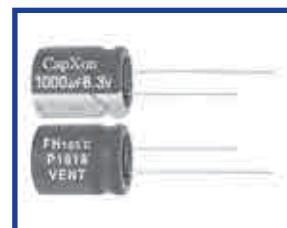


## FH 105°C high ripple current at frequency range



### Features

- ◆ New innovative electrolyte is employed to minimize ESR
- ◆ Long life 4,000 to 10,000 hours at 105°C
- ◆ Non solvent proof type
- ◆ 6.3 to 100VDC newly type
- ◆ RoHS compliant

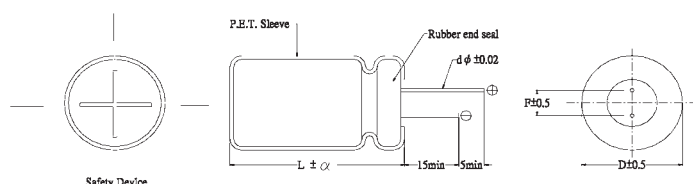
### Specifications

| Item  | Performance Characteristics  |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
|---|--|----------------------|------------|-------------|-------------|----------|---------|----------|------------|------------|-----------------|----------|------------|------------|------------|----|----|---|---|-----------------|---|---|---|---|---|---|---|---|
| Operating Temperature Range                         | -40 to +105°C  |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Rated Voltage Range                                 | 6.3 to 100VDC  |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Capacitance Tolerance                               | ±20%(120Hz,+20°C)  |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Capacitance Range                                   | 6.8~18000 µF   |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Leakage Current (+20°C,max.)                        | I=0.01 CV or 3 (µA) (After 2 minute) with rated working voltage applied.)  |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Dissipation Factor<br>(tan δ , at 20°C , 120Hz)     | <table border="1"> <tr> <td>Working Voltage(VDC)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>D. F.(%) max.</td> <td>22</td> <td>19</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>9</td> <td>8</td> </tr> </table>   | Working Voltage(VDC) | 6.3        | 10          | 16          | 25       | 35      | 50       | 63         | 100        | D. F.(%) max.   | 22       | 19         | 16         | 14         | 12 | 10 | 9 | 8 |                 |   |   |   |   |   |   |   |   |
|   | Working Voltage(VDC)   | 6.3                  | 10         | 16          | 25          | 35       | 50      | 63       | 100        |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| D. F.(%) max.                                       | 22   | 19                   | 16         | 14          | 12          | 10       | 9       | 8        |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| For capacitance > 1000µF,add 2% per another 1000µF. |  |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Low Temperature Characteristics<br>(at 120Hz)       | Impedance ratio max  |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
|   | <table border="1"> <tr> <td>Working Voltage(VDC)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>Z-25°C / Z+20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table> | Working Voltage(VDC) | 6.3        | 10          | 16          | 25       | 35      | 50       | 63         | 100        | Z-25°C / Z+20°C | 4        | 3          | 2          | 2          | 2  | 2  | 2 | 2 | Z-40°C / Z+20°C | 8 | 6 | 4 | 3 | 3 | 3 | 3 | 3 |
|   | Working Voltage(VDC)   | 6.3                  | 10         | 16          | 25          | 35       | 50      | 63       | 100        |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Z-25°C / Z+20°C                                     | 4  | 3                    | 2          | 2           | 2           | 2        | 2       | 2        |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Z-40°C / Z+20°C                                     | 8  | 6                    | 4          | 3           | 3           | 3        | 3       | 3        |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
|   |  |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Endurance   | Test conditions<br>Duration time :   |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
|   | <table border="1"> <thead> <tr> <th colspan="2">SIZE</th> <th>φ D ≤ 6.3</th> <th>φ D = 8, 10</th> <th>φ D ≥ 13</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Voltage</td> <td>6.3~10VV</td> <td>4000 hours</td> <td>6000 hours</td> <td>8000 hours</td> </tr> <tr> <td>16~100VV</td> <td>5000 hours</td> <td>7000 hours</td> <td>10000hours</td> </tr> </tbody> </table>  | SIZE                 |            | φ D ≤ 6.3   | φ D = 8, 10 | φ D ≥ 13 | Voltage | 6.3~10VV | 4000 hours | 6000 hours | 8000 hours      | 16~100VV | 5000 hours | 7000 hours | 10000hours |    |    |   |   |                 |   |   |   |   |   |   |   |   |
|   | SIZE   |                      | φ D ≤ 6.3  | φ D = 8, 10 | φ D ≥ 13    |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
|   | Voltage  | 6.3~10VV             | 4000 hours | 6000 hours  | 8000 hours  |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
|   |  | 16~100VV             | 5000 hours | 7000 hours  | 10000hours  |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Ambient temperature                                 | :+105°C  |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Applied voltage                                     | :Rated DC working voltage  |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| After test requirement at +20°C                     |  |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Capacitance change                                  | : within ± 25% of the initial measured value   |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Dissipation factor                                  | : ≤ 200% of the initial specified value  |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Leakage current                                     | : ≤ The initial specified value  |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
| Shelf Life  | Test condition   |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
|   | Duration time  | :1000Hrs             |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
|   | Ambient temperature  | :+105°C              |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
|   | Applied voltage  | :None                |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |
|   | After test requirement at +20°C:Same limits as Endurance.<br>Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.   |                      |            |             |             |          |         |          |            |            |                 |          |            |            |            |    |    |   |   |                 |   |   |   |   |   |   |   |   |

### Multiplier for Ripple Current vs. Frequency

| CAP(µF)\Hz       | 50(60) | 120  | 400  | 1K   | 10K  | 100K |
|------------------|--------|------|------|------|------|------|
| CAP ≤ 10         | 0.47   | 0.59 | 0.76 | 0.85 | 0.97 | 1.00 |
| 10 < CAP ≤ 100   | 0.52   | 0.62 | 0.80 | 0.89 | 0.97 | 1.00 |
| 100 < CAP ≤ 1000 | 0.58   | 0.72 | 0.84 | 0.90 | 0.98 | 1.00 |
| 1000 < CAP       | 0.63   | 0.78 | 0.87 | 0.91 | 0.98 | 1.00 |

### Diagram of Dimensions:(unit:mm)



| φ D | 5      | 6.3 | 8                 | 10        | 13                  | 16  | 18     |
|-----|--------|-----|-------------------|-----------|---------------------|-----|--------|
| F   | 2.0    | 2.5 | 3.5               | 5.0       | 5.0                 | 7.5 | 7.5    |
| φ d | 0.5    |     | L < 20            | L ≥ 20    |                     | 0.6 | 0.8    |
|     |        |     | 0.5               | 0.6       |                     |     |        |
| α   | D < 16 |     | D = 16            |           | D = 18              |     | D > 18 |
|     | 1.5    | 1.5 | L < 25 and L ≥ 40 | L:25~31.5 | L < 25 and L ≥ 35.5 | 2.0 |        |

## Case Size

| WV (Vdc) | Cap (uF) | Size (mm) | Ripple current (mArms/105°C /100KHz) | Max Imp.( Ω ) at 20°C/100KHz |
|----------|----------|-----------|--------------------------------------|------------------------------|
| 6.3      | 150      | 5x11      | 220                                  | 0.550                        |
| 6.3      | 220      | 6.3x11    | 300                                  | 0.260                        |
| 6.3      | 330      | 6.3x11    | 350                                  | 0.210                        |
| 6.3      | 470      | 8x11.5    | 440                                  | 0.140                        |
| 6.3      | 680      | 8x11.5    | 650                                  | 0.130                        |
| 6.3      | 820      | 10x12.5   | 870                                  | 0.090                        |
| 6.3      | 1000     | 8x16      | 850                                  | 0.080                        |
| 6.3      | 1200     | 8x20      | 1060                                 | 0.075                        |
| 6.3      | 1200     | 10x16     | 1220                                 | 0.064                        |
| 6.3      | 1500     | 10x20     | 1410                                 | 0.050                        |
| 6.3      | 1800     | 13x16     | 1460                                 | 0.049                        |
| 6.3      | 2200     | 10x25     | 1660                                 | 0.046                        |
| 6.3      | 2700     | 16x16     | 1950                                 | 0.042                        |
| 6.3      | 3300     | 13x20     | 1910                                 | 0.038                        |
| 6.3      | 3900     | 13x25     | 2240                                 | 0.029                        |
| 6.3      | 3900     | 18x16     | 2220                                 | 0.040                        |
| 6.3      | 4700     | 13x30     | 2660                                 | 0.027                        |
| 6.3      | 5600     | 13x35     | 2890                                 | 0.024                        |
| 6.3      | 5600     | 16x20     | 2540                                 | 0.027                        |
| 6.3      | 6800     | 13x40     | 3360                                 | 0.017                        |
| 6.3      | 6800     | 16x25     | 2940                                 | 0.021                        |
| 6.3      | 6800     | 18x20     | 2870                                 | 0.026                        |
| 6.3      | 8200     | 16x31.5   | 3460                                 | 0.017                        |
| 6.3      | 10000    | 16x35.5   | 3620                                 | 0.015                        |
| 6.3      | 10000    | 18x25     | 3150                                 | 0.019                        |
| 6.3      | 12000    | 16x40     | 4090                                 | 0.013                        |
| 6.3      | 12000    | 18x31.5   | 4180                                 | 0.015                        |
| 6.3      | 15000    | 18x35.5   | 4230                                 | 0.014                        |
| 6.3      | 18000    | 18x40     | 4290                                 | 0.012                        |
| 10       | 100      | 5x11      | 220                                  | 0.580                        |
| 10       | 220      | 6.3x11    | 350                                  | 0.230                        |
| 10       | 330      | 6.3x11    | 450                                  | 0.220                        |
| 10       | 470      | 8x11.5    | 650                                  | 0.130                        |
| 10       | 680      | 8x16      | 850                                  | 0.096                        |
| 10       | 680      | 10x12.5   | 870                                  | 0.085                        |
| 10       | 820      | 10x16     | 950                                  | 0.075                        |
| 10       | 1000     | 8x20      | 1060                                 | 0.072                        |
| 10       | 1000     | 10x16     | 1220                                 | 0.064                        |
| 10       | 1200     | 10x20     | 1410                                 | 0.045                        |
| 10       | 1500     | 10x25     | 1560                                 | 0.043                        |
| 10       | 1500     | 13x16     | 1460                                 | 0.049                        |
| 10       | 2200     | 10x30     | 1920                                 | 0.030                        |
| 10       | 2200     | 13x20     | 1910                                 | 0.035                        |
| 10       | 2200     | 16x16     | 1950                                 | 0.042                        |
| 10       | 2700     | 18x16     | 2220                                 | 0.043                        |
| 10       | 3300     | 13x25     | 2240                                 | 0.029                        |
| 10       | 3900     | 13x30     | 2660                                 | 0.025                        |
| 10       | 3900     | 16x20     | 2540                                 | 0.027                        |
| 10       | 4700     | 13x35     | 2890                                 | 0.020                        |
| 10       | 5600     | 13x40     | 3360                                 | 0.017                        |
| 10       | 5600     | 16x25     | 2940                                 | 0.021                        |
| 10       | 5600     | 18x20     | 2870                                 | 0.026                        |
| 10       | 6800     | 16x31.5   | 3460                                 | 0.017                        |
| 10       | 6800     | 18x25     | 3150                                 | 0.019                        |
| 10       | 8200     | 16x35.5   | 3620                                 | 0.015                        |
| 10       | 8200     | 18x31.5   | 4180                                 | 0.015                        |
| 10       | 10000    | 16x40     | 4090                                 | 0.013                        |
| 10       | 10000    | 18x35.5   | 4230                                 | 0.014                        |
| 10       | 12000    | 18x40     | 4290                                 | 0.012                        |

| WV (Vdc) | Cap (uF) | Size (mm) | Ripple current (mArms/105°C /100KHz) | Max Imp.( Ω ) at 20°C/100KHz |
|----------|----------|-----------|--------------------------------------|------------------------------|
| 16       | 56       | 5x11      | 220                                  | 0.560                        |
| 16       | 100      | 6.3x11    | 300                                  | 0.220                        |
| 16       | 120      | 6.3x11    | 350                                  | 0.215                        |
| 16       | 220      | 8x11.5    | 500                                  | 0.180                        |
| 16       | 330      | 8x11.5    | 650                                  | 0.140                        |
| 16       | 470      | 8x11.5    | 740                                  | 0.100                        |
| 16       | 470      | 8x16      | 850                                  | 0.095                        |
| 16       | 470      | 10x12.5   | 870                                  | 0.085                        |
| 16       | 680      | 8x20      | 1060                                 | 0.080                        |
| 16       | 680      | 10x16     | 1220                                 | 0.060                        |
| 16       | 820      | 10x20     | 1300                                 | 0.052                        |
| 16       | 1000     | 10x20     | 1410                                 | 0.046                        |
| 16       | 1000     | 13x16     | 1460                                 | 0.050                        |
| 16       | 1200     | 10x25     | 1660                                 | 0.044                        |
| 16       | 1500     | 10x25     | 1770                                 | 0.036                        |
| 16       | 1500     | 10x30     | 1920                                 | 0.031                        |
| 16       | 1500     | 13x20     | 1910                                 | 0.037                        |
| 16       | 1500     | 16x16     | 1950                                 | 0.042                        |
| 16       | 1800     | 10x25     | 1800                                 | 0.036                        |
| 16       | 1800     | 13x25     | 2080                                 | 0.030                        |
| 16       | 2200     | 13x25     | 2240                                 | 0.026                        |
| 16       | 2200     | 18x16     | 2220                                 | 0.043                        |
| 16       | 2700     | 13x30     | 2660                                 | 0.023                        |
| 16       | 2700     | 16x20     | 2540                                 | 0.027                        |
| 16       | 3300     | 13x35     | 2890                                 | 0.022                        |
| 16       | 3900     | 13x40     | 3360                                 | 0.017                        |
| 16       | 3900     | 16x25     | 2940                                 | 0.021                        |
| 16       | 3900     | 18x20     | 2870                                 | 0.026                        |
| 16       | 4700     | 16x31.5   | 3460                                 | 0.017                        |
| 16       | 4700     | 18x25     | 3150                                 | 0.020                        |
| 16       | 5600     | 16x35.5   | 3620                                 | 0.015                        |
| 16       | 5600     | 18x31.5   | 4180                                 | 0.015                        |
| 16       | 6800     | 16x40     | 4090                                 | 0.013                        |
| 16       | 8200     | 18x35.5   | 4230                                 | 0.014                        |
| 16       | 10000    | 18x40     | 4290                                 | 0.012                        |
| 25       | 47       | 5x11      | 220                                  | 0.560                        |
| 25       | 56       | 5x11      | 260                                  | 0.560                        |
| 25       | 100      | 6.3x11    | 350                                  | 0.250                        |
| 25       | 220      | 8x11.5    | 650                                  | 0.150                        |
| 25       | 330      | 8x16      | 850                                  | 0.092                        |
| 25       | 330      | 10x12.5   | 870                                  | 0.082                        |
| 25       | 470      | 8x20      | 1060                                 | 0.074                        |
| 25       | 470      | 10x12.5   | 1100                                 | 0.074                        |
| 25       | 470      | 10x16     | 1220                                 | 0.068                        |
| 25       | 680      | 10x20     | 1410                                 | 0.050                        |
| 25       | 680      | 13x16     | 1460                                 | 0.049                        |
| 25       | 820      | 10x25     | 1660                                 | 0.041                        |
| 25       | 1000     | 10x30     | 1920                                 | 0.032                        |
| 25       | 1000     | 13x20     | 1910                                 | 0.036                        |
| 25       | 1000     | 16x16     | 1950                                 | 0.042                        |
| 25       | 1200     | 18x16     | 2220                                 | 0.043                        |
| 25       | 1500     | 13x25     | 2240                                 | 0.028                        |
| 25       | 1800     | 13x30     | 2660                                 | 0.024                        |
| 25       | 1800     | 16x20     | 2540                                 | 0.027                        |
| 25       | 2200     | 13x30     | 2695                                 | 0.025                        |
| 25       | 2200     | 13x35     | 2890                                 | 0.023                        |
| 25       | 2200     | 18x20     | 2870                                 | 0.026                        |
| 25       | 2700     | 13x40     | 3360                                 | 0.017                        |
| 25       | 2700     | 16x25     | 2940                                 | 0.022                        |

| WV (Vdc) | Cap (uF) | Size (mm) | Ripple current (mArms/105°C /100KHz) | Max Imp.( Ω ) at 20°C/100KHz |
|----------|----------|-----------|--------------------------------------|------------------------------|
| 25       | 3300     | 16x31.5   | 3460                                 | 0.017                        |
| 25       | 3300     | 18x25     | 3150                                 | 0.019                        |
| 25       | 3900     | 16x35.5   | 3620                                 | 0.015                        |
| 25       | 3900     | 18x31.5   | 4180                                 | 0.015                        |
| 25       | 4700     | 16x40     | 4090                                 | 0.013                        |
| 25       | 4700     | 18x35.5   | 4230                                 | 0.014                        |
| 25       | 5600     | 18x40     | 4290                                 | 0.012                        |
| 35       | 33       | 5x11      | 230                                  | 0.550                        |
| 35       | 47       | 5x11      | 300                                  | 0.450                        |
| 35       | 56       | 6.3x11    | 360                                  | 0.210                        |
| 35       | 100      | 6.3x11    | 480                                  | 0.180                        |
| 35       | 150      | 8x11.5    | 680                                  | 0.140                        |
| 35       | 220      | 8x11.5    | 870                                  | 0.095                        |
| 35       | 220      | 8x16      | 1000                                 | 0.090                        |
| 35       | 220      | 10x12.5   | 1060                                 | 0.080                        |
| 35       | 270      | 8x20      | 1180                                 | 0.070                        |
| 35       | 330      | 10x16     | 1380                                 | 0.062                        |
| 35       | 470      | 10x20     | 1800                                 | 0.048                        |
| 35       | 470      | 13x16     | 1560                                 | 0.049                        |
| 35       | 560      | 10x25     | 1900                                 | 0.042                        |
| 35       | 680      | 10x30     | 2000                                 | 0.035                        |
| 35       | 680      | 13x20     | 2100                                 | 0.034                        |
| 35       | 680      | 16x16     | 2050                                 | 0.042                        |
| 35       | 1000     | 13x20     | 2180                                 | 0.038                        |
| 35       | 1000     | 13x25     | 2400                                 | 0.028                        |
| 35       | 1000     | 18x16     | 2220                                 | 0.043                        |
| 35       | 1200     | 13x30     | 2800                                 | 0.024                        |
| 35       | 1200     | 16x20     | 2800                                 | 0.028                        |
| 35       | 1500     | 13x35     | 3000                                 | 0.022                        |
| 35       | 1800     | 13x40     | 3360                                 | 0.017                        |
| 35       | 1800     | 16x25     | 2940                                 | 0.020                        |
| 35       | 1800     | 18x20     | 2870                                 | 0.026                        |
| 35       | 2200     | 16x31.5   | 3460                                 | 0.017                        |
| 35       | 2200     | 18x20     | 2930                                 | 0.025                        |
| 35       | 2200     | 18x25     | 3150                                 | 0.019                        |
| 35       | 2700     | 16x35.5   | 3620                                 | 0.018                        |
| 35       | 2700     | 18x31.5   | 4180                                 | 0.016                        |
| 35       | 3300     | 16x40     | 4090                                 | 0.013                        |
| 35       | 3300     | 18x35.5   | 4230                                 | 0.014                        |
| 35       | 3900     | 18x40     | 4300                                 | 0.012                        |
| 50       | 22       | 5x11      | 220                                  | 0.650                        |
| 50       | 47       | 6.3x11    | 270                                  | 0.370                        |
| 50       | 56       | 6.3x11    | 300                                  | 0.290                        |
| 50       | 100      | 8x11.5    | 680                                  | 0.160                        |
| 50       | 120      | 8x16      | 760                                  | 0.120                        |
| 50       | 150      | 10x12.5   | 800                                  | 0.120                        |
| 50       | 180      | 8x20      | 1000                                 | 0.090                        |
| 50       | 220      | 10x16     | 1300                                 | 0.082                        |
| 50       | 270      | 10x20     | 1350                                 | 0.060                        |
| 50       | 270      | 13x16     | 1270                                 | 0.061                        |
| 50       | 330      | 10x25     | 1600                                 | 0.057                        |
| 50       | 470      | 10x30     | 1800                                 | 0.048                        |
| 50       | 470      | 13x20     | 1740                                 | 0.045                        |
| 50       | 470      | 16x16     | 1710                                 | 0.055                        |
| 50       | 560      | 13x25     | 1960                                 | 0.042                        |
| 50       | 560      | 18x16     | 1940                                 | 0.054                        |
| 50       | 680      | 13x30     | 2320                                 | 0.030                        |
| 50       | 820      | 13x35     | 2520                                 | 0.025                        |
| 50       | 820      | 16x20     | 2220                                 | 0.034                        |
| 50       | 1000     | 13x35     | 2650                                 | 0.024                        |
| 50       | 1000     | 13x40     | 2930                                 | 0.021                        |

| WV (Vdc) | Cap (uF) | Size (mm) | Ripple current (mArms/105°C /100KHz) | Max Imp.( Ω ) at 20°C/100KHz |
|----------|----------|-----------|--------------------------------------|------------------------------|
| 50       | 1000     | 16x25     | 2565                                 | 0.025                        |
| 50       | 1000     | 18x20     | 2500                                 | 0.036                        |
| 50       | 1200     | 16x31.5   | 3020                                 | 0.030                        |
| 50       | 1200     | 18x25     | 2750                                 | 0.026                        |
| 50       | 1500     | 16x35.5   | 3160                                 | 0.019                        |
| 50       | 1800     | 16x40     | 3720                                 | 0.016                        |
| 50       | 1800     | 18x31.5   | 3645                                 | 0.021                        |
| 50       | 2200     | 18x35.5   | 3690                                 | 0.017                        |
| 50       | 2700     | 18x40     | 3810                                 | 0.014                        |
| 50       | 3300     | 18x40     | 3810                                 | 0.014                        |
| 63       | 15       | 5x11      | 65                                   | 1.800                        |
| 63       | 33       | 6.3x11    | 260                                  | 1.200                        |
| 63       | 47       | 8x11.5    | 360                                  | 0.660                        |
| 63       | 56       | 8x11.5    | 380                                  | 0.600                        |
| 63       | 82       | 8x16      | 460                                  | 0.440                        |
| 63       | 82       | 10x12.5   | 500                                  | 0.430                        |
| 63       | 100      | 10x12.5   | 640                                  | 0.340                        |
| 63       | 120      | 8x20      | 700                                  | 0.320                        |
| 63       | 120      | 10x16     | 760                                  | 0.300                        |
| 63       | 180      | 10x20     | 880                                  | 0.190                        |
| 63       | 180      | 13x16     | 800                                  | 0.180                        |
| 63       | 220      | 10x20     | 995                                  | 0.188                        |
| 63       | 220      | 10x25     | 1100                                 | 0.185                        |
| 63       | 270      | 10x30     | 1200                                 | 0.120                        |
| 63       | 270      | 13x20     | 1200                                 | 0.160                        |
| 63       | 270      | 16x16     | 1200                                 | 0.110                        |
| 63       | 330      | 13x25     | 1600                                 | 0.120                        |
| 63       | 390      | 18x16     | 1610                                 | 0.096                        |
| 63       | 470      | 13x30     | 1800                                 | 0.100                        |
| 63       | 470      | 16x20     | 1500                                 | 0.077                        |
| 63       | 560      | 13x35     | 2000                                 | 0.070                        |
| 63       | 560      | 16x25     | 2000                                 | 0.073                        |
| 63       | 680      | 13x40     | 2200                                 | 0.070                        |
| 63       | 680      | 18x20     | 1600                                 | 0.072                        |
| 63       | 820      | 16x31.5   | 2400                                 | 0.054                        |
| 63       | 820      | 18x25     | 1800                                 | 0.052                        |
| 63       | 1000     | 16x35.5   | 2500                                 | 0.048                        |
| 63       | 1000     | 18*25     | 2290                                 | 0.052                        |
| 63       | 1000     | 18x31.5   | 2800                                 | 0.047                        |
| 63       | 1200     | 16x40     | 2920                                 | 0.040                        |
| 63       | 1200     | 18x31.5   | 2850                                 | 0.045                        |
| 63       | 1200     | 18x35.5   | 3000                                 | 0.039                        |
| 63       | 1500     | 18x40     | 3200                                 | 0.036                        |
| 100      | 6.8      | 5x11      | 65                                   | 1.800                        |
| 100      | 15       | 6.3x11    | 130                                  | 1.000                        |
| 100      | 27       | 8x11.5    | 300                                  | 0.610                        |
| 100      | 39       | 8x16      | 340                                  | 0.360                        |
| 100      | 47       | 10x12.5   | 400                                  | 0.420                        |
| 100      | 56       | 8x20      | 410                                  | 0.260                        |
| 100      | 68       | 10x16     | 460                                  | 0.300                        |
| 100      | 82       | 10x20     | 600                                  | 0.210                        |
| 100      | 82       | 13x16     | 540                                  | 0.180                        |
| 100      | 100      | 10x25     | 800                                  | 0.200                        |
| 100      | 120      | 10x30     | 830                                  | 0.120                        |
| 100      | 120      | 13x20     | 900                                  | 0.160                        |
| 100      | 150      | 13x20     | 1000                                 | 0.110                        |
| 100      | 150      | 16x16     | 1000                                 | 0.110                        |
| 100      | 180      | 13x25     | 1010                                 | 0.096                        |
| 100      | 180      | 18x16     | 1180                                 | 0.096                        |
| 100      | 220      | 13x30     | 1210                                 | 0.080                        |
| 100      | 220      | 16x20     | 1140                                 | 0.077                        |

| WV (Vdc) | Cap (uF) | Size (mm) | Ripple current (mA <sub>rms</sub> /105°C /100KHz) | Max Imp.( Ω ) at 20°C/100KHz |
|----------|----------|-----------|---|------------------------------|
| 100      | 270      | 13x35     | 1450  | 0.070                        |
| 100      | 270      | 16x25     | 1480  | 0.073                        |
| 100      | 330      | 13x40     | 1600  | 0.071                        |
| 100      | 330      | 18x20     | 1400  | 0.072                        |
| 100      | 390      | 16x31.5   | 1700  | 0.055                        |
| 100      | 390      | 18x25     | 1740  | 0.054                        |

| WV (Vdc) | Cap (uF) | Size (mm) | Ripple current (mA <sub>rms</sub> /105°C /100KHz) | Max Imp.( Ω ) at 20°C/100KHz |
|----------|----------|-----------|---|------------------------------|
| 100      | 470      | 16x35.5   | 1910  | 0.047                        |
| 100      | 470      | 18x31.5   | 1730  | 0.047                        |
| 100      | 560      | 16x40     | 2140  | 0.036                        |
| 100      | 680      | 18x35.5   | 2000  | 0.042                        |
| 100      | 820      | 18x40     | 2480  | 0.040                        |
| 100      | 1000     | 18x40     | 2580  | 0.038                        |