

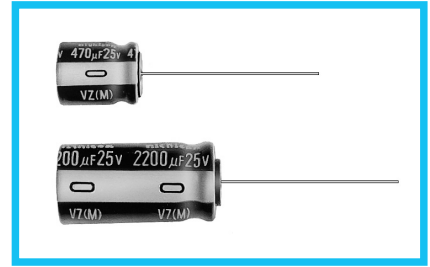
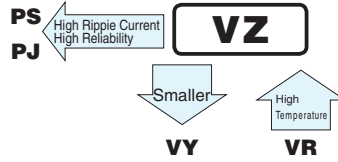
ALUMINUM ELECTROLYTIC CAPACITORS

VZ series Wide Temperature Range



Anti-Solvent Feature
(Through 100V only)

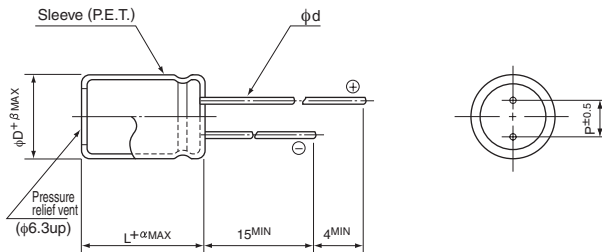
- Small case sizes as same as VR series, but operating over wide temperature range of -55 to $+105^{\circ}\text{C}$.
- Compliant to the RoHS directive (2011/65/EU).



Specifications

| Item | Performance Characteristics | |
|---------------------------------------|--|---|
| Category Temperature Range | -55 to $+105^{\circ}\text{C}$ (6.3 to 100V), -40 to $+105^{\circ}\text{C}$ (160 to 400V), -25 to $+105^{\circ}\text{C}$ (450V) | |
| Rated Voltage Range | 6.3 to 450V | |
| Rated Capacitance Range | 0.1 to 33000µF | |
| Capacitance Tolerance | $\pm 20\%$ at 120Hz, 20°C | |
| Leakage Current | Rated voltage (V) | 6.3 to 100 |
| | | 160 to 450 |
| 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 315 350 to 450 |
| Stability at Low Temperature | Measurement frequency : 120Hz | |
| | Impedance ratio ZT / Z20 (MAX.) | Z -25°C / Z $+20^{\circ}\text{C}$ 5 4 3 2 2 2 2 2 3 4 6 15 Z -40°C / Z $+20^{\circ}\text{C}$ 10 8 6 4 3 3 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 $\pm 20\%$ of the initial capacitance 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 black sleeve. | |

Radial Lead Type

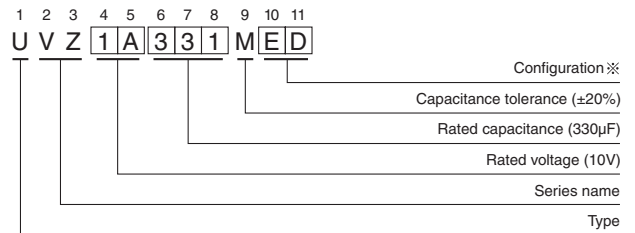


| | (mm) | | | | | | | | | | |
|----|------|-----|-----|-----|------|-----|-----|------|------|------|--|
| φD | 5 | 6.3 | 8 | 10 | 12.5 | 16 | 18 | 20 | 22 | 25 | |
| P | 2.0 | 2.5 | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 | 10.0 | 10.0 | 12.5 | |
| φd | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 | 1.0 | 1.0 | 1.0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



※ Configuration

| 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.

