

Type 500R 85 °C High Ripple Current, Inverter Grade, Aluminum

New Higher Ripple Current than Type 500C Screw Terminal Type



The Type 500R is a higher ripple-current version of CDE's long-life Type 500C specifically designed to provide the ripple current capability and long life required for high reliability inverter applications. Like the 500C, the 500R has an endurance rating of 5,000 hours at +85 °C with the rated ripple current applied, and it is offered in the 350 V to 500 V ratings appropriate for use as dc-link bus capacitors in inverter applications.

Highlights

- Large can sizes
- Screw terminals, english and metric
- 5000 hour rated ripple current life
- Higher ripple current than 500C
- 350 to 500 Vdc ratings
- RoHS compliant

Specifications

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|-------|--------|--------|-------|-------|-------------|------|------|------|------|--|-------|-------|--------|--------|-------|-------|-------------|------------------------------|--|--|--|--|--|--|--|-------|------|------|------|------|------|------|------|-----------|------|------|------|------|------|------|------|------------------------------|--|--|--|--|--|--|--|-------|------|------|------|------|------|------|------|-----------|------|------|------|------|------|------|------|
| Temperature Range | -40 °C to +85 °C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rated Voltage Range | 350 Vdc to 500 Vdc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Range | 1,100 uF to 18,000 µF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current | ≤3 √CV µA, 5 mA max, 5 minutes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ripple Current Multipliers | <p>Ambient Temperature</p> <table border="1"> <tr> <td>45 °C</td> <td>55 °C</td> <td>65 °C</td> <td>75 °C</td> <td>85 °C</td> </tr> <tr> <td>2.00</td> <td>1.82</td> <td>1.59</td> <td>1.33</td> <td>1.00</td> </tr> </table> <p>Frequency</p> <table border="1"> <tr> <td></td> <td>50 Hz</td> <td>60 Hz</td> <td>120 Hz</td> <td>360 Hz</td> <td>1 kHz</td> <td>5 kHz</td> <td>10 kHz & up</td> </tr> <tr> <td colspan="8" style="text-align: center;">2 & 2½" diameters</td> </tr> <tr> <td>350 V</td> <td>0.78</td> <td>0.83</td> <td>1.00</td> <td>1.20</td> <td>1.29</td> <td>1.34</td> <td>1.35</td> </tr> <tr> <td>400–500 V</td> <td>0.77</td> <td>0.82</td> <td>1.00</td> <td>1.22</td> <td>1.33</td> <td>1.39</td> <td>1.40</td> </tr> <tr> <td colspan="8" style="text-align: center;">3 & 3½" diameters</td> </tr> <tr> <td>350 V</td> <td>0.84</td> <td>0.88</td> <td>1.00</td> <td>1.12</td> <td>1.17</td> <td>1.20</td> <td>1.20</td> </tr> <tr> <td>400–500 V</td> <td>0.79</td> <td>0.84</td> <td>1.00</td> <td>1.18</td> <td>1.26</td> <td>1.31</td> <td>1.32</td> </tr> </table> | 45 °C | 55 °C | 65 °C | 75 °C | 85 °C | 2.00 | 1.82 | 1.59 | 1.33 | 1.00 | | 50 Hz | 60 Hz | 120 Hz | 360 Hz | 1 kHz | 5 kHz | 10 kHz & up | 2 & 2½" diameters | | | | | | | | 350 V | 0.78 | 0.83 | 1.00 | 1.20 | 1.29 | 1.34 | 1.35 | 400–500 V | 0.77 | 0.82 | 1.00 | 1.22 | 1.33 | 1.39 | 1.40 | 3 & 3½" diameters | | | | | | | | 350 V | 0.84 | 0.88 | 1.00 | 1.12 | 1.17 | 1.20 | 1.20 | 400–500 V | 0.79 | 0.84 | 1.00 | 1.18 | 1.26 | 1.31 | 1.32 |
| 45 °C | 55 °C | 65 °C | 75 °C | 85 °C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.00 | 1.82 | 1.59 | 1.33 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 50 Hz | 60 Hz | 120 Hz | 360 Hz | 1 kHz | 5 kHz | 10 kHz & up | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 & 2½" diameters | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 350 V | 0.78 | 0.83 | 1.00 | 1.20 | 1.29 | 1.34 | 1.35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 400–500 V | 0.77 | 0.82 | 1.00 | 1.22 | 1.33 | 1.39 | 1.40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 & 3½" diameters | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 350 V | 0.84 | 0.88 | 1.00 | 1.12 | 1.17 | 1.20 | 1.20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 400–500 V | 0.79 | 0.84 | 1.00 | 1.18 | 1.26 | 1.31 | 1.32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Low Temperature Characteristics | Impedance ratio: $Z_{-20°C} / Z_{+25°C}$ ≤ 3 (350–500 Vdc) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endurance Life Test | 5000 h at full load at 85 °C Δ Capacitance ±20% ESR 200% of limit DCL 100% of limit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shelf Life Test | 500 h at 85 °C Capacitance 100% of limit ESR 100% of limit DCL 100% of limit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vibration | 10 to 55 Hz, 0.06" and 10 g max, 1.5 h each of 2 axes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RoHS Compliant | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

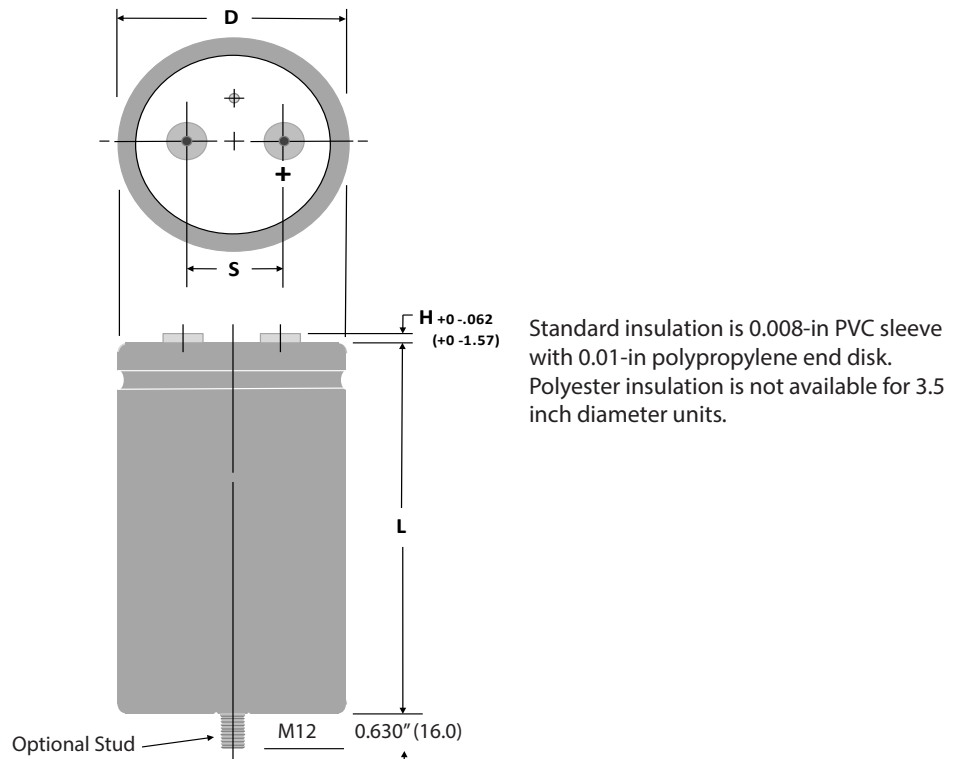
Type 500R 85 °C High Ripple Current, Inverter Grade, Aluminum

New Higher Ripple Current than Type 500C Screw Terminal Type

Part Numbering System

| | | | | | | | |
|-------------|--|---|--------------------------------|------------------|-----------------------------------|---|---|
| 500R | 103 | M | 350 | DN | 2 | E | S |
| Type | Capacitance | Tolerance | Voltage | Case Code | Insulation | Terminal | Can Style |
| | 472 = 4700 μ F 103 = 10,000 μ F | M = \pm 20% U = -10%+75% T = -10%+50% | 350 = 350 Vdc 500 = 500 Vdc | | 0= None 1= Polyester 2= PVC | A = Low Post B = High Post D = High Current, Low Post E = High Current, High Post F or M = M5 Post G = M6 Low Post H = M6 High Post | Blank= Standard Can S= Stud Bottom P= Stud with Thermal Pad |

Outline Drawing



NOTE: With the stud-mount feature, a thermally-conductive disk can be inserted in the bottom flush with the outer insulating sleeve. This reduces the thermal resistance through the can bottom by 0.3 °C/W. Can Style P.

Terminal Dimensions

| Terminal Style | For Case | | Post Diameter | | H max | | Thread | min Full Thread | | Torque | |
|--------------------|-----------|------|---------------|------|-------|-----|--------|-----------------|------|--------|------|
| | Diameters | Code | in | mm | in | mm | | in | mm | in-lb | N-m |
| Low Post | 2 to 3 | A | 0.314 | 8.0 | 0.094 | 2.4 | 10-32 | 0.218 | 5.5 | 25 | 2.82 |
| High Post | 2 to 3 | B | 0.314 | 8.0 | 0.281 | 7.1 | 10-32 | 0.375 | 9.5 | 25 | 2.82 |
| High Current, Low | 2½ to 3½ | D | 0.684 | 17.4 | 0.125 | 3.2 | ¼-28 | 0.344 | 8.7 | 50 | 5.65 |
| High Current, High | 2½ to 3½ | E | 0.684 | 17.4 | 0.281 | 7.1 | ¼-28 | 0.469 | 11.9 | 60 | 6.78 |
| M5 Post, Small | 1⅜ to 2 | M | 0.314 | 8.0 | 0.281 | 7.1 | M5 | 0.375 | 9.5 | 25 | 2.82 |
| M5 Post | 2½ & 3 | F | 0.512 | 13.0 | 0.230 | 5.8 | M5 | 0.344 | 8.7 | 25 | 2.82 |
| M6 Low Post | 2½ to 3½ | G | 0.684 | 17.4 | 0.125 | 3.2 | M6 | 0.344 | 8.7 | 50 | 5.65 |
| M6 High Post | 2½ to 3½ | H | 0.684 | 17.4 | 0.281 | 7.1 | M6 | 0.469 | 11.9 | 60 | 6.78 |

Type 500R 85 °C High Ripple Current, Inverter Grade, Aluminum

New Higher Ripple Current than Type 500C Screw Terminal Type

Uninsulated Case Dimensions

For insulated case, add 0.024"(0.610 mm) to "D" and 0.030"(0.762 mm) to length.

| Case Code | Diameter (D) | | Length (L) | | Terminals (S) | | Typical Weight | |
|-----------|--------------|----------|------------|----------|---------------|----------|----------------|--------|
| | ±0.031 in | ±0.78 mm | ±0.062 in | ±1.57 mm | ±0.015 in | ±0.38 mm | oz | g |
| BC | 2.000 | 50.80 | 4.125 | 104.78 | 0.88 | 22.23 | 9.5 | 269 |
| BD | 2.000 | 50.80 | 4.625 | 117.48 | 0.88 | 22.23 | 10.3 | 292 |
| BE | 2.000 | 50.80 | 5.125 | 130.18 | 0.88 | 22.23 | 10.7 | 303 |
| BF | 2.000 | 50.80 | 5.625 | 142.88 | 0.88 | 22.23 | 13.0 | 369 |
| CH | 2.500 | 63.50 | 2.625 | 66.68 | 1.13 | 28.58 | 9.2 | 261 |
| CJ | 2.500 | 63.50 | 3.625 | 92.08 | 1.13 | 28.58 | 12.7 | 361 |
| CC | 2.500 | 63.50 | 4.125 | 104.78 | 1.13 | 28.58 | 15.0 | 425 |
| CD | 2.500 | 63.50 | 4.625 | 117.48 | 1.13 | 28.58 | 17.2 | 488 |
| CE | 2.500 | 63.50 | 5.125 | 130.18 | 1.13 | 28.58 | 19.3 | 547 |
| CF | 2.500 | 63.50 | 5.625 | 142.88 | 1.13 | 28.58 | 21.4 | 607 |
| DB | 3.000 | 76.20 | 3.125 | 79.38 | 1.25 | 31.75 | 16.7 | 473 |
| DJ | 3.000 | 76.20 | 3.625 | 92.08 | 1.25 | 31.75 | 20.0 | 567 |
| DC | 3.000 | 76.20 | 4.125 | 104.78 | 1.25 | 31.75 | 22.2 | 629 |
| DD | 3.000 | 76.20 | 4.625 | 117.48 | 1.25 | 31.75 | 25.5 | 723 |
| DE | 3.000 | 76.20 | 5.125 | 130.18 | 1.25 | 31.75 | 30.0 | 850 |
| DF | 3.000 | 76.20 | 5.625 | 142.88 | 1.25 | 31.75 | 31.9 | 904 |
| DM | 3.000 | 76.20 | 6.625 | 168.28 | 1.25 | 31.75 | 34.4 | 933.5 |
| DP | 3.000 | 76.20 | 5.875 | 149.23 | 1.25 | 31.75 | 32.8 | 931 |
| DN | 3.000 | 76.20 | 7.625 | 193.68 | 1.25 | 31.75 | 39.5 | 1119 |
| DG | 3.000 | 76.20 | 8.625 | 219.08 | 1.25 | 31.75 | 43.3 | 1227 |
| FC | 3.500 | 88.90 | 4.125 | 104.78 | 1.25 | 31.75 | 30.0 | 850 |
| FD | 3.500 | 88.90 | 4.625 | 117.48 | 1.25 | 31.75 | 34.4 | 976 |
| FE | 3.500 | 88.90 | 5.125 | 130.18 | 1.25 | 31.75 | 40.5 | 1148 |
| FF | 3.500 | 88.90 | 5.625 | 142.88 | 1.25 | 31.75 | 43.1 | 1221 |
| FP | 3.500 | 88.90 | 5.875 | 149.23 | 1.25 | 31.75 | 44.3 | 1257 |
| FN | 3.500 | 88.90 | 7.625 | 193.68 | 1.25 | 31.75 | 53.3 | 1512 |
| FG | 3.500 | 88.90 | 8.625 | 219.08 | 1.25 | 31.75 | 58.5 | 1658 |
| FM | 3.500 | 88.90 | 6.625 | 168.28 | 1.25 | 31.75 | 46.4 | 1315.4 |

Type 500R 85 °C High Ripple Current, Inverter Grade, Aluminum

New Higher Ripple Current than Type 500C Screw Terminal Type Ratings

| Cap (µF) | Catalog Part Number | ESR Max. 25 °C | | Ripple Amps. 85 °C | | Nominal Size D x L (in) |
|--------------------------------|------------------------|-------------------|---------------|-----------------------|---------------|-------------------------------|
| | | 120 Hz (mΩ) | 10kHz (mΩ) | 120 Hz (A) | >3 kHz (A) | |
| 350 Vdc (400 Vdc Surge) | | | | | | |
| 2200 | 500R222M350BC2B | 47 | 37.6 | 8.0 | 11.3 | 2 X 4 1/8 |
| 2200 | 500R222M350BD2B | 43 | 34.4 | 9.0 | 12.6 | 2 X 4 5/8 |
| 2700 | 500R272M350BE2B | 38 | 30.4 | 10.0 | 14.0 | 2 X 5 1/8 |
| 2800 | 500R282M350CJ2E | 36 | 28.8 | 10.0 | 14.0 | 2 1/2 X 3 5/8 |
| 3100 | 500R312M350BF2B | 33 | 26.4 | 11.0 | 15.4 | 2 X 5 5/8 |
| 3300 | 500R332M350CC2E | 30 | 24.0 | 12.0 | 16.8 | 2 1/2 X 4 1/8 |
| 3600 | 500R362M350CD2E | 24 | 19.2 | 14.0 | 19.6 | 2 1/2 X 4 5/8 |
| 3900 | 500R392M350CE2E | 23 | 18.4 | 15.0 | 21.0 | 2 1/2 X 5 1/8 |
| 3900 | 500R392M350DJ2E | 23 | 18.4 | 14.0 | 19.6 | 3 X 3 5/8 |
| 4700 | 500R472M350CF2E | 19 | 15.2 | 16.0 | 22.4 | 2 1/2 X 5 5/8 |
| 4700 | 500R472M350DC2E | 19 | 15.2 | 16.0 | 22.4 | 3 X 4 1/8 |
| 5000 | 500R502M350CP2E | 18 | 14.4 | 18.0 | 25.2 | 2 1/2 X 5 7/8 |
| 5600 | 500R562M350DD2E | 16 | 12.8 | 18.0 | 25.2 | 3 X 4 5/8 |
| 6200 | 500R622M350DE2E | 15 | 12.0 | 19.0 | 26.6 | 3 X 5 1/8 |
| 6800 | 500R682M350DF2E | 14 | 11.2 | 21.0 | 29.4 | 3 X 5 5/8 |
| 6800 | 500R682M350FC2E | 16 | 12.8 | 20.2 | 28.3 | 3 1/2 X 4 1/8 |
| 7000 | 500R702M350CN2E | 13 | 10.4 | 23.0 | 32.2 | 2 1/2 X 7 5/8 |
| 7200 | 500R722M350DP2E | 13 | 10.4 | 22.0 | 30.8 | 3 X 5 7/8 |
| 7700 | 500R772M350FD2E | 14 | 11.2 | 21.6 | 30.2 | 3 1/2 X 4 5/8 |
| 8200 | 500R822M350CG2E | 12 | 9.6 | 24.0 | 33.6 | 2 1/2 X 8 5/8 |
| 8200 | 500R822M350FE2E | 12 | 9.6 | 24.0 | 33.6 | 3 1/2 X 5 1/8 |
| 10000 | 500R103M350DN2E | 9 | 7.2 | 28.0 | 39.2 | 3 X 7 5/8 |
| 10000 | 500R103M350FF2E | 10 | 8.0 | 27.7 | 38.8 | 3 1/2 X 5 5/8 |
| 12000 | 500R123M350DG2E | 8 | 6.4 | 32.5 | 45.5 | 3 X 8 5/8 |
| 15000 | 500R153M350FN2E | 6 | 4.8 | 38.1 | 53.4 | 3 1/2 X 7 5/8 |
| 18000 | 500R183M350FG2E | 6 | 4.8 | 44.6 | 62.5 | 3 1/2 X 8 5/8 |
| 400 Vdc (450 Vdc Surge) | | | | | | |
| 2,200 | 500R222M400BC2B | 44.0 | 35.2 | 8.3 | 11.7 | 2 X 4 1/8 |
| 2,200 | 500R222M400BD2B | 40.0 | 32.0 | 9.7 | 13.5 | 2 X 4 5/8 |
| 2,700 | 500R272M400BE2B | 37.0 | 29.6 | 10.5 | 14.7 | 2 X 5 1/8 |
| 2,700 | 500R272M400CJ2E | 37.0 | 29.6 | 10.1 | 14.2 | 2 1/2 X 3 5/8 |
| 3,000 | 500R302M400BF2B | 35.0 | 28.0 | 11.0 | 15.4 | 2 X 5 5/8 |
| 3,300 | 500R332M400CC2E | 31.0 | 24.8 | 11.8 | 16.5 | 2 1/2 X 4 1/8 |
| 3,600 | 500R362M400CD2E | 27.0 | 21.6 | 13.1 | 18.3 | 2 1/2 X 4 5/8 |
| 3,900 | 500R392M400CE2E | 25.0 | 20.0 | 13.8 | 19.3 | 2 1/2 X 5 1/8 |
| 3,900 | 500R392M400DJ2E | 26.0 | 20.8 | 13.7 | 19.1 | 3 X 3 5/8 |
| 4,700 | 500R472M400CF2E | 22.0 | 17.6 | 15.4 | 21.5 | 2 1/2 X 5 5/8 |
| 4,800 | 500R482M400DC2E | 22.0 | 17.6 | 15.2 | 21.3 | 3 X 4 1/8 |
| 5,000 | 500R502M400CP2E | 20.0 | 16.0 | 17.1 | 24.0 | 2 1/2 X 5 7/8 |
| 5,600 | 500R562M400DD2E | 19.0 | 15.2 | 16.8 | 23.6 | 3 X 4 5/8 |
| 6,300 | 500R632M400DE2E | 17.0 | 13.6 | 18.6 | 26.0 | 3 X 5 1/8 |

| Cap (µF) | Catalog Part Number | ESR Max. 25 °C | | Ripple Amps. 85 °C | | Nominal Size D x L (in) |
|--------------------------------|------------------------|-------------------|---------------|-----------------------|---------------|-------------------------------|
| | | 120 Hz (mΩ) | 10kHz (mΩ) | 120 Hz (A) | >3 kHz (A) | |
| 400 Vdc (450 Vdc Surge) | | | | | | |
| 6,700 | 500R672M400FC2E | 16.0 | 12.8 | 20.0 | 28.1 | 3 1/2 X 4 1/8 |
| 6,800 | 500R682M400DF2E | 16.0 | 12.8 | 19.9 | 27.9 | 3 X 5 5/8 |
| 6,900 | 500R692M400CN2E | 15.0 | 12.0 | 21.2 | 29.7 | 2 1/2 X 7 5/8 |
| 7,200 | 500R722M400DP2E | 15.0 | 12.0 | 20.7 | 29.0 | 3 X 5 7/8 |
| 7,300 | 500R732M400FD2E | 14.0 | 11.2 | 21.6 | 30.2 | 3 1/2 X 4 5/8 |
| 8,200 | 500R822M400CG2E | 13.0 | 10.4 | 24.1 | 33.7 | 2 1/2 X 8 5/8 |
| 8,200 | 500R822M400FE2E | 13.0 | 10.4 | 24.0 | 33.6 | 3 1/2 X 5 1/8 |
| 9,200 | 500R922M400DN2E | 12.0 | 9.6 | 24.4 | 34.2 | 3 X 7 5/8 |
| 10,000 | 500R103M400DG2E | 10.0 | 8.0 | 27.6 | 38.6 | 3 X 8 5/8 |
| 10,000 | 500R103M400FF2E | 10.0 | 8.0 | 27.3 | 38.2 | 3 1/2 X 5 5/8 |
| 11,000 | 500R113M400FF2E | 10.0 | 8.0 | 28.3 | 39.7 | 3 1/2 X 5 7/8 |
| 13,000 | 500R133M400FN2E | 8.0 | 6.4 | 32.9 | 46.0 | 3 1/2 X 7 5/8 |
| 15,000 | 500R153M400FG2E | 7.0 | 5.6 | 38.4 | 53.7 | 3 1/2 X 8 5/8 |
| 420 Vdc (470 Vdc Surge) | | | | | | |
| 1,600 | 500R162M420BC2B | 81.0 | 64.8 | 6.7 | 9.4 | 2 X 4 1/8 |
| 1,700 | 500R172M420BD2B | 75.0 | 60.0 | 7.7 | 10.7 | 2 X 4 5/8 |
| 1,900 | 500R192M420CJ2E | 71.0 | 56.8 | 7.2 | 10.1 | 2 1/2 X 3 5/8 |
| 2,100 | 500R212M420BE2B | 62.0 | 49.6 | 8.7 | 12.2 | 2 X 5 1/8 |
| 2,200 | 500R222M420BF2B | 58.0 | 46.4 | 9.2 | 12.9 | 2 X 5 5/8 |
| 2,400 | 500R242M420CC2E | 58.0 | 46.4 | 8.6 | 12.0 | 2 1/2 X 4 1/8 |
| 2,600 | 500R262M420CD2E | 50.0 | 40.0 | 9.6 | 13.5 | 2 1/2 X 4 5/8 |
| 2,800 | 500R282M420CE2E | 46.0 | 36.8 | 10.2 | 14.3 | 2 1/2 X 5 1/8 |
| 2,800 | 500R282M420DJ2E | 49.0 | 39.2 | 10.7 | 14.9 | 3 X 3 5/8 |
| 3,400 | 500R342M420CF2E | 39.0 | 31.2 | 11.5 | 16.1 | 2 1/2 X 5 5/8 |
| 3,400 | 500R342M420DC2E | 40.0 | 32.0 | 12.2 | 17.1 | 3 X 4 1/8 |
| 3,600 | 500R362M420CP2E | 37.0 | 29.6 | 12.8 | 18.0 | 2 1/2 X 5 7/8 |
| 4,000 | 500R402M420DD2E | 35.0 | 28.0 | 13.4 | 18.7 | 3 X 4 5/8 |
| 4,500 | 500R452M420DE2E | 29.0 | 23.2 | 15.2 | 21.3 | 3 X 5 1/8 |
| 4,900 | 500R492M420CN2E | 27.0 | 21.6 | 16.3 | 22.8 | 2 1/2 X 7 5/8 |
| 4,900 | 500R492M420DF2E | 26.0 | 20.8 | 16.7 | 23.4 | 3 X 5 5/8 |
| 5,000 | 500R502M420FC2E | 28.0 | 22.4 | 15.3 | 21.4 | 3 1/2 X 4 1/8 |
| 5,200 | 500R522M420DP2E | 26.0 | 20.8 | 17.1 | 23.9 | 3 X 5 7/8 |
| 5,500 | 500R552M420FD2E | 26.0 | 20.8 | 16.8 | 23.5 | 3 1/2 X 4 5/8 |
| 5,900 | 500R592M420CG2E | 23.0 | 18.4 | 18.6 | 26.1 | 2 1/2 X 8 5/8 |
| 6,400 | 500R642M420FE2E | 22.0 | 17.6 | 19.9 | 27.9 | 3 1/2 X 5 1/8 |
| 6,600 | 500R662M420DN2E | 20.0 | 16.0 | 20.3 | 28.4 | 3 X 7 5/8 |
| 7,400 | 500R742M420FF2E | 18.0 | 14.4 | 23.0 | 32.2 | 3 1/2 X 5 5/8 |
| 7,800 | 500R782M420DG2E | 17.0 | 13.6 | 22.8 | 31.9 | 3 X 8 5/8 |
| 8,600 | 500R862M420FN2E | 16.0 | 12.8 | 27.4 | 38.4 | 3 1/2 X 7 5/8 |
| 11,000 | 500R113M420FG2E | 13.0 | 10.4 | 32.8 | 46.0 | 3 1/2 X 8 5/8 |

Type 500R 85 °C High Ripple Current, Inverter Grade, Aluminum

New Higher Ripple Current than Type 500C Screw Terminal Type

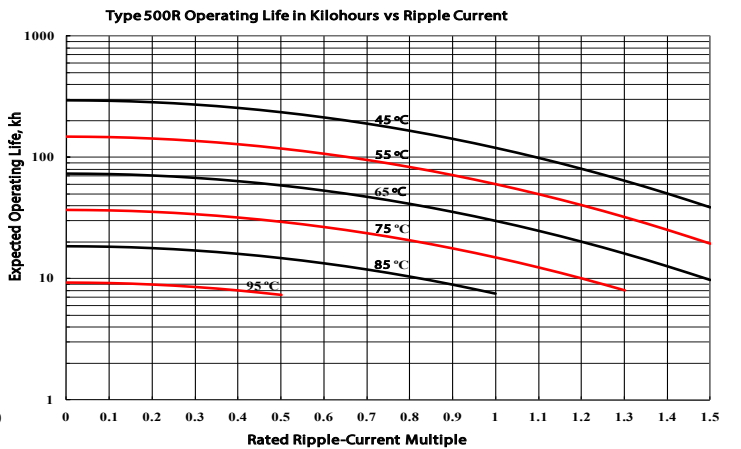
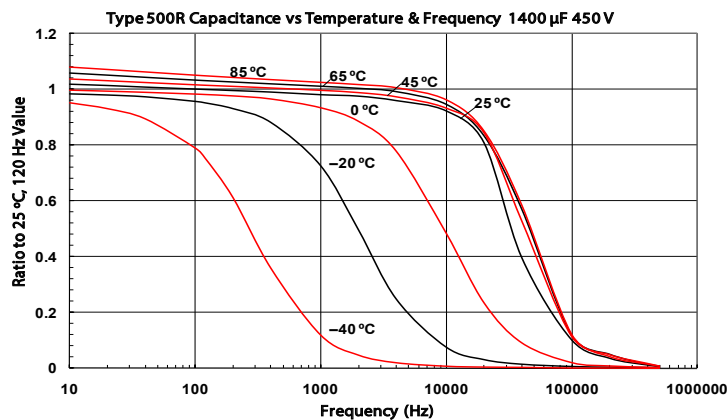
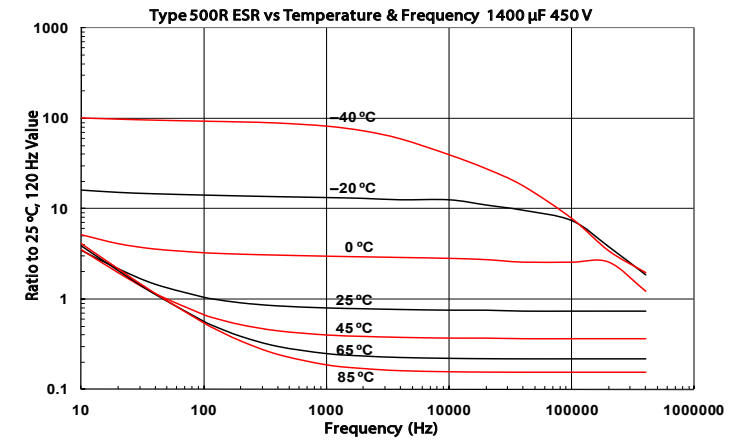
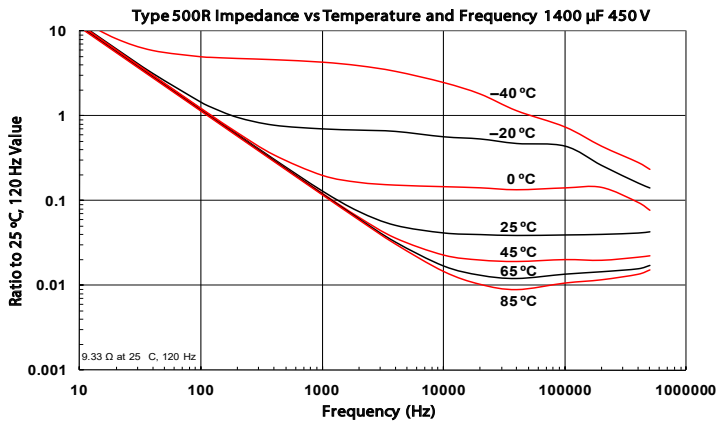
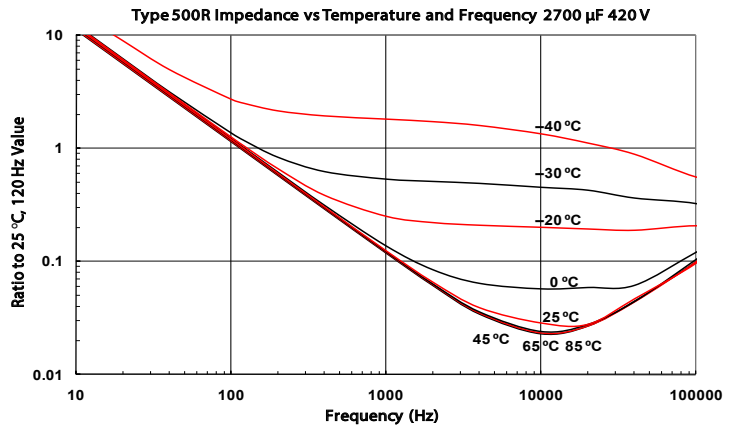
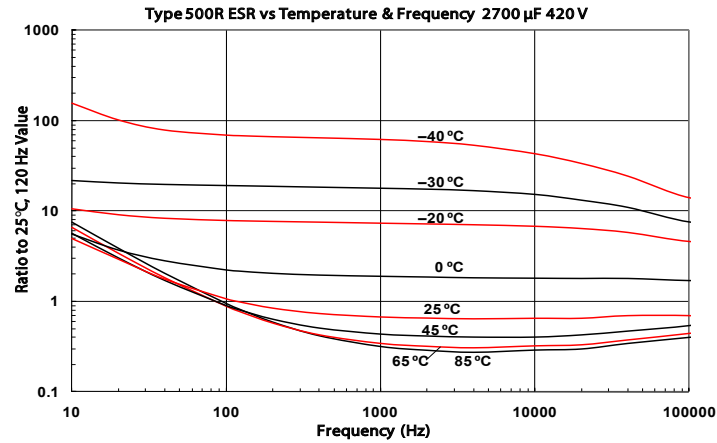
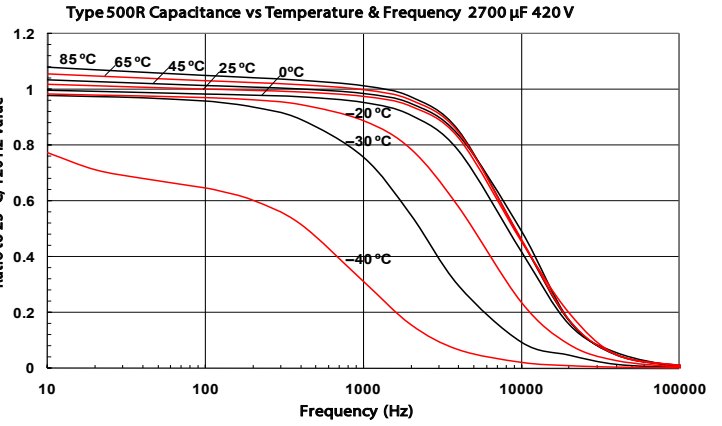
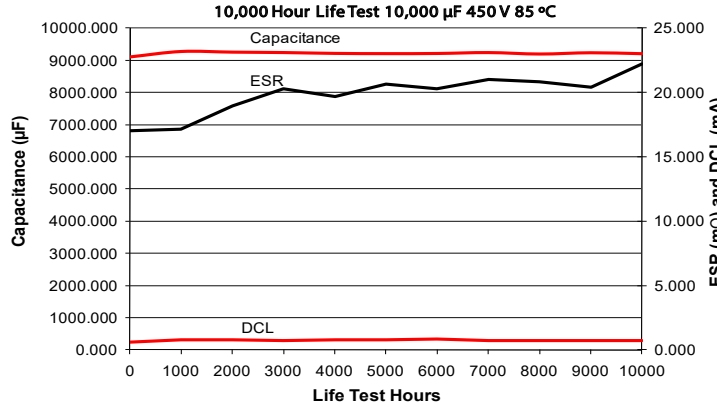
| Cap (µF) | Catalog Part Number | ESR Max. 25 °C | | Ripple Amps. 85 °C | | Nominal Size D x L (in) |
|--------------------------------|------------------------|-------------------|---------------|-----------------------|---------------|-------------------------------|
| | | 120 Hz (mΩ) | 10kHz (mΩ) | 120 Hz (A) | >3 kHz (A) | |
| 450 Vdc (500 Vdc Surge) | | | | | | |
| 1400 | 500R142M450BC2B | 104 | 83.2 | 6.0 | 8.4 | 2 X 4 1/8 |
| 1600 | 500R162M450BD2B | 89 | 71.2 | 7.0 | 9.8 | 2 X 4 5/8 |
| 1900 | 500R192M450BE2B | 73 | 58.4 | 8.1 | 11.4 | 2 X 5 1/8 |
| 2000 | 500R202M450BF2B | 71 | 56.8 | 8.4 | 11.8 | 2 X 5 5/8 |
| 2000 | 500R202M450CJ2E | 72 | 57.6 | 7.9 | 11.0 | 2 1/2 X 3 5/8 |
| 2500 | 500R252M450CC2E | 55 | 44.0 | 9.6 | 13.5 | 2 1/2 X 4 1/8 |
| 2700 | 500R272M450CD2E | 51 | 40.8 | 10.2 | 14.3 | 2 1/2 X 4 5/8 |
| 2900 | 500R292M450DJ2E | 50 | 40.0 | 10.5 | 14.8 | 3 X 3 5/8 |
| 3100 | 500R312M450CE2E | 45 | 36.0 | 11.1 | 15.5 | 2 1/2 X 5 1/8 |
| 3500 | 500R352M450CF2E | 40 | 32.0 | 12.0 | 16.8 | 2 1/2 X 5 5/8 |
| 3600 | 500R362M450DC2E | 41 | 32.8 | 12.1 | 16.9 | 3 X 4 1/8 |
| 3700 | 500R372M450CP2E | 38 | 30.4 | 13.4 | 18.7 | 2 1/2 X 5 7/8 |
| 4200 | 500R422M450DD2E | 35 | 28.0 | 13.4 | 18.7 | 3 X 4 5/8 |
| 4700 | 500R472M450DE2E | 30 | 24.0 | 14.9 | 20.9 | 3 X 5 1/8 |
| 5200 | 500R522M450CN2E | 27 | 21.6 | 17.0 | 23.8 | 2 1/2 X 7 5/8 |
| 5200 | 500R522M450DF2E | 26 | 20.8 | 17.0 | 23.8 | 3 X 5 5/8 |
| 5500 | 500R552M450FC2E | 29 | 23.2 | 15.0 | 21.0 | 3 1/2 X 4 1/8 |
| 5600 | 500R562M450DP2E | 26 | 20.8 | 18.0 | 25.2 | 3 X 5 7/8 |
| 5900 | 500R592M450FD2E | 25 | 20.0 | 17.1 | 24.0 | 3 1/2 X 4 5/8 |
| 6200 | 500R622M450CG2E | 23 | 18.4 | 19.3 | 27.0 | 2 1/2 X 8 5/8 |
| 6900 | 500R692M450DN2E | 21 | 16.8 | 21.0 | 29.4 | 3 X 7 5/8 |
| 6900 | 500R692M450FE2E | 22 | 17.6 | 19.9 | 27.9 | 3 1/2 X 5 1/8 |
| 7800 | 500R782M450FF2E | 21 | 16.8 | 21.3 | 29.8 | 3 1/2 X 5 5/8 |
| 8200 | 500R822M450DG2E | 17 | 13.6 | 23.0 | 32.2 | 3 X 8 5/8 |
| 9400 | 500R942M450FN2E | 17 | 13.6 | 26.1 | 36.6 | 3 1/2 X 7 5/8 |
| 11000 | 500R113M450FG2E | 13 | 10.4 | 32.4 | 45.3 | 3 1/2 X 8 5/8 |

| Cap (µF) | Catalog Part Number | ESR Max. 25 °C | | Ripple Amps. 85 °C | | Nominal Size D x L (in) |
|--------------------------------|------------------------|-------------------|---------------|-----------------------|---------------|-------------------------------|
| | | 120 Hz (mΩ) | 10kHz (mΩ) | 120 Hz (A) | >3 kHz (A) | |
| 500 Vdc (550 Vdc Surge) | | | | | | |
| 1100 | 500R112M500BC2B | 136 | 108.8 | 5.3 | 7.4 | 2 X 4 1/8 |
| 1300 | 500R132M500BD2B | 115 | 92.0 | 6.0 | 8.3 | 2 X 4 5/8 |
| 1500 | 500R152M500BE2B | 98 | 78.4 | 6.7 | 9.4 | 2 X 5 1/8 |
| 1600 | 500R162M500CJ2E | 93 | 74.4 | 6.8 | 9.5 | 2 1/2 X 3 5/8 |
| 1800 | 500R182M500BF2B | 79 | 63.2 | 7.7 | 10.8 | 2 X 5 5/8 |
| 2000 | 500R202M500CC2E | 76 | 60.8 | 8.1 | 11.4 | 2 1/2 X 4 1/8 |
| 2200 | 500R222M500CD2E | 70 | 56.0 | 8.5 | 11.9 | 2 1/2 X 4 5/8 |
| 2300 | 500R232M500DJ2E | 68 | 54.4 | 9.0 | 12.6 | 3 X 3 5/8 |
| 2400 | 500R242M500CE2E | 62 | 49.6 | 9.3 | 13.0 | 2 1/2 X 5 1/8 |
| 2800 | 500R282M500CF2E | 55 | 44.0 | 10.5 | 14.7 | 2 1/2 X 5 5/8 |
| 2800 | 500R282M500DC2E | 54 | 43.2 | 10.5 | 14.7 | 3 X 4 1/8 |
| 2900 | 500R292M500CP2E | 52 | 41.6 | 10.9 | 15.3 | 2 1/2 X 5 7/8 |
| 3300 | 500R332M500DD2E | 48 | 38.4 | 11.2 | 15.7 | 3 X 4 5/8 |
| 3700 | 500R372M500DE2E | 41 | 32.8 | 12.6 | 17.6 | 3 X 5 1/8 |
| 3700 | 500R372M500FC2E | 42 | 33.6 | 13.0 | 18.1 | 3 1/2 X 4 1/8 |
| 4100 | 500R412M500CN2E | 38 | 30.4 | 14.3 | 20.1 | 2 1/2 X 7 5/8 |
| 4100 | 500R412M500DF2E | 37 | 29.6 | 13.9 | 19.4 | 3 X 5 5/8 |
| 4200 | 500R422M500FD2E | 37 | 29.6 | 14.5 | 20.3 | 3 1/2 X 4 5/8 |
| 4400 | 500R442M500DP2E | 35 | 28.0 | 14.3 | 20.0 | 3 X 5 7/8 |
| 4900 | 500R492M500CG2E | 32 | 25.6 | 16.4 | 22.9 | 2 1/2 X 8 5/8 |
| 5400 | 500R542M500FE2E | 29 | 23.2 | 17.2 | 24.0 | 3 1/2 X 5 1/8 |
| 5600 | 500R562M500FF2E | 26 | 20.8 | 19.1 | 26.7 | 3 1/2 X 5 5/8 |
| 5700 | 500R572M500DN2E | 25.971 | 20.8 | 19.2 | 26.9 | 3 X 7 5/8 |
| 6800 | 500R682M500DG2E | 23 | 18.4 | 23.0 | 32.2 | 3 X 8 5/8 |
| 8200 | 500R822M500FN2E | 18 | 14.4 | 25.7 | 35.9 | 3 1/2 X 7 5/8 |
| 8800 | 500R882M500FG2E | 17 | 13.6 | 26.8 | 37.6 | 3 1/2 X 8 5/8 |

Type 500R 85 °C High Ripple Current, Inverter Grade, Aluminum

New Higher Ripple Current than Type 500C Screw Terminal Type

Typical Performance Curves



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