

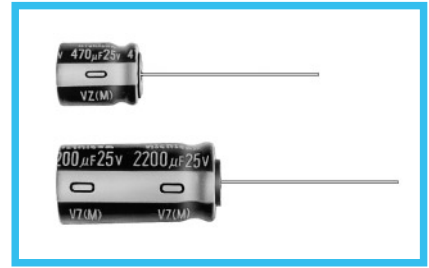
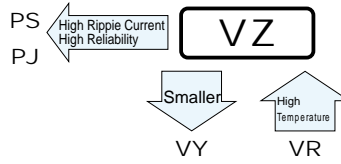
ALUMINUM ELECTROLYTIC CAPACITORS

VZ series Wide Temperature Range



Anti-Solvent Feature (Through 100V only)

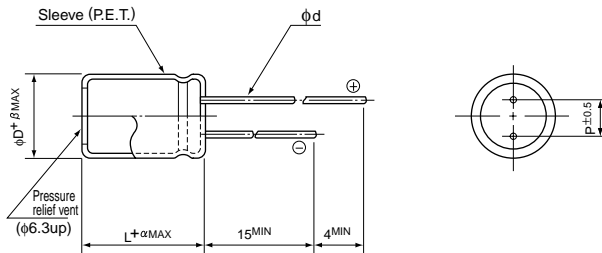
- Small case sizes as same as VR series, but operating over wide temperature range of -55 to $+105^{\circ}\text{C}$.
- Compliant to the RoHS directive (2002/95/EC).



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, Temperature : 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°C 5 4 3 2 2 2 2 2 3 4 6 15 Z- 40°C / Z+ 20°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

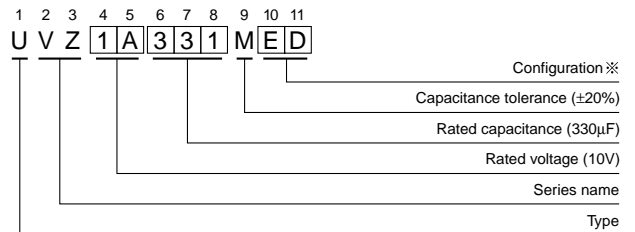


	(mm)									
φD	5	6.3	8	10	12.5	16	18	20	22	25
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10.0	10.0	12.5
φd	0.5	0.5	0.6	0.6	0.6	0.8	0.8	1.0	1.0	1.0
β	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0

α	(L < 20) 1.5 (L ≥ 20) 2.0
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- 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.

