M400AH8         | 158.00            | 54.40          | 3.20                  | 5.40          | 1 3/8 X 2 3/4                    |
| 750                            | 400C751M400EA8         | 141.00            | 54.80          | 3.70                  | 6.00          | 1 3/4 X 2 1/4                    |
| 840                            | 400C841M400AB8         | 122.00            | 42.20          | 3.90                  | 6.60          | 1 3/8 X 3 1/4                    |
| 930                            | 400C931M400BA8         | 124.00            | 52.50          | 4.30                  | 6.60          | 2 X 2 1/4                        |
| 1000                           | 400C102M400AJ8         | 99.00             | 34.70          | 4.60                  | 7.70          | 1 3/8 X 3 3/4                    |
| 1000                           | 400C102M400EH8         | 104.00            | 39.60          | 4.60                  | 7.50          | 1 3/4 X 2 3/4                    |
| 1200                           | 400C122M400AC8         | 83.60             | 29.70          | 5.20                  | 8.80          | 1 3/8 X 4 1/4                    |
| 1300                           | 400C132M400EB8         | 79.50             | 30.70          | 5.70                  | 9.20          | 1 3/4 X 3 1/4                    |
| 1300                           | 400C132M400BH8         | 89.30             | 37.20          | 5.50                  | 8.50          | 2 X 2 3/4                        |
| 1400                           | 400C142M400AD8         | 72.60             | 26.10          | 5.80                  | 9.80          | 1 3/8 X 4 3/4                    |
| 1600                           | 400C162M400AE8         | 64.30             | 23.40          | 6.50                  | 10.80         | 1 3/8 X 5 1/4                    |
| 1600                           | 400C162M400EJ8         | 64.70             | 25.20          | 6.60                  | 10.50         | 1 3/4 X 3 3/4                    |
| 1700                           | 400C172M400BB8         | 68.60             | 28.90          | 6.60                  | 10.20         | 2 X 3 1/4                        |
| 1800                           | 400C182M400AF8         | 57.80             | 21.40          | 7.20                  | 11.90         | 1 3/8 X 5 3/4                    |
| 2000                           | 400C202M400EC8         | 57.00             | 22.40          | 7.40                  | 11.80         | 1 3/4 X 4 1/4                    |
| 2100                           | 400C212M400BJ8         | 55.90             | 23.80          | 8.20                  | 12.60         | 2 X 3 3/4                        |
| 2300                           | 400C232M400ED8         | 49.50             | 19.70          | 8.40                  | 13.20         | 1 3/4 X 4 3/4                    |
| 2400                           | 400C242M400BC8         | 48.20             | 20.30          | 8.90                  | 13.70         | 2 X 4 1/4                        |
| 2600                           | 400C262M400EE8         | 43.90             | 17.70          | 9.40                  | 14.80         | 1 3/4 X 5 1/4                    |

| Cap.<br>(µF)                       | Catalog Part<br>Number | ESR Max.<br>25 °C |                | Ripple Amps.<br>85 °C |               | Nominal<br>Size<br>D X L<br>(in) |
|------------------------------------|------------------------|-------------------|----------------|-----------------------|---------------|----------------------------------|
|                                    |                        | 120 Hz<br>(mΩ)    | 20 kHz<br>(mΩ) | 120 Hz<br>(A)         | 20 kHz<br>(A) |                                  |
| 2800                               | 400C282M400BD8         | 41.60             | 18.00          | 9.90                  | 15.00         | 2 X 4 3/4                        |
| 2900                               | 400C292M400EF8         | 39.50             | 16.10          | 10.60                 | 16.60         | 1 3/4 X 5 3/4                    |
| 3400                               | 400C342M400BE8         | 35.60             | 15.70          | 11.00                 | 16.60         | 2 X 5 1/4                        |
| 3700                               | 400C372M400BF8         | 32.20             | 14.40          | 12.00                 | 17.90         | 2 X 5 3/4                        |
| 250                                | 400C251M450AK8         | 367.00            | 123.00         | 1.80                  | 3.10          | 1 3/8 X 1 3/4                    |
| 370                                | 400C371M450AA8         | 245.00            | 82.60          | 2.50                  | 4.30          | 1 3/8 X 2 1/4                    |
| 500                                | 400C501M450AH8         | 170.00            | 57.80          | 3.10                  | 5.30          | 1 3/8 X 2 3/4                    |
| 630                                | 400C631M450EA8         | 151.00            | 57.60          | 3.60                  | 5.80          | 1 3/4 X 2 1/4                    |
| 700                                | 400C701M450AB8         | 131.00            | 44.80          | 3.80                  | 6.50          | 1 3/8 X 3 1/4                    |
| 780                                | 400C781M450BA8         | 132.00            | 54.80          | 4.20                  | 6.50          | 2 X 2 1/4                        |
| 850                                | 400C851M450AJ8         | 107.00            | 36.80          | 4.40                  | 7.50          | 1 3/8 X 3 3/4                    |
| 850                                | 400C851M450EH8         | 111.00            | 41.70          | 4.50                  | 7.30          | 1 3/4 X 2 3/4                    |
| 1000                               | 400C102M450AC8         | 89.90             | 31.40          | 5.00                  | 8.50          | 1 3/8 X 4 1/4                    |
| 1000                               | 400C102M450BH8         | 95.40             | 38.90          | 5.30                  | 8.30          | 2 X 2 3/4                        |
| 1100                               | 400C112M450EB8         | 85.30             | 32.20          | 5.50                  | 9.00          | 1 3/4 X 3 1/4                    |
| 1200                               | 400C122M450AD8         | 78.00             | 27.60          | 5.60                  | 9.50          | 1 3/8 X 4 3/4                    |
| 1400                               | 400C142M450AE8         | 69.10             | 24.70          | 6.30                  | 10.50         | 1 3/8 X 5 1/4                    |
| 1400                               | 400C142M450EJ8         | 69.40             | 26.50          | 6.30                  | 10.20         | 1 3/4 X 3 3/4                    |
| 1400                               | 400C142M450BB8         | 73.30             | 30.20          | 6.40                  | 9.90          | 2 X 3 1/4                        |
| 1500                               | 400C152M450AF8         | 62.10             | 22.50          | 7.00                  | 11.60         | 1 3/8 X 5 3/4                    |
| 1600                               | 400C162M450EC8         | 61.10             | 23.50          | 7.10                  | 11.50         | 1 3/4 X 4 1/4                    |
| 1700                               | 400C172M450BJ8         | 59.70             | 24.80          | 7.90                  | 12.30         | 2 X 3 3/4                        |
| 1900                               | 400C192M450ED8         | 53.00             | 20.70          | 8.10                  | 12.90         | 1 3/4 X 4 3/4                    |
| 2000                               | 400C202M450BC8         | 51.40             | 21.20          | 8.60                  | 13.40         | 2 X 4 1/4                        |
| 2100                               | 400C212M450EE8         | 46.90             | 18.50          | 9.10                  | 14.50         | 1 3/4 X 5 1/4                    |
| 2400                               | 400C242M450EF8         | 42.20             | 16.90          | 10.20                 | 16.20         | 1 3/4 X 5 3/4                    |
| 2400                               | 400C242M450BD8         | 44.40             | 18.80          | 9.50                  | 14.70         | 2 X 4 3/4                        |
| 2800                               | 400C282M450BE8         | 37.90             | 16.40          | 10.70                 | 16.30         | 2 X 5 1/4                        |
| 3100                               | 400C312M450BF8         | 34.30             | 15.00          | 11.60                 | 17.60         | 2 X 5 3/4                        |
| <b>500 Volts (550 Volts Surge)</b> |                        |                   |                |                       |               |                                  |
| 170                                | 400C171M500AK8         | 403.00            | 147.00         | 1.70                  | 2.80          | 1 3/8 X 1 3/4                    |
| 260                                | 400C261M500AA8         | 269.00            | 98.60          | 2.40                  | 3.90          | 1 3/8 X 2 1/4                    |
| 380                                | 400C381M500AH8         | 187.00            | 68.90          | 2.90                  | 4.80          | 1 3/8 X 2 3/4                    |
| 400                                | 400C401M500EA8         | 241.00            | 137.00         | 3.30                  | 5.30          | 1 3/4 X 2 1/4                    |
| 490                                | 400C491M500AB8         | 144.00            | 53.20          | 3.60                  | 5.90          | 1 3/8 X 3 1/4                    |
| 510                                | 400C511M500BA8         | 192.00            | 116.00         | 3.90                  | 6.10          | 2 X 2 1/4                        |
| 580                                | 400C581M500EH8         | 167.00            | 95.80          | 4.20                  | 6.80          | 1 3/4 X 2 3/4                    |
| 610                                | 400C611M500AJ8         | 117.00            | 43.60          | 4.20                  | 6.90          | 1 3/8 X 3 3/4                    |
| 710                                | 400C711M500BH8         | 133.00            | 80.80          | 5.10                  | 7.80          | 2 X 2 3/4                        |
| 720                                | 400C721M500AC8         | 133.00            | 77.50          | 4.80                  | 7.80          | 1 3/8 X 4 1/4                    |
| 760                                | 400C761M500EB8         | 129.00            | 74.00          | 5.20                  | 8.30          | 1 3/4 X 3 1/4                    |
| 800                                | 400C801M500AD8         | 85.80             | 32.60          | 5.40                  | 8.70          | 1 3/8 X 4 3/4                    |
| 940                                | 400C941M500EJ8         | 105.00            | 60.60          | 6.00                  | 9.50          | 1 3/4 X 3 3/4                    |
| 950                                | 400C951M500AE8         | 75.90             | 29.10          | 6.00                  | 9.70          | 1 3/8 X 5 1/4                    |
| 960                                | 400C961M500BB8         | 103.00            | 62.50          | 6.10                  | 9.40          | 2 X 3 1/4                        |
| 1100                               | 400C112M500AF8         | 68.30             | 26.40          | 6.60                  | 10.70         | 1 3/8 X 5 3/4                    |
| 1100                               | 400C112M500EC8         | 88.40             | 51.70          | 6.80                  | 10.70         | 1 3/4 X 4 1/4                    |
| 1200                               | 400C122M500BJ8         | 83.50             | 51.30          | 7.50                  | 11.60         | 2 X 3 3/4                        |
| 1300                               | 400C132M500ED8         | 76.70             | 45.20          | 7.60                  | 12.00         | 1 3/4 X 4 3/4                    |
| 1400                               | 400C142M500BC8         | 70.70             | 43.80          | 8.20                  | 12.60         | 2 X 4 1/4                        |
| 1500                               | 400C152M500EE8         | 68.00             | 40.50          | 8.60                  | 13.50         | 1 3/4 X 5 1/4                    |
| 1600                               | 400C162M500BD8         | 61.50             | 38.40          | 9.10                  | 13.90         | 2 X 4 3/4                        |
| 1700                               | 400C172M500EF8         | 61.20             | 36.80          | 9.70                  | 15.10         | 1 3/4 X 5 3/4                    |
| 1900                               | 400C192M500BE8         | 53.10             | 33.60          | 10.20                 | 15.40         | 2 X 5 1/4                        |
| 2100                               | 400C212M500BF8         | 48.00             | 30.70          | 11.10                 | 16.70         | 2 X 5 3/4                        |