

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 > 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 <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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr> <th>Rated voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35 to 50</th> <th>63 to 100</th> <th>160 to 200</th> <th>250 to 350</th> <th>400</th> <th>450</th> </tr> <tr> <td rowspan="2">Impedance ratio (MAX.)</td> <td>Z-25°C / Z+20°C</td> <td>5</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td>4</td> <td>6</td> <td>15</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>4</td> <td>8</td> <td>10</td> <td>—</td> </tr> </table> | 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 |
| 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 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.



■ Dimensions

| Cap.(μF) | V | 6.3 | | 10 | | 16 | | 25 | | 35 | | 50 | | 63 | |
|----------|-----|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|---------------------------|-----------------|
| | | Code | 0J | 1A | 1C | 1E | 1V | 1H | 1J | | | | | | |
| 2.2 | 2R2 | | | | | | | | | | | 5 × 11 | 20 | | |
| 3.3 | 3R3 | | | | | | | | | | | 5 × 11 | 25 | | |
| 4.7 | 4R7 | | | | | | | | | | | 5 × 11 | 30 | | |
| 10 | 100 | | | | | | | | | | | 5 × 11 | 46 | | |
| 22 | 220 | | | | | | | | | | | 5 × 11 | 68 | 5 × 11 | 71 |
| 33 | 330 | | | | | | | | | | | 5 × 11 | 90 | 6.3 × 11 | 100 |
| 47 | 470 | | | | | | | | | 5 × 11 | 93 | 6.3 × 11 | 115 | 6.3 × 11 | 120 |
| 68 | 680 | | | | | | | | | 6.3 × 11 | 110 | 6.3 × 11 | 150 | 8 × 11.5 | 155 |
| 100 | 101 | | | | | | | 5 × 11 | 125 | 6.3 × 11 | 150 | 8 × 11.5 | 190 | 8 × 11.5 | 200 |
| 220 | 221 | | | 5 × 11 | 155 | 6.3 × 11 | 190 | 6.3 × 11 | 200 | 8 × 11.5 | 250 | 10 × 12.5 | 300 | 10 × 16 | 335 |
| 330 | 331 | | | 6.3 × 11 | 210 | 6.3 × 11 | 225 | 8 × 11.5 | 275 | 10 × 12.5 | 350 | 10 × 16 | 410 | 10 × 20 | 510 |
| 470 | 471 | | | 6.3 × 11 | 250 | 8 × 11.5 | 315 | 10 × 12.5 | 380 | 10 × 16 | 460 | 10 × 20 | 540 | 12.5 × 20 | 640 |
| 1000 | 102 | 8 × 11.5 | 390 | 10 × 12.5 | 460 | 10 × 12.5 | 500 | 10 × 16 | 610 | 12.5 × 20 | 810 | 12.5 × 25 | 950 | 16 × 25 | 930 |
| 2200 | 222 | 10 × 16 | 635 | 10 × 16 | 705 | 10 × 20 | 710 | 12.5 × 25 | 1090 | 16 × 25 | 1260 | 16 × 31.5 | 1410 | 18 × 35.5 | 1650 |
| 3300 | 332 | 10 × 20 | 840 | 12.5 × 20 | 1000 | 12.5 × 25 | 1170 | 16 × 25 | 1400 | 16 × 31.5 | 1500 | 18 × 35.5 | 1770 | 20 × 40 | 1950 |
| 4700 | 472 | 12.5 × 20 | 1090 | 12.5 × 25 | 1260 | 16 × 25 | 1500 | 16 × 25 | 1570 | 16 × 35.5 | 1780 | 20 × 40 | 2100 | 22 × 50 | 2450 |
| 6800 | 682 | 12.5 × 25 | 1350 | 16 × 25 | 1570 | 16 × 25 | 1600 | 16 × 35.5 | 1850 | 18 × 40 | 2000 | 22 × 50 | 2500 | 25 × 50 | 2800 |
| 10000 | 103 | 16 × 25 | 1650 | 16 × 31.5 | 1820 | 16 × 35.5 | 1930 | 18 × 40 | 2000 | 22 × 50 | 2650 | 25 × 50 | 2850 | | |
| 15000 | 153 | 16 × 31.5 | 1820 | 16 × 35.5 | 2050 | 18 × 40 | 2210 | 22 × 50 | 2750 | 25 × 50 | 3100 | | | | |
| 22000 | 223 | 18 × 35.5 | 2280 | 18 × 40 | 2420 | 22 × 40 | 2710 | 25 × 50 | 3250 | | | | | | |
| 33000 | 333 | 20 × 40 | 2500 | 22 × 50 | 3210 | 25 × 50 | 3450 | | | | | | | | |
| | | | | | | | | | | | | | | Case size φ D × L (mm) | Rated ripple |

| Cap.(μF) | V | 100 | | 160 | | 200 | | 250 | | 350 | | 400 | | 450 | |
|----------|-----|-----------|------|-----------|------|-----------|-----|-----------|------|-----------|-----|-----------|-----|---------------------------|-----------------|
| | | Code | 2A | 2C | 2D | 2E | 2V | 2G | 2W | | | | | | |
| 0.47 | R47 | | | | | 6.3 × 11 | 11 | | | | | 6.3 × 11 | 8.5 | | |
| 1 | 010 | | | | | 6.3 × 11 | 16 | | | | | 6.3 × 11 | 14 | | |
| 2.2 | 2R2 | 5 × 11 | 21 | | | 6.3 × 11 | 25 | | | 6.3 × 11 | 21 | 8 × 11.5 | 27 | 8 × 11.5 | 20 |
| 3.3 | 3R3 | 5 × 11 | 29 | | | 6.3 × 11 | 30 | 6.3 × 11 | 28 | 8 × 11.5 | 30 | 8 × 11.5 | 34 | 10 × 12.5 | 28 |
| 4.7 | 4R7 | 5 × 11 | 32 | | | 6.3 × 11 | 35 | 6.3 × 11 | 35 | 8 × 11.5 | 39 | 10 × 12.5 | 42 | 10 × 12.5 | 32 |
| 10 | 100 | 5 × 11 | 50 | 8 × 11.5 | 41 | 8 × 11.5 | 57 | 10 × 12.5 | 71 | 10 × 12.5 | 64 | 10 × 16 | 64 | 10 × 20 | 56 |
| 22 | 220 | 6.3 × 11 | 93 | 10 × 12.5 | 92 | 10 × 16 | 105 | 10 × 20 | 105 | 12.5 × 20 | 105 | 12.5 × 25 | 140 | 12.5 × 25 | 100 |
| 33 | 330 | 8 × 11.5 | 130 | 10 × 16 | 125 | 10 × 20 | 140 | 10 × 20 | 140 | 12.5 × 25 | 170 | 16 × 25 | 170 | 16 × 25 | 125 |
| 47 | 470 | 8 × 11.5 | 140 | 10 × 20 | 150 | 12.5 × 20 | 195 | 12.5 × 20 | 190 | 16 × 25 | 210 | 16 × 25 | 200 | 16 × 31.5 | 155 |
| 68 | 680 | 10 × 12.5 | 190 | 12.5 × 20 | 250 | 12.5 × 25 | 250 | 16 × 25 | 270 | 16 × 25 | 285 | 16 × 31.5 | 240 | 18 × 35.5 | 185 |
| 100 | 101 | 10 × 16 | 240 | 12.5 × 25 | 310 | 16 × 25 | 320 | 16 × 25 | 310 | 18 × 35.5 | 370 | 18 × 35.5 | 310 | 18 × 40 | 200 |
| 220 | 221 | 12.5 × 20 | 390 | 16 × 31.5 | 410 | 16 × 35.5 | 500 | 18 × 35.5 | 485 | 22 × 50 | 540 | 22 × 50 | 460 | 25 × 50 | 250 |
| 330 | 331 | 12.5 × 25 | 540 | 18 × 35.5 | 570 | 18 × 40 | 675 | 20 × 40 | 710 | 25 × 50 | 710 | | | | |
| 470 | 471 | 16 × 25 | 715 | 18 × 40 | 855 | 22 × 40 | 925 | 22 × 50 | 1000 | | | | | | |
| 1000 | 102 | 18 × 35.5 | 960 | 25 × 50 | 1350 | | | | | | | | | | |
| 2200 | 222 | 22 × 50 | 1750 | | | | | | | | | | | | |
| 3300 | 332 | 25 × 50 | 2070 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | Case size φ D × L (mm) | Rated ripple |

Rated ripple current (mA rms) at 105°C 120Hz

● Frequency coefficient of rated ripple current

| V | Cap.(μF) | Frequency | | | | |
|------------|---------------|-----------|-------|-------|-------|----------------|
| | | 50Hz | 120Hz | 300Hz | 1 kHz | 10 kHz or more |
| 6.3 to 100 | 2.2 to 68 | 0.75 | 1.00 | 1.35 | 1.57 | 2.00 |
| | 100 to 470 | 0.80 | 1.00 | 1.23 | 1.34 | 1.50 |
| | 1000 to 33000 | 0.85 | 1.00 | 1.10 | 1.13 | 1.15 |
| 160 to 450 | 0.47 to 220 | 0.80 | 1.00 | 1.25 | 1.40 | 1.60 |
| | 330 to 1000 | 0.90 | 1.00 | 1.10 | 1.13 | 1.15 |

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».



JONHON

«**JONHON**» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«**FORSTAR**» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А