

## URY 12.5mmL Wide Temperature Range



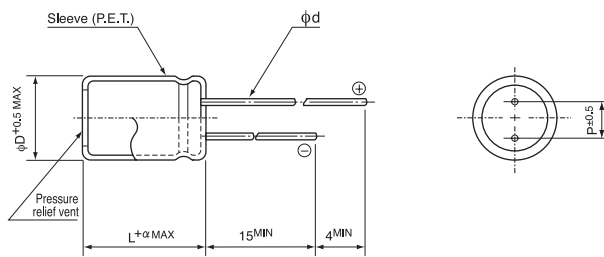
- 12.5mmL height.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



### Specifications

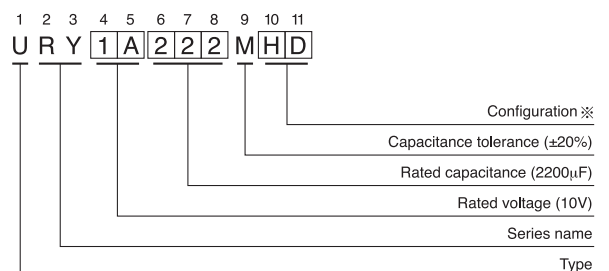
| Item                          | Performance Characteristics   |  |   |      |      |      |          |           |            |            |            |     |
|-------------------------------|---|--|---|------|------|------|----------|-----------|------------|------------|------------|-----|
| Category 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       | 6.8 to 4700µF   |  |   |      |      |      |          |           |            |            |            |     |
| Capacitance Tolerance         | ±20% at 120Hz, 20°C   |  |   |      |      |      |          |           |            |            |            |     |
| Leakage Current               | 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.<br>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, 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   |  |   |      |      |      |          |           |            |            |            |     |
|                               | Rated voltage (V)   | 6.3  | 10  | 16   | 25   | 35   | 50       | 63        | 100        | 160 to 350 | 400 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   |  |   |      |      |      |          |           |            |            |            |     |
|                               | 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 2000 hours at 105°C.  |  |   |      |      |      |          |           |            |            |            |     |
|                               | Capacitance change  |  | Within ±20% of the initial capacitance value      |      |      |      |          |           |            |            |            |     |
|                               | tan δ   |  | 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. |  |   |      |      |      |          |           |            |            |            |     |
|                               | Leakage current   |  | Less than or equal to the initial specified value |      |      |      |          |           |            |            |            |     |
| Marking                       | Printed with white color letter on black sleeve.  |  |   |      |      |      |          |           |            |            |            |     |

### Radial Lead Type



|    |           | (mm) |     |      |      |      |  |
|----|-----------|------|-----|------|------|------|--|
| α  | (φD < 20) | 1.5  |     |      |      |      |  |
|    | (φD ≥ 20) | 2.0  |     |      |      |      |  |
| φD | 12.5      | 16   | 18  | 20   | 22   | 25   |  |
| P  | 5.0       | 7.5  | 7.5 | 10.0 | 10.0 | 12.5 |  |
| φd | 0.6       | 0.8  | 0.8 | 1.0  | 1.0  | 1.0  |  |

### Type numbering system (Example : 10V 2200µF)



| ※ Configuration |  |
|-----------------|--|
| φ D             | Pb-free leadwire<br>Pb-free PET sleeve |
| 12.5 to 18      | HD                                     |
| 20 to 25        | RD                                     |

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

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.

## URY

### ■ Dimensions

| V        |      | 6.3         |      | 10        |      | 16          |      | 25          |      | 35          |     | 50                        |                 |
|----------|------|-------------|------|-----------|------|-------------|------|-------------|------|-------------|-----|---------------------------|-----------------|
| Cap.(μF) | Code | 0J          |      | 1A        |      | 1C          |      | 1E          |      | 1V          |     | 1H                        |                 |
| 330      | 331  |             |      |           |      |             |      |             |      |             |     | 12.5 × 12.5               | 450             |
| 470      | 471  |             |      |           |      |             |      |             |      | 12.5 × 12.5 | 420 | 20 × 12.5                 | 540             |
| 680      | 681  |             |      |           |      |             |      | 12.5 × 12.5 | 500  | 18 × 12.5   | 610 | 25 × 12.5                 | 700             |
| 1000     | 102  |             |      |           |      | 12.5 × 12.5 | 520  | 18 × 12.5   | 770  | 22 × 12.5   | 810 |                           |                 |
| 2200     | 222  | 12.5 × 12.5 | 580  | 18 × 12.5 | 820  | 25 × 12.5   | 1000 | 25 × 12.5   | 1170 |             |     |                           |                 |
| 3300     | 332  | 18 × 12.5   | 730  | 22 × 12.5 | 1030 |             |      |             |      |             |     |                           |                 |
| 4700     | 472  | 25 × 12.5   | 1200 |           |      |             |      |             |      |             |     | Case size<br>φ D × L (mm) | Rated<br>ripple |

| V        |      | 63          |     | 100         |     | 160         |     | 200         |     | 250       |     | 315         |     |
|----------|------|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-----------|-----|-------------|-----|
| Cap.(μF) | Code | 1J          |     | 2A          |     | 2C          |     | 2D          |     | 2E        |     | 2F          |     |
| 10       | 100  |             |     |             |     |             |     |             |     |           |     | 12.5 × 12.5 | 70  |
| 22       | 220  |             |     |             |     |             |     | 12.5 × 12.5 | 110 | 16 × 12.5 | 130 | 16 × 12.5   | 85  |
| 33       | 330  |             |     |             |     | 12.5 × 12.5 | 130 | 16 × 12.5   | 170 | 18 × 12.5 | 170 | 20 × 12.5   | 120 |
| 47       | 470  |             |     |             |     | 16 × 12.5   | 210 | 18 × 12.5   | 230 | 22 × 12.5 | 190 | 25 × 12.5   | 160 |
| 68       | 680  |             |     |             |     | 20 × 12.5   | 280 | 25 × 12.5   | 310 |           |     |             |     |
| 100      | 101  |             |     | 12.5 × 12.5 | 230 | 25 × 12.5   | 360 |             |     |           |     |             |     |
| 220      | 221  | 12.5 × 12.5 | 400 | 22 × 12.5   | 400 |             |     |             |     |           |     |             |     |
| 330      | 331  | 18 × 12.5   | 550 |             |     |             |     |             |     |           |     |             |     |
| 470      | 471  | 22 × 12.5   | 610 |             |     |             |     |             |     |           |     |             |     |

| V        |      | 350       |     | 400       |     | 450         |    |
|----------|------|-----------|-----|-----------|-----|-------------|----|
| Cap.(μF) | Code | 2V        |     | 2G        |     | 2W          |    |
| 6.8      | 6R8  |           |     |           |     | 12.5 × 12.5 | 38 |
| 10       | 100  | 16 × 12.5 | 75  | 16 × 12.5 | 65  | 16 × 12.5   | 47 |
| 22       | 220  | 18 × 12.5 | 90  | 20 × 12.5 | 150 | 25 × 12.5   | 85 |
| 33       | 330  | 25 × 12.5 | 140 | 25 × 12.5 | 200 |             |    |

Rated ripple current (mArms) 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 | 100 to 680   |           | 0.80 | 1.00  | 1.23  | 1.34  | 1.50           |
|            | 1000 to 4700 |           | 0.85 | 1.00  | 1.10  | 1.13  | 1.15           |
| 160 to 450 | 6.8 to 100   |           | 0.80 | 1.00  | 1.25  | 1.40  | 1.60           |



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#### Как с нами связаться

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