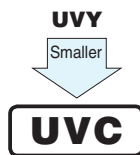


# UVC

Ultra-Miniature-Sized for adapters.



- One rank smaller case sizes than UYY.
- Suited for adapter circuit.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

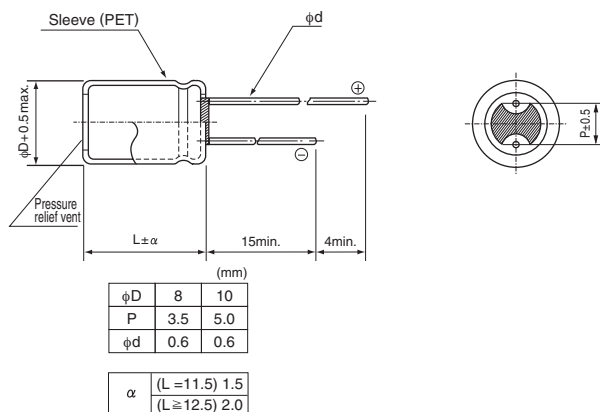


## Specifications

| Item                          | Performance Characteristics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                   |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----|--------------------|----------------------------------------------|----------------------------------------|-----------------------------------------------|---------------------|---------------------------------------------------|-------------------------------|--|
| Category Temperature Range    | -40 to +105°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |
| Rated Voltage Range           | 400V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                   |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |
| Rated Capacitance Range       | 4.7 to 18μF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                   |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |
| Capacitance Tolerance         | ±20% at 120Hz, 20°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |
| Leakage Current ※             | After 1 minute's application of rated voltage at 20°C, I = 0.04CV+100 (μA) or less                                                                                                                                                                                                                                                                                                                                                                                                                                      |                   |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |
| Tangent of loss angle (tan δ) | <table><tr><td>Rated voltage (V)</td><td>400</td></tr><tr><td>tan δ (max.)</td><td>0.25</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                               | Rated voltage (V) | 400 | tan δ (max.)       | 0.25                                         | Measurement frequency : 120Hz, at 20°C |                                               |                     |                                                   |                               |  |
| Rated voltage (V)             | 400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |
| tan δ (max.)                  | 0.25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                   |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |
| Stability at Low Temperature  | <table><tr><td colspan="2">Rated voltage (V)</td><td>400</td></tr><tr><td rowspan="2">Impedance ratio (max.)</td><td>Z(-25°C) / Z(+20°C)</td><td>6</td></tr><tr><td>Z(-40°C) / Z(+20°C)</td><td>10</td></tr></table>                                                                                                                                                                                                                                                                                                    | Rated voltage (V) |     | 400                | Impedance ratio (max.)                       | Z(-25°C) / Z(+20°C)                    | 6                                             | Z(-40°C) / Z(+20°C) | 10                                                | Measurement frequency : 120Hz |  |
| Rated voltage (V)             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 400               |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |
| Impedance ratio (max.)        | Z(-25°C) / Z(+20°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 6                 |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |
|                               | Z(-40°C) / Z(+20°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 10                |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |
| Endurance                     | <div>The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 2000 hours at 105°C, the peak voltage shall not exceed the rated voltage.</div> <table><tr><td>Capacitance change</td><td>Within ±25% of the initial capacitance value</td></tr><tr><td>tan δ</td><td>200% or less than the initial specified value</td></tr><tr><td>Leakage current</td><td>Less than or equal to the initial specified value</td></tr></table> |                   |     | Capacitance change | Within ±25% of the initial capacitance value | tan δ                                  | 200% or less than the initial specified value | Leakage current     | Less than or equal to the initial specified value |                               |  |
| Capacitance change            | Within ±25% of the initial capacitance value                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |
| tan δ                         | 200% or less than the initial specified value                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |
| Leakage current               | Less than or equal to 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 dark brown sleeve.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |     |                    |                                              |                                        |                                               |                     |                                                   |                               |  |

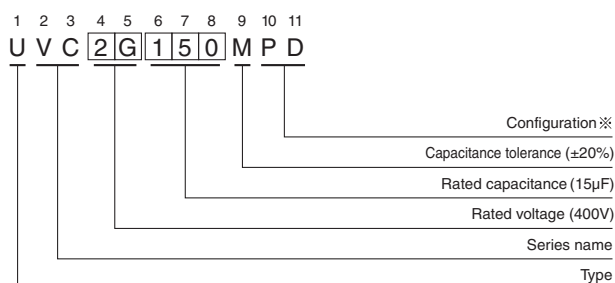
※ I : Leakage Current (µA), C : Rated Capacitance (µF), V : Rated Voltage (V)

## Radial Lead Type



- Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

## Type numbering system (Example : 400V 15µF)



※ Configuration

|        |                                        |
|--------|----------------------------------------|
| φ D    | Pb-free leadwire<br>Pb-free PET sleeve |
| 8 · 10 | PD                                     |

## Frequency coefficient of rated ripple current

| Cap.(µF)   | Frequency | 50Hz | 120Hz | 500Hz | 1 kHz | 10kHz or more |
|------------|-----------|------|-------|-------|-------|---------------|
| 4.7 to 8.2 |           | 0.65 | 1.00  | 1.20  | 1.30  | 1.50          |
| 10 to 18   |           | 0.80 | 1.00  | 1.20  | 1.30  | 1.50          |

UVC

## ■ Dimensions

| Rated Voltage<br>(V)<br>(code) | Rated Capacitance<br>( $\mu$ F) | Case Size<br>$\phi$ D $\times$ L (mm) | $\tan \delta$ | Leakage Current<br>( $\mu$ A)<br>(at 20°C after<br>1 minute) | Rated Ripple<br>(mA <sub>rms</sub> )<br>(105°C/120Hz) | Part Number |
|--------------------------------|---------------------------------|---------------------------------------|---------------|--------------------------------------------------------------|-------------------------------------------------------|-------------|
| 400<br>(2G)                    | 4.7                             | 8 $\times$ 11.5                       | 0.25          | 175.2                                                        | 70                                                    | UVC2G4R7MPD |
|                                | 5.6                             | 8 $\times$ 11.5                       | 0.25          | 189.6                                                        | 70                                                    | UVC2G5R6MPD |
|                                | 8.2                             | 8 $\times$ 16                         | 0.25          | 231.2                                                        | 85                                                    | UVC2G8R2MPD |
|                                | 10                              | 10 $\times$ 12.5                      | 0.25          | 260                                                          | 100                                                   | UVC2G100MPD |
|                                | 12                              | 8 $\times$ 20                         | 0.25          | 292                                                          | 120                                                   | UVC2G120MPD |
|                                | 15                              | 10 $\times$ 16                        | 0.25          | 340                                                          | 150                                                   | UVC2G150MPD |
|                                | 18                              | 10 $\times$ 20                        | 0.25          | 388                                                          | 200                                                   | UVC2G180MPD |

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).  
If there is no size code in the part number, please add size code "1" and then add the appropriate code.

- For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.