

# Type 3186 85 °C Aluminum Electrolytic, Screw Terminal

## Best Value 85 °C High Capacitance Screw Terminal Type



While Type 3186's standard encasement is by compression with the capacitor element captured on an aluminum peg in the can bottom and a phenolic peg in the top, rilled construction is available. With rilled construction the element is secured by rills, spoon shaped dimples in the side of the can. Rilled construction offers the industry's highest vibration and shock withstanding and excellent heat transfer. Besides increasing ripple current handling, the rilled construction extends the great value of the Type 3186 into military and transportation applications that require rugged mechanical capability.

### Highlights

- Rilled cans withstand high shock and vibration
- High ripple current capability
- High capacitance per can

### Specifications

| Temperature Range               | -40 °C to +85 °C  |        |        |         |         |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
|---------------------------------|---|--------|--------|---------|---------|-------|------|------|------|------|------|--|-------|--------|--------|---------|---------|-------------------|------|------|------|------|------|--------------------|------|------|------|------|------|
| Rated Voltage Range             | 16 Vdc to 500 Vdc   |        |        |         |         |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
| Capacitance Range               | 220 uF to 1.0 F   |        |        |         |         |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
| Capacitance Tolerance           | -10% +75% ≤ 160 Vdc<br>-10% +50% ≥ 200 Vdc  |        |        |         |         |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
| Leakage Current                 | ≤ 6√CV μA (6 mA max.) at 5 minutes  |        |        |         |         |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
| Ripple Current Multipliers      | <p>Ambient Temperature</p> <table border="1"> <thead> <tr> <th>45 °C</th> <th>55 °C</th> <th>65 °C</th> <th>75 °C</th> <th>85 °C</th> </tr> </thead> <tbody> <tr> <td>2.24</td> <td>2.00</td> <td>1.73</td> <td>1.41</td> <td>1.00</td> </tr> </tbody> </table> <p>Frequency</p> <table border="1"> <thead> <tr> <th></th> <th>60 Hz</th> <th>120 Hz</th> <th>300 Hz</th> <th>1000 Hz</th> <th>≥10 kHz</th> </tr> </thead> <tbody> <tr> <td><b>16 – 100 V</b></td> <td>0.90</td> <td>1.00</td> <td>1.15</td> <td>1.25</td> <td>1.30</td> </tr> <tr> <td><b>200 – 500 V</b></td> <td>0.90</td> <td>1.00</td> <td>1.25</td> <td>1.40</td> <td>1.50</td> </tr> </tbody> </table> | 45 °C  | 55 °C  | 65 °C   | 75 °C   | 85 °C | 2.24 | 2.00 | 1.73 | 1.41 | 1.00 |  | 60 Hz | 120 Hz | 300 Hz | 1000 Hz | ≥10 kHz | <b>16 – 100 V</b> | 0.90 | 1.00 | 1.15 | 1.25 | 1.30 | <b>200 – 500 V</b> | 0.90 | 1.00 | 1.25 | 1.40 | 1.50 |
| 45 °C                           | 55 °C   | 65 °C  | 75 °C  | 85 °C   |         |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
| 2.24                            | 2.00  | 1.73   | 1.41   | 1.00    |         |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
|                                 | 60 Hz   | 120 Hz | 300 Hz | 1000 Hz | ≥10 kHz |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
| <b>16 – 100 V</b>               | 0.90  | 1.00   | 1.15   | 1.25    | 1.30    |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
| <b>200 – 500 V</b>              | 0.90  | 1.00   | 1.25   | 1.40    | 1.50    |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
| Low Temperature Characteristics | Impedance ratio: $Z_{-20^{\circ}\text{C}}/Z_{+25^{\circ}\text{C}}$<br>≤ 8 (16–50 Vdc)<br>≤ 4 (63–100 Vdc)<br>≤ 3 (150–500 Vdc)  |        |        |         |         |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
| Endurance Life Test             | 1,500 h @ full load at 85 °C<br>ΔCapacitance ±10%<br>ESR 200% of limit<br>DCL 100% of limit   |        |        |         |         |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
| Shelf Life Test                 | 500 h @ 85 °C<br>ΔCapacitance ±10%<br>ESR 175% of limit<br>DCL 100% of limit  |        |        |         |         |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
| Vibration                       | 10 to 500 Hz, 0.75 mm or 10 g* if less,<br>3 directions, 2 h ea<br>Δ Capacitance: ±5%<br>no visible damage or leakage<br>*15 g if rilled construction   |        |        |         |         |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |
| <b>RoHS Compliant</b>           |   |        |        |         |         |       |      |      |      |      |      |  |       |        |        |         |         |                   |      |      |      |      |      |                    |      |      |      |      |      |

# Type 3186 85 °C Aluminum Electrolytic, Screw Terminal

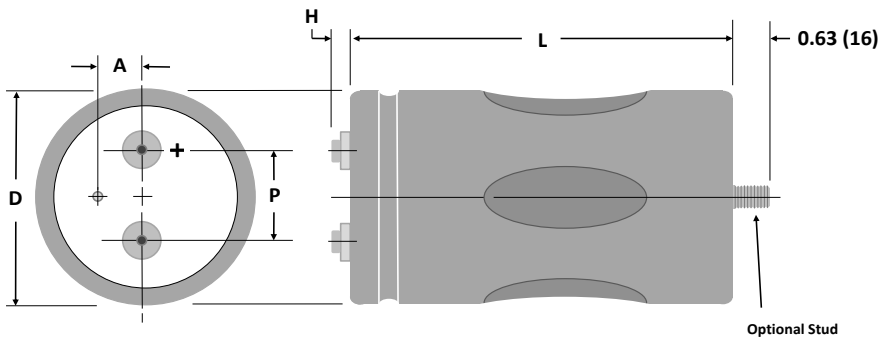
## Best Value 85 °C High Capacitance Screw Terminal Type

### Part Numbering System

|             |           |   |  |                           |   |  |  |
|-------------|-----------|---|--|---------------------------|---|--|--|
| <b>3186</b> | <b>GH</b> | <b>562</b>                                | <b>T</b>   | <b>400</b>                | <b>M</b>  | <b>P</b>   | <b>A1</b>  |
| Type        | Case Code | Capacitance                               | Tolerance  | Voltage                   | Terminal  | Insulation   | Construction*  |
|             |           | 562=5600 µF<br>223=22000 µF<br>821=820 µF | M= ±20%<br>S= -10 +30%<br>T= -10 +50%<br>U= -10 +75% | 016=16 Vdc<br>450=450 Vdc | A=high post<br>B=low post<br>D=high current<br>low post<br>K=high current<br>high post<br>M=M5 high post<br>J=M6 low post | P=0.008" PVC<br>N=none<br>with mounting<br>clamp/bracket<br>R=0.008" PVC<br>X=none | A1=compression<br>R1=rilled<br>S1=stud & compression<br>T1=stud & rilled |

### Outline Drawing

\* Construction code is also a sequence number, e.g., A1, A2,---,A9, B1,B2,---, for customer specifications. Sequence number 1 in A1, R1, S1 and T1 denotes the standard catalog capacitor with no special requirements.



### Stud Dimensions

| Case  | Stud   | P ± 0.039"    |
|-------|--------|---------------|
| Diam. | Thread | (±1.0 mm)     |
| 1.375 | M8     | 0.470" (12.0) |
| 1.750 | M8     | 0.470" (12.0) |
| 2.000 | M12    | 0.630" (16.0) |
| 2.500 | M12    | 0.630" (16.0) |
| 3.000 | M12    | 0.630" (16.0) |

### Can Dimensions Insulation Adders

|            | Diameter (D) |      | Length (L) |      | Standing Height (H) |      |
|------------|--------------|------|------------|------|---------------------|------|
|            | (in)         | (mm) | (in)       | (mm) | (in)                | (mm) |
| 0.008" PVC | 0.02         | 0.51 | 0.032      | 0.81 | 0.024               | 0.61 |

### Terminal Dimensions

| Terminal Style     | For Case Diameters | Code | Post Diameter |      | H max |     | Thread | min Full Thread |      | Torque |      |
|--------------------|--------------------|------|---------------|------|-------|-----|--------|-----------------|------|--------|------|
|                    |                    |      | in            | mm   | in    | mm  |        | in              | mm   | in-lb  | N-m  |
| Low Post           | 1 3/8 to 3         | B    | 0.314         | 8.0  | 0.094 | 2.4 | 10-32  | 0.218           | 5.5  | 25     | 2.82 |
| High Post          | 1 3/8 to 3         | A    | 0.314         | 8.0  | 0.281 | 7.1 | 10-32  | 0.375           | 9.5  | 25     | 2.82 |
| High Current, Low  | 2 1/2 & 3          | D    | 0.684         | 17.4 | 0.125 | 3.2 | ¼-28   | 0.344           | 8.7  | 50     | 5.65 |
| High Current, High | 2 1/2 & 3          | K    | 0.684         | 17.4 | 0.281 | 7.1 | ¼-28   | 0.469           | 11.9 | 60     | 6.78 |
| M5 High Post       | 1 3/8 to 2         | M    | 0.314         | 8.0  | 0.281 | 7.1 | M5     | 0.375           | 9.5  | 25     | 2.82 |
| M5 Post            | 2 1/2 & 3          | F    | 0.512         | 13.0 | 0.230 | 5.8 | M5     | 0.344           | 8.7  | 25     | 2.82 |
| M6 Low Post        | 2 1/2 & 3          | J    | 0.684         | 17.4 | 0.125 | 3.2 | M6     | 0.344           | 8.7  | 50     | 5.65 |

# Type 3186 85 °C Aluminum Electrolytic, Screw Terminal

## Best Value 85 °C High Capacitance Screw Terminal Type

### Case Dimensions, Uninsulated Bare Can

| Case Code | Diam. (D) |      | Length (L) |       | Terminal Space(P) |      | Vent Plug (A) |      | Typical Weight |      | Optional Bracket Part No. |
|-----------|-----------|------|------------|-------|-------------------|------|---------------|------|----------------|------|---------------------------|
|           | ±0.031    | ±0.8 | ±0.062     | ±1.6  | ±0.014            | ±0.4 | (in)          | (mm) | (oz)           | (g)  |                           |
|           | (in)      | (mm) | (in)       | (mm)  | (in)              | (mm) |               |      |                |      |                           |
| BA        | 1.375     | 34.9 | 2.125      | 54.0  | 0.5               | 12.7 | 0.39          | 8.0  | 2.5            | 72   | 115058-06                 |
| BB        | 1.375     | 34.9 | 2.625      | 66.7  | 0.5               | 12.7 | 0.39          | 8.0  | 3.2            | 90   | 115058-06                 |
| BC        | 1.375     | 34.9 | 3.125      | 79.4  | 0.5               | 12.7 | 0.39          | 8.0  | 3.7            | 105  | 115058-06                 |
| BD        | 1.375     | 34.9 | 3.625      | 92.1  | 0.5               | 12.7 | 0.39          | 8.0  | 4.2            | 120  | 115058-06                 |
| BE        | 1.375     | 34.9 | 4.125      | 104.8 | 0.5               | 12.7 | 0.39          | 8.0  | 4.7            | 135  | 115058-06                 |
| BF        | 1.375     | 34.9 | 4.625      | 117.5 | 0.5               | 12.7 | 0.39          | 8.0  | 6.0            | 170  | 115058-06                 |
| BG        | 1.375     | 34.9 | 5.125      | 130.2 | 0.5               | 12.7 | 0.39          | 8.0  | 7.7            | 220  | 115058-06                 |
| BH        | 1.375     | 34.9 | 5.625      | 142.9 | 0.5               | 12.7 | 0.39          | 8.0  | 9.5            | 270  | 115058-06                 |
| DA        | 1.750     | 44.5 | 2.125      | 54.0  | 0.75              | 19.1 | 0.453         | 11.5 | 5.6            | 160  | 115058-15                 |
| DB        | 1.750     | 44.5 | 2.625      | 66.7  | 0.75              | 19.1 | 0.453         | 11.5 | 6.1            | 175  | 115058-15                 |
| DC        | 1.750     | 44.5 | 3.125      | 79.4  | 0.75              | 19.1 | 0.453         | 11.5 | 6.3            | 180  | 115058-15                 |
| DD        | 1.750     | 44.5 | 3.625      | 92.1  | 0.75              | 19.1 | 0.453         | 11.5 | 7.2            | 205  | 115058-15                 |
| DE        | 1.750     | 44.5 | 4.125      | 104.8 | 0.75              | 19.1 | 0.453         | 11.5 | 7.7            | 220  | 115058-15                 |
| DF        | 1.750     | 44.5 | 4.625      | 117.5 | 0.75              | 19.1 | 0.453         | 11.5 | 8.2            | 235  | 115058-15                 |
| DG        | 1.750     | 44.5 | 5.125      | 130.2 | 0.75              | 19.1 | 0.453         | 11.5 | 8.8            | 250  | 115058-15                 |
| DH        | 1.750     | 44.5 | 5.625      | 142.9 | 0.75              | 19.1 | 0.453         | 11.5 | 9.5            | 270  | 115058-15                 |
| EA        | 2.000     | 50.8 | 2.125      | 54.0  | 0.875             | 22.2 | 0.5           | 12.7 | 6.0            | 170  | 115058-09                 |
| EB        | 2.000     | 50.8 | 2.625      | 66.7  | 0.875             | 22.2 | 0.5           | 12.7 | 6.3            | 180  | 115058-09                 |
| EC        | 2.000     | 50.8 | 3.125      | 79.4  | 0.875             | 22.2 | 0.5           | 12.7 | 6.7            | 190  | 115058-09                 |
| ED        | 2.000     | 50.8 | 3.625      | 92.1  | 0.875             | 22.2 | 0.5           | 12.7 | 7.7            | 220  | 115058-09                 |
| EE        | 2.000     | 50.8 | 4.125      | 104.8 | 0.875             | 22.2 | 0.5           | 12.7 | 8.9            | 255  | 115058-09                 |
| EF        | 2.000     | 50.8 | 4.625      | 117.5 | 0.875             | 22.2 | 0.5           | 12.7 | 10.2           | 290  | 115058-09                 |
| EG        | 2.000     | 50.8 | 5.125      | 130.2 | 0.875             | 22.2 | 0.5           | 12.7 | 11.2           | 320  | 115058-09                 |
| EH        | 2.000     | 50.8 | 5.625      | 142.9 | 0.875             | 22.2 | 0.5           | 12.7 | 12.3           | 350  | 115058-09                 |
| FB        | 2.500     | 63.5 | 2.625      | 66.7  | 1.125             | 28.6 | 0.625         | 15.9 | 10.5           | 300  | 115058-14                 |
| FC        | 2.500     | 63.5 | 3.125      | 79.4  | 1.125             | 28.6 | 0.625         | 15.9 | 13.0           | 370  | 115058-14                 |
| FD        | 2.500     | 63.5 | 3.625      | 92.1  | 1.125             | 28.6 | 0.625         | 15.9 | 14.0           | 400  | 115058-14                 |
| FE        | 2.500     | 63.5 | 4.125      | 104.8 | 1.125             | 28.6 | 0.625         | 15.9 | 15.6           | 445  | 115058-14                 |
| FF        | 2.500     | 63.5 | 4.625      | 117.5 | 1.125             | 28.6 | 0.625         | 15.9 | 21.0           | 600  | 115058-14                 |
| FG        | 2.500     | 63.5 | 5.125      | 130.2 | 1.125             | 28.6 | 0.625         | 15.9 | 22.8           | 650  | 115058-14                 |
| FH        | 2.500     | 63.5 | 5.625      | 142.9 | 1.125             | 28.6 | 0.625         | 15.9 | 21.0           | 600  | 115058-14                 |
| GC        | 3.000     | 76.2 | 3.125      | 79.4  | 1.25              | 31.8 | 0.75          | 19.0 | 18.2           | 520  | 115058-11                 |
| GD        | 3.000     | 76.2 | 3.625      | 92.1  | 1.25              | 31.8 | 0.75          | 19.0 | 20.0           | 570  | 115058-11                 |
| GE        | 3.000     | 76.2 | 4.125      | 104.8 | 1.25              | 31.8 | 0.75          | 19.0 | 21.0           | 600  | 115058-11                 |
| GF        | 3.000     | 76.2 | 4.625      | 117.5 | 1.25              | 31.8 | 0.75          | 19.0 | 25.2           | 720  | 115058-11                 |
| GG        | 3.000     | 76.2 | 5.125      | 130.2 | 1.25              | 31.8 | 0.75          | 19.0 | 29.8           | 850  | 115058-11                 |
| GH        | 3.000     | 76.2 | 5.625      | 142.9 | 1.25              | 31.8 | 0.75          | 19.0 | 34.0           | 970  | 115058-11                 |
| GJ        | 3.000     | 76.2 | 5.875      | 149.2 | 1.25              | 31.8 | 0.75          | 19.0 | 36.8           | 1050 | 115058-11                 |
| GN        | 3.000     | 76.2 | 8.625      | 219.1 | 1.25              | 31.8 | 0.75          | 19.0 | 51.1           | 1460 | 115058-11                 |

# Type 3186 85 °C Aluminum Electrolytic, Screw Terminal

## Best Value 85 °C High Capacitance Screw Terminal Type

### Ratings

| Capacitance<br>(µF)              | Catalog<br>Part Number | ESR max<br>120 Hz, 25°C<br>(mΩ) | Ripple max<br>120 Hz, 85 °C<br>(A) | Case Size<br>DxL<br>(in) |
|----------------------------------|------------------------|---------------------------------|------------------------------------|--------------------------|
| <b>16 Volts (20 Volts Surge)</b> |                        |                                 |                                    |                          |
| 22000                            | 3186BA223T016APA1      | 25.0                            | 5.4                                | 1.375 X 2.125            |
| 39000                            | 3186BC393T016APA1      | 18.0                            | 7.6                                | 1.375 X 3.125            |
| 56000                            | 3186BE563T016APA1      | 14.0                            | 9.7                                | 1.375 X 4.125            |
| 82000                            | 3186EC823T016APA1      | 6.0                             | 17.0                               | 2.00 X 3.125             |
| 120000                           | 3186EE124T016APA1      | 5.0                             | 21.0                               | 2.00 X 4.125             |
| 150000                           | 3186EF154T016APA1      | 4.0                             | 23.0                               | 2.00 X 4.625             |
| 150000                           | 3186EH154T016APA1      | 4.0                             | 25.0                               | 2.00 X 5.625             |
| 220000                           | 3186FE224T016APA1      | 4.0                             | 27.0                               | 2.50 X 4.125             |
| 270000                           | 3186FF274T016APA1      | 4.0                             | 29.0                               | 2.50 X 4.625             |
| 330000                           | 3186FH334T016DPA1      | 3.0                             | 34.0                               | 2.50 X 5.625             |
| 330000                           | 3186GE334T016DPA1      | 4.0                             | 32.0                               | 3.00 X 4.125             |
| 390000                           | 3186GF394T016DPA1      | 3.0                             | 35.0                               | 3.00 X 4.625             |
| 470000                           | 3186GH474T016DPA1      | 3.0                             | 40.0                               | 3.00 X 5.625             |
| 820000                           | 3186GN824T016DPA1      | 3.0                             | 50.0                               | 3.00 X 8.625             |
| 1000000                          | 3186GN105T016DPA1      | 3.0                             | 50.0                               | 3.00 X 8.625             |
| <b>25 Volts (30 Volts Surge)</b> |                        |                                 |                                    |                          |
| 18000                            | 3186BA183T025APA1      | 25.0                            | 5.4                                | 1.375 X 2.125            |
| 27000                            | 3186BC273T025APA1      | 18.0                            | 7.5                                | 1.375 X 3.125            |
| 39000                            | 3186BE393T025APA1      | 14.0                            | 9.0                                | 1.375 X 4.125            |
| 68000                            | 3186EC683T025APA1      | 6.0                             | 17.0                               | 2.00 X 3.125             |
| 100000                           | 3186EE104T025APA1      | 5.0                             | 21.0                               | 2.00 X 4.125             |
| 120000                           | 3186EF124T025APA1      | 4.0                             | 23.0                               | 2.00 X 4.625             |
| 150000                           | 3186EH154T025APA1      | 4.0                             | 26.0                               | 2.00 X 5.625             |
| 150000                           | 3186FE154T025APA1      | 4.0                             | 27.0                               | 2.50 X 4.125             |
| 180000                           | 3186FF184T025APA1      | 4.0                             | 29.0                               | 2.50 X 4.625             |
| 220000                           | 3186FH224T025DPA1      | 3.0                             | 31.0                               | 2.50 X 5.625             |
| 220000                           | 3186GE224T025DPA1      | 4.0                             | 32.0                               | 3.00 X 4.125             |
| 270000                           | 3186GF274T025DPA1      | 3.0                             | 35.0                               | 3.00 X 4.625             |
| 330000                           | 3186GH334T025DPA1      | 3.0                             | 38.0                               | 3.00 X 5.625             |
| 560000                           | 3186GN564T025DPA1      | 3.0                             | 50.0                               | 3.00 X 8.625             |
| <b>40 Volts (50 Volts Surge)</b> |                        |                                 |                                    |                          |
| 10000                            | 3186BA103T040APA1      | 33.0                            | 4.8                                | 1.375 X 2.125            |
| 15000                            | 3186BC153T040APA1      | 19.0                            | 7.4                                | 1.375 X 3.125            |
| 22000                            | 3186BE223T040APA1      | 14.0                            | 9.4                                | 1.375 X 4.125            |
| 39000                            | 3186EC393T040APA1      | 7.0                             | 15.0                               | 2.00 X 3.125             |
| 56000                            | 3186EE563T040APA1      | 6.0                             | 19.0                               | 2.00 X 4.125             |
| 68000                            | 3186EF683T040APA1      | 5.0                             | 21.0                               | 2.00 X 4.625             |
| 82000                            | 3186EH82T040APA1       | 5.0                             | 23.0                               | 2.00 X 5.625             |
| 100000                           | 3186FE104T040APA1      | 5.0                             | 24.0                               | 2.50 X 4.125             |
| 120000                           | 3186FF124T040APA1      | 4.0                             | 27.0                               | 2.50 X 4.625             |
| 150000                           | 3186FH154T040DPA1      | 4.0                             | 31.0                               | 2.50 X 5.625             |
| 150000                           | 3186GE154T040APA1      | 4.0                             | 29.0                               | 3.00 X 4.125             |
| 180000                           | 3186GF184T040DPA1      | 4.0                             | 35.0                               | 3.00 X 4.625             |
| 220000                           | 3186GH224T040DPA1      | 3.0                             | 37.0                               | 3.00 X 5.625             |
| 330000                           | 3186GN334T040DPA1      | 3.0                             | 50.0                               | 3.00 X 8.625             |

| Capacitance<br>(µF)              | Catalog<br>Part Number | ESR max<br>120 Hz, 25°C<br>(mΩ) | Ripple max<br>120 Hz, 85 °C<br>(A) | Case Size<br>DxL<br>(in) |
|----------------------------------|------------------------|---------------------------------|------------------------------------|--------------------------|
| <b>50 Volts (63 Volts Surge)</b> |                        |                                 |                                    |                          |
| 8200                             | 3186BA822T050APA1      | 41.0                            | 4.2                                | 1.375 X 2.125            |
| 12000                            | 3186BC123T050APA1      | 28.0                            | 6.0                                | 1.375 X 3.125            |
| 18000                            | 3186BE183T050APA1      | 21.0                            | 7.8                                | 1.375 X 4.125            |
| 27000                            | 3186EC273T050APA1      | 15.0                            | 10.0                               | 2.00 X 3.125             |
| 47000                            | 3186EE473T050APA1      | 11.0                            | 13.0                               | 2.00 X 4.125             |
| 56000                            | 3186EF563T050APA1      | 10.0                            | 15.0                               | 2.00 X 4.625             |
| 68000                            | 3186EH683T050APA1      | 9.0                             | 17.0                               | 2.00 X 5.625             |
| 68000                            | 3186FE683T050APA1      | 8.0                             | 18.0                               | 2.50 X 4.125             |
| 82000                            | 3186FF823T050APA1      | 7.0                             | 20.0                               | 2.50 X 4.625             |
| 100000                           | 3186FH104T050APA1      | 6.0                             | 24.0                               | 2.50 X 5.625             |
| 100000                           | 3186GE104T050APA1      | 6.0                             | 23.0                               | 3.00 X 4.125             |
| 120000                           | 3186GF124T050APA1      | 6.0                             | 25.0                               | 3.00 X 4.625             |
| 150000                           | 3186GH154T050DPA1      | 5.0                             | 30.0                               | 3.00 X 5.625             |
| 220000                           | 3186GN224T050DPA1      | 4.0                             | 40.0                               | 3.00 X 8.625             |
| <b>63 Volts (75 Volts Surge)</b> |                        |                                 |                                    |                          |
| 4700                             | 3186BA472T063APA1      | 42.0                            | 4.2                                | 1.375 X 2.125            |
| 8200                             | 3186BC822T063APA1      | 28.0                            | 6.0                                | 1.375 X 3.125            |
| 12000                            | 3186BE123T063APA1      | 21.0                            | 8.0                                | 1.375 X 4.125            |
| 18000                            | 3186EC183T063APA1      | 15.0                            | 10.0                               | 2.00 X 3.125             |
| 27000                            | 3186EE273T063APA1      | 11.0                            | 13.0                               | 2.00 X 4.125             |
| 33000                            | 3186EF333T063APA1      | 10.0                            | 15.0                               | 2.00 X 4.625             |
| 39000                            | 3186EH393T063APA1      | 9.0                             | 16.0                               | 2.00 X 5.625             |
| 47000                            | 3186FE473T063APA1      | 8.0                             | 18.0                               | 2.50 X 4.125             |
| 56000                            | 3186FF563T063APA1      | 7.0                             | 20.0                               | 2.50 X 4.625             |
| 68000                            | 3186FH683T063APA1      | 6.0                             | 24.0                               | 2.50 X 5.625             |
| 68000                            | 3186GE683T063APA1      | 6.0                             | 23.0                               | 3.00 X 4.125             |
| 82000                            | 3186GF823T063APA1      | 6.0                             | 25.0                               | 3.00 X 4.625             |
| 100000                           | 3186GH104T063DPA1      | 5.0                             | 30.0                               | 3.00 X 5.625             |
| 150000                           | 3186GN154T063DPA1      | 4.0                             | 40.0                               | 3.00 X 8.625             |
| <b>75 Volts (95 Volts Surge)</b> |                        |                                 |                                    |                          |
| 3900                             | 3186BA392T075APA1      | 43.0                            | 4.1                                | 1.375 X 2.125            |
| 6800                             | 3186BC682T075APA1      | 29.0                            | 5.9                                | 1.375 X 3.125            |
| 10000                            | 3186BE103T075APA1      | 21.0                            | 7.8                                | 1.375 X 4.125            |
| 15000                            | 3186EC153T075APA1      | 15.0                            | 10.0                               | 2.00 X 3.125             |
| 22000                            | 3186EE223T075APA1      | 11.0                            | 13.0                               | 2.00 X 4.125             |
| 27000                            | 3186EF273T075APA1      | 10.0                            | 15.0                               | 2.00 X 4.625             |
| 33000                            | 3186EH333T075APA1      | 9.0                             | 17.0                               | 2.00 X 5.625             |
| 33000                            | 3186FE333T075APA1      | 8.0                             | 18.0                               | 2.50 X 4.125             |
| 39000                            | 3186FF393T075APA1      | 7.0                             | 20.0                               | 2.50 X 4.625             |
| 56000                            | 3186FH563T075APA1      | 6.0                             | 23.0                               | 2.50 X 5.625             |
| 47000                            | 3186GE473T075APA1      | 7.0                             | 23.0                               | 3.00 X 4.125             |
| 56000                            | 3186GF563T075APA1      | 6.0                             | 25.0                               | 3.00 X 4.625             |
| 82000                            | 3186GH823T075APA1      | 5.0                             | 29.0                               | 3.00 X 5.625             |
| 120000                           | 3186GN124T075DPA1      | 4.0                             | 40.0                               | 3.00 X 8.625             |

# Type 3186 85 °C Aluminum Electrolytic, Screw Terminal

## Best Value 85 °C High Capacitance Screw Terminal Type

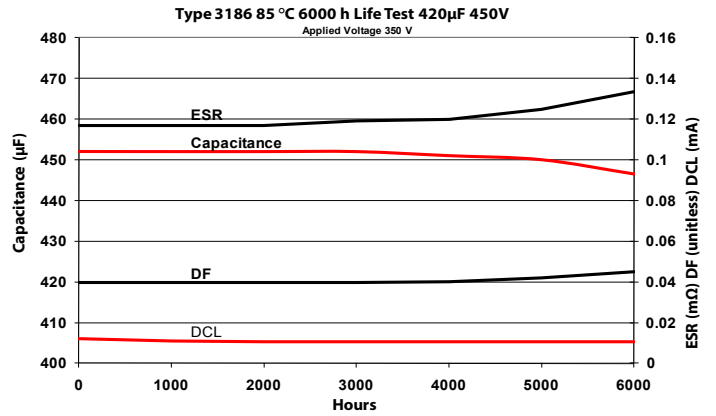
| Capacitance (µF)                   | Catalog Part Number | ESR max 120 Hz, 25°C (mΩ) | Ripple max 120 Hz, 85 °C (A) | Case Size DxL (in) |
|------------------------------------|---------------------|---------------------------|------------------------------|--------------------|
| <b>100 Volts (125 Volts Surge)</b> |                     |                           |                              |                    |
| 2700                               | 3186BA272T100APA1   | 65.0                      | 3.3                          | 1.375 X 2.125      |
| 3900                               | 3186BC392T100APA1   | 50.0                      | 4.3                          | 1.375 X 3.125      |
| 5600                               | 3186BE562T100APA1   | 32.0                      | 5.9                          | 1.375 X 4.125      |
| 10000                              | 3186EC103T100APA1   | 52.0                      | 5.5                          | 2.00 X 3.125       |
| 15000                              | 3186EE153T100APA1   | 37.0                      | 7.3                          | 2.00 X 4.125       |
| 18000                              | 3186EF183T100APA1   | 27.0                      | 9.0                          | 2.00 X 4.625       |
| 22000                              | 3186EH223T100APA1   | 11.0                      | 15.0                         | 2.00 X 5.625       |
| 22000                              | 3186FE223T100APA1   | 19.0                      | 11.0                         | 2.50 X 4.125       |
| 27000                              | 3186FF273T100APA1   | 16.0                      | 13.0                         | 2.50 X 4.625       |
| 33000                              | 3186FH333T100APA1   | 14.0                      | 14.0                         | 2.50 X 5.625       |
| 33000                              | 3186GE333T100APA1   | 14.0                      | 14.0                         | 3.00 X 4.125       |
| 39000                              | 3186GF393T100APA1   | 11.0                      | 17.0                         | 3.00 X 4.625       |
| 56000                              | 3186GH563T100DPA1   | 8.0                       | 22.0                         | 3.00 X 5.625       |
| 82000                              | 3186GN823T100DPA1   | 7.0                       | 25.0                         | 3.00 X 8.625       |
| <b>200 Volts (250 Volts Surge)</b> |                     |                           |                              |                    |
| 1000                               | 3186BA102T200APA1   | 109.0                     | 2.6                          | 1.375 X 2.125      |
| 1500                               | 3186BC152T200APA1   | 77.0                      | 3.4                          | 1.375 X 3.125      |
| 2200                               | 3186BE222T200APA1   | 52.0                      | 4.6                          | 1.375 X 4.125      |
| 3900                               | 3186EC392T200APA1   | 73.0                      | 4.8                          | 2.00 X 3.125       |
| 5600                               | 3186EE562T200APA1   | 24.0                      | 8.6                          | 2.00 X 4.125       |
| 6800                               | 3186EF682T200APA1   | 21.0                      | 9.9                          | 2.00 X 4.625       |
| 8200                               | 3186EH822T200APA1   | 17.0                      | 12.0                         | 2.00 X 5.625       |
| 10000                              | 3186FE103T200APA1   | 22.0                      | 11.0                         | 2.50 X 4.125       |
| 12000                              | 3186FF123T200APA1   | 17.0                      | 12.0                         | 2.50 X 4.625       |
| 15000                              | 3186FH153T200APA1   | 16.0                      | 14.0                         | 2.50 X 5.625       |
| 12000                              | 3186GE123T200APA1   | 26.0                      | 11.0                         | 3.00 X 4.125       |
| 15000                              | 3186GF153T200APA1   | 23.0                      | 12.0                         | 3.00 X 4.625       |
| 22000                              | 3186GH223T200APA1   | 17.0                      | 15.0                         | 3.00 X 5.625       |
| 33000                              | 3186GN333T200APA1   | 15.0                      | 17.0                         | 3.00 X 8.625       |
| <b>250 Volts (300 Volts Surge)</b> |                     |                           |                              |                    |
| 680                                | 3186BA681T250APA1   | 120.0                     | 2.6                          | 1.375 X 2.125      |
| 1200                               | 3186BC122T250APA1   | 76.0                      | 2.6                          | 1.375 X 3.125      |
| 1800                               | 3186BE182T250APA1   | 53.0                      | 4.9                          | 1.375 X 4.125      |
| 2700                               | 3186EC272T250APA1   | 67.0                      | 4.4                          | 2.00 X 3.125       |
| 3900                               | 3186EE392T250APA1   | 27.0                      | 7.9                          | 2.00 X 4.125       |
| 4700                               | 3186EF472T250APA1   | 23.0                      | 9.0                          | 2.00 X 4.625       |
| 5600                               | 3186EH562T250APA1   | 20.0                      | 10.0                         | 2.00 X 5.625       |
| 6800                               | 3186FE682T250APA1   | 24.0                      | 10.0                         | 2.50 X 4.125       |
| 8200                               | 3186FF822T250APA1   | 19.0                      | 11.0                         | 2.50 X 4.625       |
| 10000                              | 3186FH103T250APA1   | 17.0                      | 14.0                         | 2.50 X 5.625       |
| 10000                              | 3186GE103T250APA1   | 25.0                      | 11.0                         | 3.00 X 4.125       |
| 12000                              | 3186GF123T250APA1   | 22.0                      | 12.0                         | 3.00 X 4.625       |
| 15000                              | 3186GH153T250APA1   | 19.0                      | 14.0                         | 3.00 X 5.625       |
| 22000                              | 3186GN223T250APA1   | 16.0                      | 17.0                         | 3.00 X 8.625       |
| <b>350 Volts (400 Volts Surge)</b> |                     |                           |                              |                    |
| 390                                | 3186BA391T350APA1   | 270.0                     | 1.3                          | 1.375 X 2.125      |
| 680                                | 3186BC681T350APA1   | 163.0                     | 2.5                          | 1.375 X 3.125      |

| Capacitance (µF)                   | Catalog Part Number | ESR max 120 Hz, 25°C (mΩ) | Ripple max 120 Hz, 85 °C (A) | Case Size DxL (in) |
|------------------------------------|---------------------|---------------------------|------------------------------|--------------------|
| 1000                               | 3186BE102T350APA1   | 112.0                     | 3.3                          | 1.375 X 4.125      |
| 1500                               | 3186EC152T350APA1   | 105.0                     | 3.9                          | 2.00 X 3.125       |
| 2200                               | 3186EE222T350APA1   | 55.0                      | 5.6                          | 2.00 X 4.125       |
| 2700                               | 3186EF272T350APA1   | 44.0                      | 7.0                          | 2.00 X 4.625       |
| 3300                               | 3186EH332T350APA1   | 37.0                      | 8.0                          | 2.00 X 5.625       |
| 2700                               | 3186FE272T350APA1   | 54.0                      | 6.6                          | 2.50 X 4.125       |
| 3900                               | 3186FF392T350APA1   | 37.0                      | 8.7                          | 2.50 X 4.625       |
| 4700                               | 3186FH472T350APA1   | 33.0                      | 9.6                          | 2.50 X 5.625       |
| 4700                               | 3186GE472T350APA1   | 33.0                      | 9.6                          | 3.00 X 4.125       |
| 5600                               | 3186GF562T350APA1   | 33.0                      | 10.0                         | 3.00 X 4.625       |
| 6800                               | 3186GH682T350APA1   | 28.0                      | 11.0                         | 3.00 X 5.625       |
| 12000                              | 3186GN123T350APA1   | 18.0                      | 18.0                         | 3.00 X 8.625       |
| <b>400 Volts (450 Volts Surge)</b> |                     |                           |                              |                    |
| 330                                | 3186BA331T400APA1   | 290.0                     | 1.3                          | 1.375 X 2.125      |
| 560                                | 3186BC561T400APA1   | 190.0                     | 2.1                          | 1.375 X 3.125      |
| 820                                | 3186BE821T400APA1   | 129.0                     | 3.0                          | 1.375 X 4.125      |
| 1200                               | 3186EC122T400APA1   | 95.0                      | 3.7                          | 2.00 X 3.125       |
| 1800                               | 3186EE182T400APA1   | 59.0                      | 5.5                          | 2.00 X 4.125       |
| 2200                               | 3186EF222T400APA1   | 50.0                      | 6.4                          | 2.00 X 4.625       |
| 2700                               | 3186EH272T400APA1   | 39.0                      | 7.9                          | 2.00 X 5.625       |
| 2700                               | 3186FE272T400APA1   | 48.0                      | 7.3                          | 2.50 X 4.125       |
| 3300                               | 3186FF332T400APA1   | 39.0                      | 8.5                          | 2.50 X 4.625       |
| 3900                               | 3186FH392T400APA1   | 37.0                      | 9.4                          | 2.50 X 5.625       |
| 3900                               | 3186GE392T400APA1   | 37.0                      | 9.4                          | 3.00 X 4.125       |
| 4700                               | 3186GF472T400APA1   | 34.0                      | 10.0                         | 3.00 X 4.625       |
| 5600                               | 3186GH562T400APA1   | 28.0                      | 11.0                         | 3.00 X 5.625       |
| 10000                              | 3186GN103T400APA1   | 18.0                      | 18.0                         | 3.00 X 8.625       |
| <b>450 Volts (525 Volts Surge)</b> |                     |                           |                              |                    |
| 220                                | 3186BA221T450APA1   | 430.0                     | 1.0                          | 1.375 X 2.125      |
| 390                                | 3186BC391T450APA1   | 310.0                     | 1.8                          | 1.375 X 3.125      |
| 560                                | 3186BE561T450APA1   | 180.0                     | 2.6                          | 1.375 X 4.125      |
| 820                                | 3186EC821T450APA1   | 145.0                     | 3.0                          | 2.00 X 3.125       |
| 1200                               | 3186EE122T450APA1   | 85.0                      | 4.6                          | 2.00 X 4.125       |
| 1500                               | 3186EF152T450APA1   | 71.0                      | 5.3                          | 2.00 X 4.625       |
| 1800                               | 3186EH182T450APA1   | 60.0                      | 5.9                          | 2.00 X 5.625       |
| 2200                               | 3186FE222T450APA1   | 53.0                      | 6.7                          | 2.50 X 4.125       |
| 2700                               | 3186FF272T450APA1   | 45.0                      | 7.7                          | 2.50 X 4.625       |
| 3300                               | 3186FH332T450APA1   | 35.0                      | 9.5                          | 2.50 X 5.625       |
| 3300                               | 3186GE332T450APA1   | 35.0                      | 9.5                          | 3.00 X 4.125       |
| 3900                               | 3186GF392T450APA1   | 36.0                      | 9.8                          | 3.00 X 4.625       |
| 4700                               | 3186GH472T450APA1   | 31.0                      | 11.0                         | 3.00 X 5.625       |
| 8200                               | 3186GN822T450APA1   | 23.0                      | 14.0                         | 3.00 X 8.625       |
| <b>500 Volts (550 Volts Surge)</b> |                     |                           |                              |                    |
| 820                                | 3186EE821T500APA1   | 132.0                     | 3.4                          | 2.00 X 4.125       |
| 1200                               | 3186EG122T500APA1   | 90.0                      | 4.6                          | 2.00 X 5.125       |
| 2200                               | 3186FG222T500APA1   | 59.0                      | 6.6                          | 2.50 X 5.125       |
| 3300                               | 3186GH332T500APA1   | 43.0                      | 8.6                          | 3.00 X 5.625       |

# Type 3186 85 °C Aluminum Electrolytic, Screw Terminal

## Best Value 85 °C High Capacitance Screw Terminal Type

### Typical Performance Curves



# Type 3186 85 °C Aluminum Electrolytic, Screw Terminal

## Best Value 85 °C High Capacitance Screw Terminal Type

### Typical Performance Curves



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