

## UVY Wide Temperature Range



- One rank smaller case sizes than UVZ.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).



### Specifications

| Item  | Performance Characteristics  |   |            |            |   |   |            |   |   |            |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
|---|--|---|------------|------------|---|---|------------|---|---|------------|------------|------------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|----|-----------------|----|---|---|---|---|---|---|---|----|
| Category Temperature Range  | -55 to +105°C (6.3 to 100V), -40 to +105°C (160 to 400V), -25 to +105°C (450V)   |   |            |            |   |   |            |   |   |            |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
| Rated Voltage Range   | 6.3 to 450V  |   |            |            |   |   |            |   |   |            |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
| Rated Capacitance Range   | 0.47 to 33000µF  |   |            |            |   |   |            |   |   |            |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
| Capacitance Tolerance   | ±20% at 120Hz, 20°C  |   |            |            |   |   |            |   |   |            |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
| Leakage Current   | <table border="1"> <tr> <th>Rated voltage (V)</th> <th>6.3 to 100</th> <th>160 to 450</th> </tr> <tr> <td>After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV or 4 (µA), whichever is greater.</td> <td colspan="2">After 1 minute's application of rated voltage at 20°C, CV ≤ 1000: I = 0.1CV + 40 (µA) or less</td> </tr> <tr> <td>After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV or 3 (µA), whichever is greater.</td> <td colspan="2">After 1 minute's application of rated voltage at 20°C, CV &gt; 1000: I = 0.04CV + 100 (µA) or less</td> </tr> </table> | Rated voltage (V)                             | 6.3 to 100 | 160 to 450 | After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV or 4 (µA), whichever is greater. | After 1 minute's application of rated voltage at 20°C, CV ≤ 1000: I = 0.1CV + 40 (µA) or less |            | After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV or 3 (µA), whichever is greater. | After 1 minute's application of rated voltage at 20°C, CV > 1000: I = 0.04CV + 100 (µA) or less |            |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
|   | Rated voltage (V)  | 6.3 to 100                                    | 160 to 450 |            |   |   |            |   |   |            |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
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| Tangent of loss angle (tan δ)   | For capacitance of more than 1000µF, add 0.02 for every increase of 1000µF. Measurement frequency : 120Hz at 20°C<br><table border="1"> <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> <th>160 to 250</th> <th>350 to 450</th> </tr> <tr> <td>tan δ (MAX.)</td> <td>0.28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> <td>0.20</td> <td>0.25</td> </tr> </table>  | Rated voltage (V)                             | 6.3        | 10         | 16  | 25  | 35         | 50  | 63  | 100        | 160 to 250 | 350 to 450 | tan δ (MAX.)           | 0.28            | 0.24 | 0.20 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.20 | 0.25 |    |                 |    |   |   |   |   |   |   |   |    |
| Rated voltage (V)   | 6.3  | 10  | 16         | 25         | 35  | 50  | 63         | 100   | 160 to 250  | 350 to 450 |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
| tan δ (MAX.)  | 0.28   | 0.24  | 0.20       | 0.16       | 0.14  | 0.12  | 0.10       | 0.08  | 0.20  | 0.25       |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
| Stability at Low Temperature  | Measurement frequency : 120Hz  |   |            |            |   |   |            |   |   |            |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
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| Rated voltage (V)   | 6.3  | 10  | 16         | 25         | 35 to 50  | 63 to 100   | 160 to 200 | 250 to 350  | 400   | 450        |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
| Impedance ratio (MAX.)  | Z-25°C / Z+20°C  | 5   | 4          | 3          | 2   | 2   | 2          | 3   | 4   | 6          | 15         |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
|   | Z-40°C / Z+20°C  | 10  | 8          | 6          | 4   | 3   | 3          | 4   | 8   | 10         | —          |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
| Endurance   | The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 105°C.   |   |            |            |   |   |            |   |   |            |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
|   | Capacitance change   | Within ±20% of the initial capacitance value  |            |            |   |   |            |   |   |            |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
|   | Leakage current  | 200% or less than the initial specified value |            |            |   |   |            |   |   |            |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
| Shelf Life  | After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.  |   |            |            |   |   |            |   |   |            |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |
| Marking   | Printed with white color letter on black sleeve.   |   |            |            |   |   |            |   |   |            |            |            |                        |                 |      |      |      |      |      |      |      |      |      |    |                 |    |   |   |   |   |   |   |   |    |

### Radial Lead Type



|    | 5   | 6.3 | 8   | 10  | 12.5 | 16  | 18  | 20   | 22   | 25   |
|----|-----|-----|-----|-----|------|-----|-----|------|------|------|
| φD | 5   | 6.3 | 8   | 10  | 12.5 | 16  | 18  | 20   | 22   | 25   |
| P  | 2.0 | 2.5 | 3.5 | 5.0 | 5.0  | 7.5 | 7.5 | 10.0 | 10.0 | 12.5 |
| φd | 0.5 | 0.5 | 0.6 | 0.6 | 0.6  | 0.8 | 0.8 | 1.0  | 1.0  | 1.0  |
| β  | 0.5 | 0.5 | 0.5 | 0.5 | 0.5  | 0.5 | 0.5 | 0.5  | 1.0  | 1.0  |

|   |              |
|---|--------------|
| α | (L < 20) 1.5 |
|   | (L ≥ 20) 2.0 |

- Please refer to page 20 about the end seal configuration.

### Type numbering system (Example : 10V 330µF)



| φ D        | Pb-free leadwire<br>Pb-free PET sleeve |
|------------|--|
| 5          | DD                                     |
| 6.3        | ED                                     |
| 8 - 10     | PD                                     |
| 12.5 to 18 | HD                                     |
| 20 to 25   | RD                                     |

Please refer to page 20, 21, 22 about the formed or taped product spec.  
Please refer to page 4 for the minimum order quantity.

● Dimension table in next page.



## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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