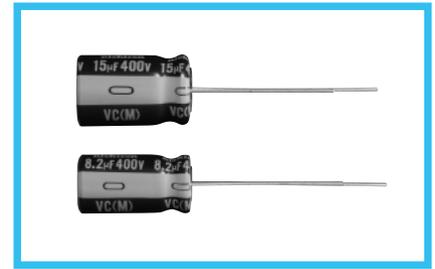
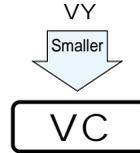


# ALUMINUM ELECTROLYTIC CAPACITORS

**VC** Ultra-Miniature-Sized for adapters.  
series

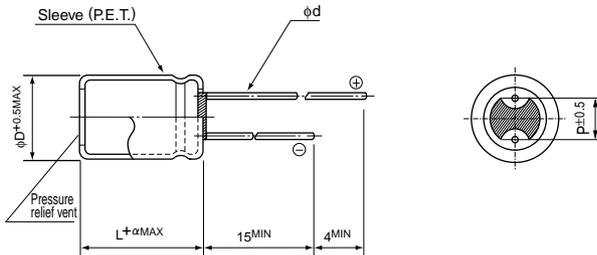


- One rank smaller case sizes than VY series.
- Swited for adapter circuit.
- Compliant to the RoHS directive (2011/65/EU).

## Specifications

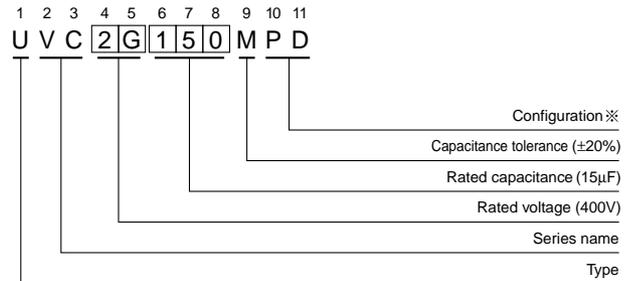
Item	Performance Characteristics										
Category Temperature Range	-40 to +105°C										
Rated Voltage Range	400V										
Rated Capacitance Range	4.7 to 18µF										
Capacitance Tolerance	±20% at 120Hz, 20°C										
Leakage Current	$I = 0.04CV + 100$ (µA) or less										
Tangent of loss angle (tan δ)	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>400</td> <td rowspan="2">Measurement frequency : 120Hz, at 20°C</td> </tr> <tr> <td>tan δ (MAX.)</td> <td>0.25</td> </tr> </table>	Rated voltage (V)	400	Measurement frequency : 120Hz, at 20°C	tan δ (MAX.)	0.25					
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tan δ (MAX.)	0.25										
Stability at Low Temperature	<table border="1"> <tr> <td colspan="2">Rated voltage (V)</td> <td>400</td> <td rowspan="3">Measurement frequency : 120Hz</td> </tr> <tr> <td>Impedance ratio</td> <td>Z-25°C / Z+20°C</td> <td>6</td> </tr> <tr> <td>ZT / Z20 (MAX.)</td> <td>Z-40°C / Z+20°C</td> <td>10</td> </tr> </table>	Rated voltage (V)		400	Measurement frequency : 120Hz	Impedance ratio	Z-25°C / Z+20°C	6	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	10
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Impedance ratio	Z-25°C / Z+20°C	6									
ZT / Z20 (MAX.)	Z-40°C / Z+20°C	10									
Endurance	<p>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.</p> <table border="1"> <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				
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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.										

## Radial Lead Type



	(mm)	
φD	8	10
P	3.5	5.0
φd	0.6	0.6
α	(L = 11.5) 1.5 (L ≥ 12.5) 2.0	

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



※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
8 · 10	PD

## Dimensions

Cap.(µF)	V		400	
	Code		2G	
4.7	4R7	8 × 11.5	70	
5.6	5R6	8 × 11.5	70	
8.2	8R2	8 × 16	85	
10	100	10 × 12.5	100	
12	120	8 × 20	120	
15	150	10 × 16	150	
18	180	10 × 20	200	
		Case size φD × L (mm)	Rated ripple	

Rated ripple current (mA<sub>rms</sub>) at 105°C 120Hz

## 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

Please refer to page 20, 21, 22 about the formed or taped product spec.  
Please refer to page 4 for the minimum order quantity.