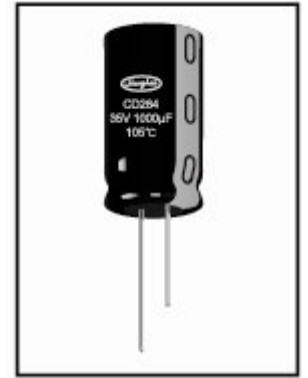
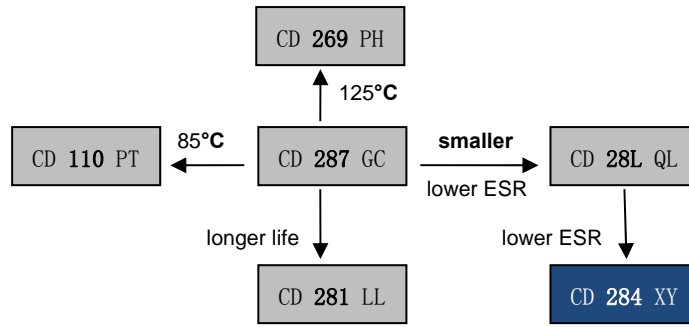


# CD 284 XY Series



2000 ~ 5000h at 105°C

- Lowest Impedance
- High Ripple Current
- Switching Power Supplies

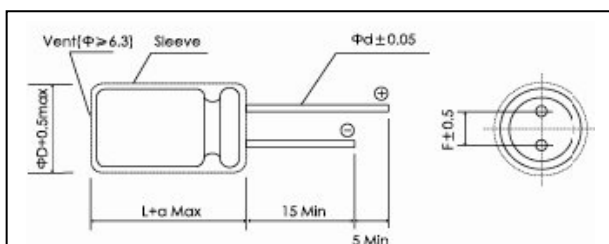


| Items   | Characteristics   |                  |      |      |      |      |      |      |     |     |            |      |      |      |      |      |      |      |      |
|---|---|------------------|------|------|------|------|------|------|-----|-----|------------|------|------|------|------|------|------|------|------|
| Operating Temperature Range(°C)                         | -40~ +105   |                  |      |      |      |      |      |      |     |     |            |      |      |      |      |      |      |      |      |
| Voltage Range (V)                                       | 6.3~ 100  |                  |      |      |      |      |      |      |     |     |            |      |      |      |      |      |      |      |      |
| Capacitance Range(μF)                                   | 6.8 ~ 6800  |                  |      |      |      |      |      |      |     |     |            |      |      |      |      |      |      |      |      |
| Capacitance Tolerance (20°C,120Hz)                      | ±20%  |                  |      |      |      |      |      |      |     |     |            |      |      |      |      |      |      |      |      |
| Leakage Current (μA)                                    | After 2 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 3, whichever is greater.<br>C:Nominal Capacitance(μF) V:Rated Voltage(V)   |                  |      |      |      |      |      |      |     |     |            |      |      |      |      |      |      |      |      |
| Dissipation Factor (20°C, 120Hz)                        | <table border="1"> <thead> <tr> <th>Rated Voltage(V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Tan δ(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>0.08</td> </tr> </tbody> </table> | Rated Voltage(V) | 6.3  | 10   | 16   | 25   | 35   | 50   | 63  | 100 | Tan δ(max) | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 |
|   | Rated Voltage(V)  | 6.3              | 10   | 16   | 25   | 35   | 50   | 63   | 100 |     |            |      |      |      |      |      |      |      |      |
| Tan δ(max)  | 0.22  | 0.19             | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 |     |     |            |      |      |      |      |      |      |      |      |
| For Capacitances>1000μF add 0.02 to every 1000μF        |   |                  |      |      |      |      |      |      |     |     |            |      |      |      |      |      |      |      |      |
| Stability at Low Temperature (Impedance Ratio at 120Hz) | Rated Voltage(V)  | 6.3~100          |      |      |      |      |      |      |     |     |            |      |      |      |      |      |      |      |      |
|   | Z <sub>-25°C</sub> /Z <sub>+20°C</sub>  | 2                |      |      |      |      |      |      |     |     |            |      |      |      |      |      |      |      |      |
|   | Z <sub>-40°C</sub> /Z <sub>+20°C</sub>  | 3                |      |      |      |      |      |      |     |     |            |      |      |      |      |      |      |      |      |

|   | Useful Life  |  | Load Life   | Endurance Test  | Shelf Life   |
|---|--|--|---|---|--|
| Lifetime  | $\phi \leq 6.3$ :4000h<br>$\phi 8$ :6000h<br>$\phi 10$ :8000h<br>$\phi 12.5$ :10000h | $\phi \geq 8$ :>250000h                        | $\phi \leq 6.3$ :2000h<br>$\phi 8$ :3000h<br>$\phi 10$ :4000h<br>$\phi 12.5$ :5000h | $\phi \leq 6.3$ :2500h<br>$\phi 8$ :3500h<br>$\phi 10$ :5000h<br>$\phi 12.5$ :6000h | 1000h  |
| Leakage Current   | Not more than specified value  |  | Not more than specified value   | Not more than specified value   | Not more than specified value  |
| Capacitance Change  | Within ±50% of initial value   |  | Within ±25% of initial value  | Within ±25% of initial value  | Within ±20% of initial value   |
| Dissipation Factor  | Not more than 300% of specified value  |  | Not more than 200% of specified value   | Not more than 200% of specified value   | Not more than 200% of specified value  |
| Condition:<br>Applied Voltage<br>Applied Current<br>Applied Temperature | U <sub>R</sub><br>I <sub>R</sub><br>105°C  | U <sub>R</sub><br>1.4 x I <sub>R</sub><br>40°C | U <sub>R</sub><br>I <sub>R</sub><br>105°C   | U <sub>R</sub><br>I <sub>R</sub> = 0<br>105°C                                       | After test:<br>U <sub>R</sub> to be applied<br>for 30min>24h<br>before<br>measurement<br>U <sub>R</sub> = 0<br>I <sub>R</sub> = 0<br>105°C |

## Dimensions

mm



| ΦD | 5   | 6.3 | 8   | 10  | 12.5 | 16  | 18 |
|----|-----|-----|-----|-----|------|-----|----|
| F  | 2.0 | 2.5 | 3.5 | 5.0 |      | 7.5 |    |
| Φd | 0.5 |     | 0.6 |     |      | 0.8 |    |
| a  | 1.5 |     |     | 2.0 |      |     |    |

## Frequency Coefficient

| Frequency<br>Cap(μF) | 120Hz | 1kHz | 10kHz | 100kHz |
|----------------------|-------|------|-------|--------|
| 6.8~33               | 0.42  | 0.70 | 0.90  | 1.00   |
| 39~270               | 0.50  | 0.73 | 0.92  | 1.00   |
| 330~680              | 0.55  | 0.88 | 0.98  | 1.00   |
| 820~1800             | 0.66  | 0.90 | 0.99  | 1.00   |
| 2200~6800            | 0.70  | 0.92 | 1.00  | 1.00   |

## Temperature Coefficient

| Temperature(°C) | ≤65 | +80 | +105 |
|-----------------|-----|-----|------|
| Coefficient     | 2.0 | 1.7 | 1.0  |



## Ratings for CD 284 XY Series

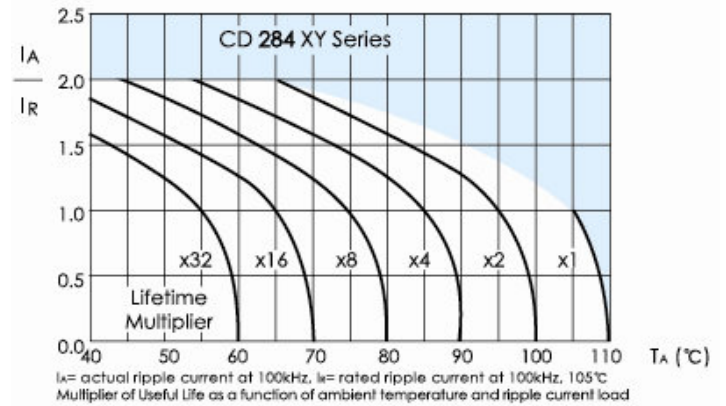
| U <sub>R</sub><br>(Surge Voltage)<br>Code | Rated Capacitance                     | Max ESR<br>20°C,<br>120Hz | Max Imp<br>20°C,<br>100kHz | Max Imp<br>-10°C,<br>100kHz | Rated Ripple Current<br>105°C,<br>100kHz | Size<br>ΦD×L | P/N                 |
|---|---------------------------------------|---------------------------|----------------------------|-----------------------------|--|--------------|---------------------|
| (v)                                       | (μF)                                  | (Ω)                       | (Ω)                        | (Ω)                         | (mArms)                                  | (mm)         | -                   |
| <b>6.3</b><br><b>(7.2)</b><br><b>0J</b>   | 150                                   | 1.946                     | 0.3                        | 1.0                         | 250                                      | 5X11.5       | ECR0JXY151M□□050011 |
|   | 330                                   | 0.885                     | 0.13                       | 0.41                        | 405                                      | 6.3x11.5     | ECR0JXY331M□□063011 |
|   | 560                                   | 0.521                     | 0.072                      | 0.22                        | 760                                      | 8x11.5       | ECR0JXY561M□□080011 |
|   | 820                                   | 0.356                     | 0.056                      | 0.17                        | 995                                      | 8x16         | ECR0JXY821M□□080016 |
|   | 1000                                  | 0.292                     | 0.053                      | 0.16                        | 1030                                     | 10x12.5      | ECR0JXY102M□□100012 |
|   | 1200                                  | 0.243                     | 0.041                      | 0.13                        | 1250                                     | 8X20         | ECR0JXY122M□□080020 |
|   |                                       | 0.243                     | 0.038                      | 0.12                        | 1430                                     | 10x16        | ECR0JXY122M□□100016 |
|   | 1500                                  | 0.195                     | 0.023                      | 0.069                       | 1820                                     | 10x20        | ECR0JXY152M□□100020 |
|   | 2200                                  | 0.145                     | 0.022                      | 0.066                       | 2150                                     | 10x25        | ECR0JXY222M□□100025 |
|   | 3300                                  | 0.105                     | 0.021                      | 0.053                       | 2360                                     | 12.5X20      | ECR0JXY332M□□125020 |
|   | 3900                                  | 0.088                     | 0.018                      | 0.045                       | 2770                                     | 12.5x25      | ECR0JXY392M□□125025 |
|   | 4700                                  | 0.079                     | 0.016                      | 0.041                       | 3290                                     | 12.5X30      | ECR0JXY472M□□125030 |
|   | 5600                                  | 0.071                     | 0.015                      | 0.039                       | 3400                                     | 12.5x35      | ECR0JXY562M□□125035 |
|   |                                       | 0.071                     | 0.018                      | 0.045                       | 3140                                     | 16x20        | ECR0JXY562M□□160020 |
|   | 6800                                  | 0.062                     | 0.016                      | 0.043                       | 3460                                     | 16x25        | ECR0JXY682M□□160025 |
|   | <b>10</b><br><b>(13)</b><br><b>1A</b> | 100                       | 2.521                      | 0.30                        | 1.0                                      | 250          | 5x11.5              |
| 220                                       |                                       | 1.146                     | 0.13                       | 0.41                        | 405                                      | 6.3x11.5     | ECR1AXY221M□□063011 |
| 470                                       |                                       | 0.536                     | 0.072                      | 0.22                        | 760                                      | 8x11.5       | ECR1AXY471M□□080011 |
| 680                                       |                                       | 0.371                     | 0.056                      | 0.17                        | 995                                      | 8x16         | ECR1AXY681M□□080016 |
|   |                                       | 0.371                     | 0.053                      | 0.16                        | 1030                                     | 10x12.5      | ECR1AXY681M□□100012 |
| 1000                                      |                                       | 0.252                     | 0.041                      | 0.13                        | 1250                                     | 8x20         | ECR1AXY102M□□080020 |
|   |                                       | 0.252                     | 0.038                      | 0.12                        | 1430                                     | 10x16        | ECR1AXY102M□□100016 |
| 1200                                      |                                       | 0.210                     | 0.023                      | 0.069                       | 1820                                     | 10x20        | ECR1AXY122M□□100020 |
| 1500                                      |                                       | 0.168                     | 0.022                      | 0.066                       | 2150                                     | 10x25        | ECR1AXY152M□□100025 |
| 2200                                      |                                       | 0.127                     | 0.021                      | 0.053                       | 2360                                     | 12.5X20      | ECR1AXY222M□□125020 |
| 3300                                      |                                       | 0.092                     | 0.018                      | 0.045                       | 2770                                     | 12.5x25      | ECR1AXY332M□□125025 |
| 3900                                      |                                       | 0.078                     | 0.016                      | 0.041                       | 3290                                     | 12.5x30      | ECR1AXY392M□□125030 |
|   |                                       | 0.078                     | 0.018                      | 0.045                       | 3140                                     | 16X20        | ECR1AXY392M□□160020 |
| 4700                                      |                                       | 0.071                     | 0.015                      | 0.039                       | 3400                                     | 12.5x35      | ECR1AXY472M□□125035 |
| 5600                                      |                                       | 0.064                     | 0.016                      | 0.043                       | 3460                                     | 16X25        | ECR1AXY562M□□160025 |
| <b>16</b><br><b>(20)</b><br><b>1C</b>     |                                       | 56                        | 3.791                      | 0.30                        | 1.0                                      | 250          | 5x11.5              |
|   | 120                                   | 1.769                     | 0.13                       | 0.41                        | 405                                      | 6.3X11.5     | ECR1CXY121M□□063011 |
|   | 330                                   | 0.643                     | 0.072                      | 0.22                        | 760                                      | 8x11.5       | ECR1CXY331M□□080011 |
|   | 470                                   | 0.452                     | 0.056                      | 0.17                        | 995                                      | 8X16         | ECR1CXY471M□□080016 |
|   |                                       | 0.452                     | 0.053                      | 0.16                        | 1030                                     | 10x12.5      | ECR1CXY471M□□100012 |
|   | 680                                   | 0.312                     | 0.041                      | 0.13                        | 1250                                     | 8X20         | ECR1CXY681M□□080020 |
|   |                                       | 0.312                     | 0.038                      | 0.12                        | 1430                                     | 10x16        | ECR1CXY681M□□100016 |
|   | 1000                                  | 0.212                     | 0.023                      | 0.069                       | 1820                                     | 10x20        | ECR1CXY102M□□100020 |
|   | 1200                                  | 0.177                     | 0.022                      | 0.066                       | 2150                                     | 10x25        | ECR1CXY122M□□100025 |
|   | 1500                                  | 0.142                     | 0.021                      | 0.053                       | 2360                                     | 12.5x20      | ECR1CXY152M□□125020 |
|   | 2200                                  | 0.109                     | 0.018                      | 0.045                       | 2770                                     | 12.5x25      | ECR1CXY222M□□125025 |
|   | 2700                                  | 0.088                     | 0.016                      | 0.041                       | 3290                                     | 12.5x30      | ECR1CXY272M□□125030 |
|   |                                       | 0.088                     | 0.018                      | 0.045                       | 3140                                     | 16x20        | ECR1CXY272M□□160020 |
|   | 3300                                  | 0.080                     | 0.015                      | 0.039                       | 3400                                     | 12.5x35      | ECR1CXY332M□□125035 |
|   | 3900                                  | 0.068                     | 0.016                      | 0.043                       | 3460                                     | 16x25        | ECR1CXY392M□□160025 |

| U <sub>R</sub><br>(Surge Voltage)<br>Code | Rated Capacitance                     | Max ESR<br>20°C,<br>120Hz | Max Imp<br>20°C,<br>100kHz | Max Imp<br>-10°C,<br>100kHz | Rated Ripple Current<br>105°C,<br>100kHz | Size<br>ΦD×L | P/N                 |
|---|---------------------------------------|---------------------------|----------------------------|-----------------------------|--|--------------|---------------------|
| (v)                                       | (μF)                                  | (Ω)                       | (Ω)                        | (Ω)                         | (mArms)                                  | (mm)         | -                   |
| <b>25</b><br><b>(32)</b><br><b>1E</b>     | 47                                    | 3.953                     | 0.30                       | 1.0                         | 250                                      | 5x11.5       | ECR1EXY470M□□050011 |
|   | 100                                   | 1.858                     | 0.13                       | 0.41                        | 405                                      | 6.3x11.5     | ECR1EXY101M□□063011 |
|   | 220                                   | 0.844                     | 0.072                      | 0.22                        | 760                                      | 8x11.5       | ECR1EXY221M□□080011 |
|   | 330                                   | 0.563                     | 0.056                      | 0.17                        | 995                                      | 8x16         | ECR1EXY331M□□080016 |
|   |                                       | 0.563                     | 0.053                      | 0.16                        | 1030                                     | 10x12.5      | ECR1EXY331M□□100012 |
|   | 470                                   | 0.395                     | 0.041                      | 0.13                        | 1250                                     | 8X20         | ECR1EXY471M□□080020 |
|   |                                       | 0.395                     | 0.038                      | 0.12                        | 1430                                     | 10x16        | ECR1EXY471M□□100016 |
|   | 680                                   | 0.273                     | 0.023                      | 0.069                       | 1820                                     | 10x20        | ECR1EXY681M□□100020 |
|   | 820                                   | 0.227                     | 0.022                      | 0.066                       | 2150                                     | 10x25        | ECR1EXY821M□□100025 |
|   | 1000                                  | 0.186                     | 0.021                      | 0.053                       | 2360                                     | 12.5X20      | ECR1EXY102M□□125020 |
|   | 1500                                  | 0.124                     | 0.018                      | 0.045                       | 2770                                     | 12.5x25      | ECR1EXY152M□□125025 |
|   | 1800                                  | 0.103                     | 0.016                      | 0.041                       | 3290                                     | 12.5X30      | ECR1EXY182M□□125030 |
|   |                                       | 0.103                     | 0.018                      | 0.045                       | 3140                                     | 16x20        | ECR1EXY182M□□160020 |
|   | 2200                                  | 0.097                     | 0.015                      | 0.039                       | 3400                                     | 12.5x35      | ECR1EXY222M□□125035 |
|   | 2700                                  | 0.079                     | 0.016                      | 0.043                       | 3460                                     | 16x25        | ECR1EXY272M□□160025 |
|   | <b>35</b><br><b>(44)</b><br><b>1V</b> | 33                        | 4.825                      | 0.30                        | 1.0                                      | 250          | 5x11.5              |
| 56  |                                       | 2.843                     | 0.13                       | 0.41                        | 405                                      | 6.3X11.5     | ECR1VXY560M□□063011 |
| 150                                       |                                       | 1.062                     | 0.072                      | 0.22                        | 760                                      | 8x11.5       | ECR1VXY151M□□080011 |
| 220                                       |                                       | 0.724                     | 0.056                      | 0.17                        | 995                                      | 8x16         | ECR1VXY221M□□080016 |
|   |                                       | 0.724                     | 0.053                      | 0.16                        | 1030                                     | 10x12.5      | ECR1VXY221M□□100012 |
| 270                                       |                                       | 0.590                     | 0.041                      | 0.13                        | 1250                                     | 8X20         | ECR1VXY271M□□080020 |
| 330                                       |                                       | 0.483                     | 0.038                      | 0.12                        | 1430                                     | 10x16        | ECR1VXY331M□□100016 |
| 470                                       |                                       | 0.339                     | 0.023                      | 0.069                       | 1820                                     | 10X20        | ECR1VXY471M□□100020 |
| 560                                       |                                       | 0.284                     | 0.022                      | 0.066                       | 2150                                     | 10x25        | ECR1VXY561M□□100025 |
| 680                                       |                                       | 0.234                     | 0.021                      | 0.053                       | 2360                                     | 12.5x20      | ECR1VXY681M□□125020 |
| 1000                                      |                                       | 0.159                     | 0.018                      | 0.045                       | 2770                                     | 12.5x25      | ECR1VXY102M□□125025 |
| 1200                                      |                                       | 0.133                     | 0.016                      | 0.041                       | 3290                                     | 12.5x30      | ECR1VXY122M□□125030 |
|   |                                       | 0.133                     | 0.018                      | 0.045                       | 3140                                     | 16X20        | ECR1VXY122M□□160020 |
| 1500                                      |                                       | 0.106                     | 0.015                      | 0.039                       | 3400                                     | 12.5x35      | ECR1VXY152M□□125035 |
| 1800                                      |                                       | 0.088                     | 0.016                      | 0.043                       | 3460                                     | 16X25        | ECR1VXY182M□□160025 |
| <b>50</b><br><b>(63)</b><br><b>1H</b>     |                                       | 22                        | 6.032                      | 0.34                        | 1.18                                     | 238          | 5x11.5              |
|   | 56                                    | 2.370                     | 0.14                       | 0.50                        | 385                                      | 6.3X11.5     | ECR1HXY560M□□063011 |
|   | 100                                   | 1.327                     | 0.074                      | 0.22                        | 724                                      | 8x11.5       | ECR1HXY101M□□080011 |
|   | 120                                   | 1.106                     | 0.061                      | 0.18                        | 950                                      | 8X16         | ECR1HXY121M□□080016 |
|   | 150                                   | 0.885                     | 0.061                      | 0.18                        | 979                                      | 10x12.5      | ECR1HXY151M□□100012 |
|   | 180                                   | 0.737                     | 0.046                      | 0.14                        | 1190                                     | 8X20         | ECR1HXY181M□□080020 |
|   | 220                                   | 0.603                     | 0.042                      | 0.12                        | 1370                                     | 10x16        | ECR1HXY221M□□100016 |
|   | 270                                   | 0.491                     | 0.030                      | 0.090                       | 1580                                     | 10x20        | ECR1HXY271M□□100020 |
|   | 330                                   | 0.402                     | 0.028                      | 0.085                       | 1870                                     | 10x25        | ECR1HXY331M□□100025 |
|   | 470                                   | 0.282                     | 0.027                      | 0.068                       | 2050                                     | 12.5x20      | ECR1HXY471M□□125020 |
|   | 560                                   | 0.237                     | 0.023                      | 0.059                       | 2410                                     | 12.5X25      | ECR1HXY561M□□125025 |
|   | 680                                   | 0.195                     | 0.021                      | 0.052                       | 2860                                     | 12.5x30      | ECR1HXY681M□□125030 |
|   |                                       | 0.162                     | 0.019                      | 0.051                       | 2960                                     | 12.5X35      | ECR1HXY821M□□125035 |
|   | 820                                   | 0.162                     | 0.023                      | 0.059                       | 2730                                     | 16x20        | ECR1HXY821M□□160020 |
|   |                                       | 0.133                     | 0.021                      | 0.056                       | 3010                                     | 16X25        | ECR1HXY102M□□160025 |

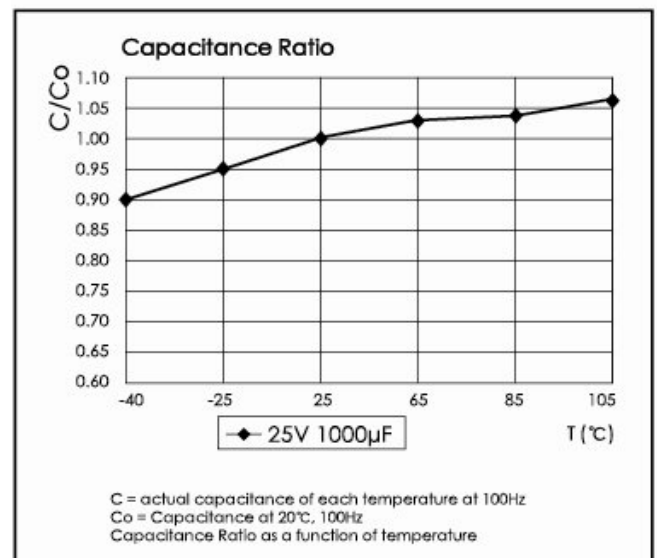
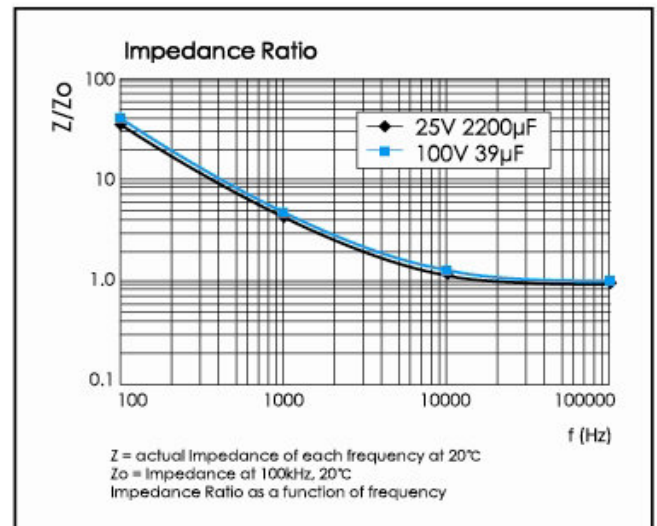
## Ratings for CD 284 XY Series

| U <sub>R</sub><br>(Surge Voltage)<br>Code | Rated Capacitance | Max ESR<br>20°C,<br>120Hz | Max Imp<br>20°C,<br>100kHz | Max Imp<br>-10°C,<br>100kHz | Rated Ripple Current<br>105°C,<br>100kHz | Size<br>ΦD×L        | P/N                 |
|---|-------------------|---------------------------|----------------------------|-----------------------------|--|---------------------|---------------------|
| (v)                                       | (μF)              | (Ω)                       | (Ω)                        | (Ω)                         | (mA <sub>rms</sub> )                     | (mm)                | -                   |
| 63<br>(79)<br>1J                          | 15                | 7.962                     | 0.88                       | 3.5                         | 165                                      | 5x 11.5             | ECR1JXY150M□□050011 |
|   | 33                | 3.619                     | 0.35                       | 1.4                         | 265                                      | 6.3x 11.5           | ECR1JXY330M□□063011 |
|   | 56                | 2.133                     | 0.22                       | 0.88                        | 500                                      | 8x11.5              | ECR1JXY560M□□080011 |
|   | 82                | 1.456                     | 0.16                       | 0.64                        | 665                                      | 8x16                | ECR1JXY820M□□080016 |
|   |                   | 1.456                     | 0.15                       | 0.60                        | 685                                      | 10x12.5             | ECR1JXY820M□□100012 |
|   | 120               | 0.995                     | 0.12                       | 0.48                        | 820                                      | 8x20                | ECR1JXY121M□□080020 |
|   |                   | 0.995                     | 0.11                       | 0.44                        | 945                                      | 10x16               | ECR1JXY121M□□100016 |
|   | 180               | 0.663                     | 0.080                      | 0.32                        | 1100                                     | 10x20               | ECR1JXY181M□□100020 |
|   |                   | 0.663                     | 0.082                      | 0.27                        | 1135                                     | 12.5x16             | ECR1JXY181M□□125016 |
|   | 220               | 0.543                     | 0.073                      | 0.29                        | 1300                                     | 10x25               | ECR1JXY221M□□100025 |
|   | 270               | 0.442                     | 0.060                      | 0.20                        | 1495                                     | 12.5x20             | ECR1JXY271M□□125020 |
|   | 330               | 0.362                     | 0.043                      | 0.14                        | 1850                                     | 12.5x25             | ECR1JXY331M□□125025 |
|   | 470               | 0.254                     | 0.039                      | 0.13                        | 2250                                     | 12.5x30             | ECR1JXY471M□□125030 |
|   |                   | 0.254                     | 0.045                      | 0.14                        | 1990                                     | 16x20               | ECR1JXY471M□□160020 |
|   | 560               | 0.213                     | 0.033                      | 0.11                        | 2450                                     | 12.5x35             | ECR1JXY561M□□125035 |
|   |                   | 0.213                     | 0.032                      | 0.096                       | 2550                                     | 16x25               | ECR1JXY561M□□160025 |
|   | 680               | 0.176                     | 0.029                      | 0.096                       | 2780                                     | 12.5x40             | ECR1JXY681M□□125040 |
|   |                   | 0.176                     | 0.038                      | 0.10                        | 2450                                     | 18x20               | ECR1JXY681M□□180020 |
|   | 820               | 0.146                     | 0.026                      | 0.078                       | 2810                                     | 16x31.5             | ECR1JXY821M□□160031 |
|   |                   | 0.146                     | 0.031                      | 0.084                       | 2780                                     | 18x25               | ECR1JXY821M□□180025 |
| 1000                                      | 0.119             | 0.021                     | 0.063                      | 2835                        | 16x35.5                                  | ECR1JXY102M□□160035 |                     |
|   | 0.119             | 0.025                     | 0.068                      | 3270                        | 18x31.5                                  | ECR1JXY102M□□180031 |                     |
| 1200                                      | 0.100             | 0.019                     | 0.057                      | 3340                        | 16x40                                    | ECR1JXY122M□□160040 |                     |
|   | 0.100             | 0.020                     | 0.054                      | 3310                        | 18x35.5                                  | ECR1JXY122M□□180035 |                     |
| 1500                                      | 0.080             | 0.018                     | 0.049                      | 3420                        | 18x40                                    | ECR1JXY152M□□180040 |                     |
| 100<br>(125)<br>2A                        | 6.8               | 15.611                    | 1.40                       | 5.6                         | 125                                      | 5X11.5              | ECR2AXY6R8M□□050011 |
|   | 15                | 7.077                     | 0.57                       | 2.3                         | 205                                      | 6.3x11.5            | ECR2AXY150M□□063011 |
|   | 27                | 3.932                     | 0.36                       | 1.4                         | 355                                      | 8x11.5              | ECR2AXY270M□□080011 |
|   | 39                | 2.722                     | 0.25                       | 1.0                         | 450                                      | 8x16                | ECR2AXY390M□□080016 |
|   | 47                | 2.259                     | 0.24                       | 0.96                        | 450                                      | 10x12.5             | ECR2AXY470M□□100012 |
|   | 56                | 1.896                     | 0.19                       | 0.76                        | 565                                      | 8x20                | ECR2AXY560M□□080020 |
|   | 68                | 1.561                     | 0.18                       | 0.72                        | 580                                      | 10x16               | ECR2AXY680M□□100016 |
|   | 82                | 1.295                     | 0.13                       | 0.52                        | 750                                      | 10x20               | ECR2AXY820M□□100020 |
|   |                   | 1.295                     | 0.13                       | 0.43                        | 735                                      | 12.5x16             | ECR2AXY820M□□125016 |
|   | 100               | 1.062                     | 0.12                       | 0.48                        | 880                                      | 10x25               | ECR2AXY101M□□100025 |
|   | 120               | 0.885                     | 0.094                      | 0.31                        | 1045                                     | 12.5x20             | ECR2AXY121M□□125020 |
|   | 180               | 0.590                     | 0.071                      | 0.23                        | 1195                                     | 12.5x25             | ECR2AXY181M□□125025 |
|   | 220               | 0.483                     | 0.063                      | 0.21                        | 1410                                     | 12.5x30             | ECR2AXY221M□□125030 |
|   |                   | 0.483                     | 0.071                      | 0.21                        | 1295                                     | 16x20               | ECR2AXY221M□□160020 |
|   | 270               | 0.393                     | 0.052                      | 0.17                        | 1560                                     | 12.5x35             | ECR2AXY271M□□125035 |
|   |                   | 0.393                     | 0.053                      | 0.16                        | 1600                                     | 16x25               | ECR2AXY271M□□160025 |
|   | 330               | 0.322                     | 0.046                      | 0.15                        | 1700                                     | 12.5x40             | ECR2AXY331M□□125040 |
|   |                   | 0.272                     | 0.041                      | 0.12                        | 1750                                     | 16x31.5             | ECR2AXY391M□□160031 |
|   | 390               | 0.272                     | 0.049                      | 0.13                        | 1620                                     | 18x25               | ECR2AXY391M□□180025 |
|   |                   | 0.226                     | 0.033                      | 0.10                        | 1890                                     | 16x35.5             | ECR2AXY471M□□160035 |
| 470                                       | 0.226             | 0.039                     | 0.11                       | 1775                        | 18x31.5                                  | ECR2AXY471M□□180031 |                     |
|   | 0.190             | 0.030                     | 0.090                      | 2080                        | 16x40                                    | ECR2AXY561M□□160040 |                     |
| 560                                       | 0.190             | 0.031                     | 0.084                      | 2060                        | 18x35.5                                  | ECR2AXY561M□□180035 |                     |
|   | 680               | 0.156                     | 0.028                      | 0.076                       | 2570                                     | 18x40               | ECR2AXY681M□□180040 |

### Lifetime Diagram



### Typical Curves



Customer products are available on request.