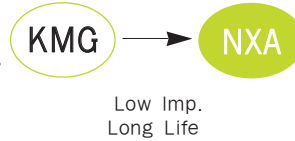


## NXA Series

• 105°C 4,000 ~ 10,000Hrs assured.

- Non-solvent proof.
- Low Impedance, Long Life.
- For SMPS, IP-Board, Adaptor, Noise Filter, Charger.
- RoHS compliant.
- Halogen-free capacitors are also available.



## SPECIFICATIONS

| Item   | Characteristics  |                                 |                 |             |              |           |                    |                             |           |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
|--|--|---------------------------------|-----------------|-------------|--------------|-----------|--------------------|-----------------------------|-----------|-------------|-------------|-------------------|------|---------------------------------------|------|------|------|-----------------|-------------------------------|-----------|-------------|-------------------|--------------|---|---|---|---|---|---|---|---|
| Rated Voltage Range                                | 6.3 ~ 100 V <sub>dc</sub>  |                                 |                 |             |              |           |                    |                             |           |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Operating Temperature Range                        | -40 ~ +105°C   |                                 |                 |             |              |           |                    |                             |           |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Capacitance Tolerance                              | ±20%(M) (at 20°C, 120Hz)   |                                 |                 |             |              |           |                    |                             |           |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Leakage Current                                    | I = 0.01CV(μA) or 3μA, whichever is greater.<br>Where, I:Max. Leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(V <sub>dc</sub> )<br>(at 20°C, 2 minutes)  |                                 |                 |             |              |           |                    |                             |           |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Dissipation Factor(Tanδ)                           | <table border="1"> <tr> <td>Rated Voltage(V<sub>dc</sub>)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>80</td> <td>100</td> </tr> <tr> <td>Tanδ(Max.)</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.09</td> <td>0.08</td> </tr> </table> <p>When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase. (at 20°C, 120Hz)</p>   | Rated Voltage(V <sub>dc</sub> ) | 6.3             | 10          | 16           | 25        | 35                 | 50                          | 63        | 80          | 100         | Tanδ(Max.)        | 0.22 | 0.19                                  | 0.16 | 0.14 | 0.12 | 0.10            | 0.09                          | 0.09      | 0.08        |                   |              |   |   |   |   |   |   |   |   |
| Rated Voltage(V <sub>dc</sub> )                    | 6.3  | 10                              | 16              | 25          | 35           | 50        | 63                 | 80                          | 100       |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Tanδ(Max.)   | 0.22   | 0.19                            | 0.16            | 0.14        | 0.12         | 0.10      | 0.09               | 0.09                        | 0.08      |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Temperature Characteristics (Max. Impedance ratio) | <table border="1"> <tr> <td>Rated Voltage(V<sub>dc</sub>)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>80</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> <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> <td>3</td> </tr> </table> <p>(at 120Hz)</p>  | Rated Voltage(V <sub>dc</sub> ) | 6.3             | 10          | 16           | 25        | 35                 | 50                          | 63        | 80          | 100         | Z(-25°C)/Z(+20°C) | 4    | 3                                     | 2    | 2    | 2    | 2               | 2                             | 2         | 2           | Z(-40°C)/Z(+20°C) | 8            | 6 | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| Rated Voltage(V <sub>dc</sub> )                    | 6.3  | 10                              | 16              | 25          | 35           | 50        | 63                 | 80                          | 100       |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Z(-25°C)/Z(+20°C)                                  | 4  | 3                               | 2               | 2           | 2            | 2         | 2                  | 2                           | 2         |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Z(-40°C)/Z(+20°C)                                  | 8  | 6                               | 4               | 3           | 3            | 3         | 3                  | 3                           | 3         |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Load Life  | <p>The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) at 105°C for the specified period of time.</p> <table border="1"> <tr> <td></td> <td>V<sub>dc</sub></td> <td>φ5~φ6.3</td> <td>φ8~φ10</td> <td>φ12.5~φ18</td> </tr> <tr> <td>Capacitance change</td> <td>≤ ±25% of the initial value</td> <td>6.3~10(V)</td> <td>4,000 hours</td> <td>6,000 hours</td> <td>8,000 hours</td> </tr> <tr> <td>Tanδ</td> <td>≤ 200% of the initial specified value</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Leakage current</td> <td>≤ The initial specified value</td> <td>16~100(V)</td> <td>5,000 hours</td> <td>7,000 hours</td> <td>10,000 hours</td> </tr> </table> |                                 | V <sub>dc</sub> | φ5~φ6.3     | φ8~φ10       | φ12.5~φ18 | Capacitance change | ≤ ±25% of the initial value | 6.3~10(V) | 4,000 hours | 6,000 hours | 8,000 hours       | Tanδ | ≤ 200% of the initial specified value |      |      |      | Leakage current | ≤ The initial specified value | 16~100(V) | 5,000 hours | 7,000 hours       | 10,000 hours |   |   |   |   |   |   |   |   |
|  | V <sub>dc</sub>  | φ5~φ6.3                         | φ8~φ10          | φ12.5~φ18   |              |           |                    |                             |           |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Capacitance change                                 | ≤ ±25% of the initial value  | 6.3~10(V)                       | 4,000 hours     | 6,000 hours | 8,000 hours  |           |                    |                             |           |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Tanδ   | ≤ 200% of the initial specified value  |                                 |                 |             |              |           |                    |                             |           |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Leakage current                                    | ≤ The initial specified value  | 16~100(V)                       | 5,000 hours     | 7,000 hours | 10,000 hours |           |                    |                             |           |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Shelf Life   | <p>The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 500 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements.</p> <p>Capacitance change ≤ ±25% of the initial value<br/>Tanδ ≤ 200% of the initial specified value<br/>Leakage current ≤ The initial specified value</p>   |                                 |                 |             |              |           |                    |                             |           |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |
| Others   | Satisfied characteristics KS C IEC 60384-4   |                                 |                 |             |              |           |                    |                             |           |             |             |                   |      |                                       |      |      |      |                 |                               |           |             |                   |              |   |   |   |   |   |   |   |   |

## DIMENSIONS OF NXA Series

Unit(mm)

Marking : DARK BROWN SLEEVE, SILVER INK

|     |               |     |     |              |      |     |     |
|-----|---------------|-----|-----|--------------|------|-----|-----|
| φD  | 5             | 6.3 | 8   | 10           | 12.5 | 16  | 18  |
| φd  | 0.5           | 0.5 | 0.6 | 0.6          | 0.6  | 0.8 | 0.8 |
| F   | 2.0           | 2.5 | 3.5 | 5.0          | 5.0  | 7.5 | 7.5 |
| φD' | φD + 0.5 max. |     |     |              |      |     |     |
| L'  | L + 1.5 max.  |     |     | L + 2.0 max. |      |     |     |

※ φ10 x 12L, L' ≤ L + 1.5



# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

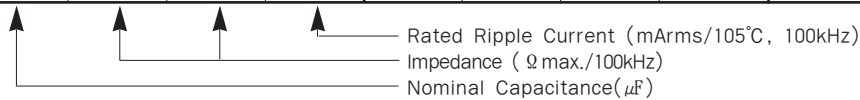
## RATINGS OF NXA Series

| V <sub>dc</sub><br>∅D×L(mm) | 6.3    |       |       |        | 10     |       |       |        | 16     |       |       |        |
|-----------------------------|--------|-------|-------|--------|--------|-------|-------|--------|--------|-------|-------|--------|
|                             | μF     | IMP.  |       | Ripple | μF     | IMP.  |       | Ripple | μF     | IMP.  |       | Ripple |
|                             |        | 20°C  | -10°C |        |        | 20°C  | -10°C |        |        | 20°C  | -10°C |        |
| 5×11                        | 150    | 0.58  | 2.3   | 210    | 100    | 0.58  | 2.3   | 210    | 56     | 0.58  | 2.3   | 210    |
| 6.3×11                      | 330    | 0.22  | 0.87  | 340    | 220    | 0.22  | 0.87  | 340    | 120    | 0.22  | 0.87  | 340    |
| 8×11.5                      | 680    | 0.130 | 0.52  | 640    | 470    | 0.130 | 0.52  | 640    | 330    | 0.130 | 0.52  | 640    |
| 8×15                        | 1,000  | 0.087 | 0.35  | 840    | 680    | 0.087 | 0.35  | 840    | 470    | 0.087 | 0.35  | 840    |
| 8×20                        | 1,200  | 0.069 | 0.27  | 1,050  | 1,000  | 0.069 | 0.27  | 1,050  | 680    | 0.069 | 0.27  | 1,050  |
| 10×12                       | 820    | 0.080 | 0.32  | 865    | 680    | 0.080 | 0.32  | 865    | 470    | 0.080 | 0.32  | 865    |
| 10×12.5                     | 820    | 0.080 | 0.32  | 865    | 680    | 0.080 | 0.32  | 865    | 470    | 0.080 | 0.32  | 865    |
| 10×16                       | 1,200  | 0.060 | 0.24  | 1,210  | 1,000  | 0.060 | 0.24  | 1,210  | 680    | 0.060 | 0.24  | 1,210  |
| 10×20                       | 1,500  | 0.046 | 0.18  | 1,400  | 1,200  | 0.046 | 0.18  | 1,400  | 1,000  | 0.046 | 0.18  | 1,400  |
| 10×25                       | 2,200  | 0.042 | 0.17  | 1,650  | 1,500  | 0.042 | 0.17  | 1,650  | 1,200  | 0.042 | 0.17  | 1,650  |
| 10×30                       | 2,700  | 0.031 | 0.12  | 1,910  | 2,200  | 0.031 | 0.12  | 1,910  | 1,500  | 0.031 | 0.12  | 1,910  |
| 12.5×16                     | 1,800  | 0.049 | 0.16  | 1,450  | 1,500  | 0.049 | 0.16  | 1,450  | 1,000  | 0.049 | 0.16  | 1,450  |
| 12.5×20                     | 3,300  | 0.035 | 0.12  | 1,900  | 2,200  | 0.035 | 0.12  | 1,900  | 1,500  | 0.035 | 0.12  | 1,900  |
| 12.5×25                     | 3,900  | 0.027 | 0.089 | 2,230  | 3,300  | 0.027 | 0.089 | 2,230  | 2,200  | 0.027 | 0.089 | 2,230  |
| 12.5×30                     | 4,700  | 0.024 | 0.078 | 2,650  | 3,900  | 0.024 | 0.078 | 2,650  | 2,700  | 0.024 | 0.078 | 2,650  |
| 12.5×35                     | 5,600  | 0.020 | 0.065 | 2,880  | 4,700  | 0.020 | 0.065 | 2,880  | 3,300  | 0.020 | 0.065 | 2,880  |
| 16×15                       | 2,700  | 0.042 | 0.12  | 1,940  | 2,200  | 0.042 | 0.12  | 1,940  | 1,500  | 0.042 | 0.12  | 1,940  |
| 16×20                       | 5,600  | 0.027 | 0.078 | 2,530  | 3,900  | 0.027 | 0.078 | 2,530  | 2,700  | 0.027 | 0.078 | 2,530  |
| 16×25                       | 6,800  | 0.021 | 0.060 | 2,930  | 5,600  | 0.021 | 0.06  | 2,930  | 3,900  | 0.021 | 0.06  | 2,930  |
| 16×31.5                     | 8,200  | 0.017 | 0.050 | 3,450  | 6,800  | 0.017 | 0.05  | 3,450  | 4,700  | 0.017 | 0.05  | 3,450  |
| 16×35.5                     | 10,000 | 0.015 | 0.044 | 3,610  | 8,200  | 0.015 | 0.044 | 3,610  | 5,600  | 0.015 | 0.044 | 3,610  |
| 16×40                       | 12,000 | 0.013 | 0.038 | 4,080  | 10,000 | 0.013 | 0.038 | 4,080  | 6,800  | 0.013 | 0.038 | 4,080  |
| 18×20                       | 6,800  | 0.026 | 0.067 | 2,860  | 5,600  | 0.026 | 0.067 | 2,860  | 3,900  | 0.026 | 0.067 | 2,860  |
| 18×25                       | 10,000 | 0.019 | 0.049 | 3,140  | 6,800  | 0.019 | 0.049 | 3,140  | 4,700  | 0.019 | 0.049 | 3,140  |
| 18×31.5                     | 12,000 | 0.017 | 0.047 | 4,170  | 8,200  | 0.017 | 0.047 | 4,170  | 5,600  | 0.017 | 0.047 | 4,170  |
| 18×35.5                     | 15,000 | 0.016 | 0.045 | 4,220  | 10,000 | 0.016 | 0.045 | 4,220  | 8,200  | 0.016 | 0.045 | 4,220  |
| 18×40                       | 18,000 | 0.015 | 0.043 | 4,280  | 12,000 | 0.015 | 0.043 | 4,280  | 10,000 | 0.015 | 0.043 | 4,280  |

| V <sub>dc</sub><br>∅D×L(mm) | 25    |       |       |        | 35    |       |       |        | 50    |       |       |        |
|-----------------------------|-------|-------|-------|--------|-------|-------|-------|--------|-------|-------|-------|--------|
|                             | μF    | IMP.  |       | Ripple | μF    | IMP.  |       | Ripple | μF    | IMP.  |       | Ripple |
|                             |       | 20°C  | -10°C |        |       | 20°C  | -10°C |        |       | 20°C  | -10°C |        |
| 5×11                        | 47    | 0.58  | 2.3   | 210    | 33    | 0.58  | 2.3   | 210    | 1     | 4.0   | 16.0  | 50     |
|                             |       |       |       |        |       |       |       |        | 2.2   | 2.5   | 10.0  | 51     |
|                             |       |       |       |        |       |       |       |        | 3.3   | 2.2   | 8.8   | 53     |
|                             |       |       |       |        |       |       |       |        | 4.7   | 3.0   | 12.0  | 80     |
|                             |       |       |       |        |       |       |       |        | 10    | 1.5   | 6.0   | 100    |
|                             |       |       |       |        |       |       |       |        | 22    | 0.70  | 2.8   | 180    |
| 6.3×11                      | 100   | 0.22  | 0.87  | 340    | 56    | 0.22  | 0.87  | 340    | 22    | 0.30  | 1.2   | 295    |
|                             |       |       |       |        |       |       |       |        | 47    | 0.30  | 1.2   | 340    |
| 8×11.5                      | 220   | 0.13  | 0.52  | 640    | 150   | 0.13  | 0.52  | 640    | 100   | 0.17  | 0.68  | 555    |
| 8×15                        | 330   | 0.087 | 0.35  | 840    | 220   | 0.087 | 0.35  | 840    | 120   | 0.12  | 0.48  | 730    |
| 8×20                        | 470   | 0.069 | 0.27  | 1,050  | 270   | 0.069 | 0.27  | 1,050  | 180   | 0.090 | 0.36  | 910    |
| 10×12                       | 330   | 0.080 | 0.32  | 865    | 220   | 0.080 | 0.32  | 865    | 150   | 0.12  | 0.48  | 760    |
| 10×12.5                     | 330   | 0.080 | 0.32  | 865    | 220   | 0.080 | 0.32  | 865    | 150   | 0.12  | 0.48  | 760    |
| 10×16                       | 470   | 0.060 | 0.24  | 1,210  | 330   | 0.060 | 0.24  | 1,210  | 220   | 0.084 | 0.34  | 1,050  |
| 10×20                       | 680   | 0.046 | 0.18  | 1,400  | 470   | 0.046 | 0.18  | 1,400  | 270   | 0.060 | 0.24  | 1,220  |
| 10×25                       | 820   | 0.042 | 0.17  | 1,650  | 560   | 0.042 | 0.17  | 1,650  | 330   | 0.055 | 0.22  | 1,440  |
| 10×30                       | 1,000 | 0.031 | 0.12  | 1,910  | 680   | 0.031 | 0.12  | 1,910  | 470   | 0.043 | 0.17  | 1,690  |
| 12.5×16                     | 680   | 0.049 | 0.16  | 1,450  | 470   | 0.049 | 0.16  | 1,450  | 270   | 0.061 | 0.20  | 1,260  |
| 12.5×20                     | 1,000 | 0.035 | 0.12  | 1,900  | 680   | 0.035 | 0.12  | 1,900  | 470   | 0.045 | 0.15  | 1,660  |
| 12.5×25                     | 1,500 | 0.027 | 0.089 | 2,230  | 1,000 | 0.027 | 0.089 | 2,230  | 560   | 0.034 | 0.11  | 1,950  |
| 12.5×30                     | 1,800 | 0.024 | 0.078 | 2,650  | 1,200 | 0.024 | 0.078 | 2,650  | 680   | 0.030 | 0.10  | 2,310  |
| 12.5×35                     | 2,200 | 0.020 | 0.065 | 2,880  | 1,500 | 0.020 | 0.065 | 2,880  | 820   | 0.025 | 0.083 | 2,510  |
| 16×15                       | 1,000 | 0.042 | 0.12  | 1,940  | 680   | 0.042 | 0.12  | 1,940  | 470   | 0.055 | 0.17  | 1,690  |
| 16×20                       | 1,800 | 0.027 | 0.078 | 2,530  | 1,200 | 0.027 | 0.078 | 2,530  | 820   | 0.034 | 0.10  | 2,210  |
| 16×25                       | 2,700 | 0.021 | 0.060 | 2,930  | 1,800 | 0.021 | 0.060 | 2,930  | 1,000 | 0.025 | 0.075 | 2,555  |
| 16×31.5                     | 3,300 | 0.017 | 0.050 | 3,450  | 2,200 | 0.017 | 0.050 | 3,450  | 1,200 | 0.022 | 0.066 | 3,010  |
| 16×35.5                     | 3,900 | 0.015 | 0.044 | 3,610  | 2,700 | 0.015 | 0.044 | 3,610  | 1,500 | 0.019 | 0.057 | 3,150  |
| 16×40                       | 4,700 | 0.013 | 0.038 | 4,080  | 3,300 | 0.013 | 0.038 | 4,080  | 1,800 | 0.016 | 0.048 | 3,710  |
| 18×20                       | 2,200 | 0.026 | 0.067 | 2,860  | 1,800 | 0.026 | 0.067 | 2,860  | 1,000 | 0.036 | 0.097 | 2,490  |
| 18×25                       | 3,300 | 0.019 | 0.049 | 3,140  | 2,200 | 0.019 | 0.049 | 3,140  | 1,200 | 0.026 | 0.070 | 2,740  |
| 18×31.5                     | 3,900 | 0.017 | 0.047 | 4,170  | 2,700 | 0.017 | 0.047 | 4,170  | 1,800 | 0.021 | 0.057 | 3,635  |
| 18×35.5                     | 4,700 | 0.016 | 0.045 | 4,220  | 3,300 | 0.016 | 0.045 | 4,220  | 2,200 | 0.017 | 0.046 | 3,680  |
| 18×40                       | 5,600 | 0.015 | 0.043 | 4,280  | 3,900 | 0.015 | 0.043 | 4,280  | 2,700 | 0.016 | 0.045 | 3,800  |

**RATINGS OF NXA Series**

| V <sub>dc</sub><br>#D×L(mm) | 63    |       |       |        | 80    |       |       |        | 100 |       |       |        |
|-----------------------------|-------|-------|-------|--------|-------|-------|-------|--------|-----|-------|-------|--------|
|                             | μF    | IMP.  |       | Ripple | μF    | IMP.  |       | Ripple | μF  | IMP.  |       | Ripple |
|                             |       | 20°C  | -10°C |        |       | 20°C  | -10°C |        |     | 20°C  | -10°C |        |
| 5 × 11                      | 15    | 0.88  | 3.5   | 165    |       |       |       |        | 4.7 | 1.5   | 6.0   | 105    |
|                             |       |       |       |        |       |       |       |        | 6.8 | 1.4   | 5.6   | 125    |
| 6.3 × 11                    | 33    | 0.35  | 1.4   | 265    |       |       |       |        | 15  | 0.57  | 2.3   | 205    |
| 8 × 11.5                    | 47    | 0.22  | 0.88  | 500    |       |       |       |        | 22  | 0.50  | 1.9   | 310    |
|                             | 56    | 0.22  | 0.88  | 500    |       |       |       |        | 27  | 0.36  | 1.4   | 355    |
| 8 × 15                      | 82    | 0.16  | 0.64  | 665    |       |       |       |        | 39  | 0.25  | 1.0   | 450    |
| 8 × 20                      | 120   | 0.12  | 0.48  | 820    |       |       |       |        | 68  | 0.19  | 0.76  | 565    |
| 10 × 12                     | 82    | 0.11  | 0.44  | 690    | 68    | 0.17  | 0.66  | 480    | 47  | 0.17  | 0.66  | 480    |
| 10 × 12.5                   | 82    | 0.11  | 0.44  | 690    | 68    | 0.17  | 0.66  | 480    | 47  | 0.17  | 0.66  | 480    |
| 10 × 16                     | 120   | 0.076 | 0.31  | 950    | 100   | 0.11  | 0.47  | 600    | 68  | 0.11  | 0.47  | 600    |
| 10 × 20                     | 180   | 0.056 | 0.23  | 1,150  | 120   | 0.084 | 0.34  | 800    | 82  | 0.084 | 0.34  | 800    |
|                             |       |       |       |        |       |       |       |        | 100 | 0.084 | 0.34  | 800    |
| 10 × 25                     | 220   | 0.046 | 0.19  | 1,350  | 150   | 0.069 | 0.28  | 900    | 100 | 0.069 | 0.28  | 900    |
|                             |       |       |       |        |       |       |       |        | 120 | 0.069 | 0.28  | 900    |
| 12.5 × 16                   | 180   | 0.072 | 0.29  | 1,150  | 150   | 0.11  | 0.34  | 750    | 100 | 0.11  | 0.34  | 750    |
| 12.5 × 20                   | 270   | 0.041 | 0.13  | 1,500  | 220   | 0.062 | 0.18  | 1,100  | 150 | 0.062 | 0.18  | 1,100  |
| 12.5 × 25                   | 390   | 0.031 | 0.093 | 1,900  | 330   | 0.047 | 0.14  | 1,250  | 220 | 0.047 | 0.14  | 1,250  |
| 12.5 × 30                   | 470   | 0.028 | 0.084 | 2,300  | 390   | 0.042 | 0.13  | 1,500  | 270 | 0.042 | 0.13  | 1,500  |
| 12.5 × 35                   | 560   | 0.024 | 0.072 | 2,500  | 470   | 0.036 | 0.11  | 1,650  | 330 | 0.036 | 0.11  | 1,650  |
|                             |       |       |       |        |       |       |       |        | 390 | 0.036 | 0.11  | 1,650  |
| 16 × 20                     | 470   | 0.032 | 0.096 | 2,000  | 330   | 0.048 | 0.15  | 1,350  | 220 | 0.048 | 0.15  | 1,350  |
| 16 × 25                     | 680   | 0.025 | 0.075 | 2,600  | 470   | 0.038 | 0.12  | 1,700  | 330 | 0.036 | 0.11  | 1,650  |
| 16 × 31.5                   | 820   | 0.021 | 0.063 | 2,850  | 680   | 0.032 | 0.095 | 1,850  | 470 | 0.032 | 0.095 | 1,850  |
| 16 × 35.5                   | 1,000 | 0.019 | 0.057 | 2,900  | 820   | 0.029 | 0.086 | 2,000  | 560 | 0.029 | 0.086 | 2,000  |
| 16 × 40                     | 1,200 | 0.018 | 0.054 | 3,400  | 1,000 | 0.027 | 0.081 | 2,200  | 680 | 0.027 | 0.081 | 2,200  |
| 18 × 20                     | 680   | 0.030 | 0.090 | 2,500  | 470   | 0.038 | 0.12  | 1,700  | 330 | 0.045 | 0.14  | 1,500  |
| 18 × 25                     | 1,000 | 0.024 | 0.072 | 2,800  | 680   | 0.036 | 0.11  | 1,750  | 470 | 0.036 | 0.11  | 1,750  |
| 18 × 31.5                   | 1,200 | 0.020 | 0.060 | 3,300  | 820   | 0.030 | 0.090 | 1,900  | 560 | 0.030 | 0.09  | 1,900  |
| 18 × 35.5                   | 1,500 | 0.018 | 0.054 | 3,400  | 1,000 | 0.027 | 0.081 | 2,200  | 680 | 0.027 | 0.081 | 2,200  |
| 18 × 40                     | 1,800 | 0.017 | 0.051 | 3,500  | 1,200 | 0.026 | 0.077 | 2,700  | 820 | 0.026 | 0.077 | 2,700  |



**RATED RIPPLE CURRENT MULTIPLIERS**

Frequency Multipliers

| Freq.(Hz)<br>Cap.(μF) | 120  | 1k   | 10k  | 50K  | 100k |
|-----------------------|------|------|------|------|------|
| 1 ~ 180               | 0.40 | 0.75 | 0.90 | 0.95 | 1.00 |
| 220 ~ 560             | 0.50 | 0.85 | 0.94 | 0.96 | 1.00 |
| 680 ~ 1,800           | 0.60 | 0.87 | 0.95 | 0.97 | 1.00 |
| 2,200 ~ 3,900         | 0.75 | 0.90 | 0.95 | 0.97 | 1.00 |
| 4,700 ~ 18,000        | 0.85 | 0.95 | 0.98 | 0.99 | 1.00 |