

ALUMINUM ELECTROLYTIC CAPACITORS

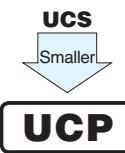
nichicon

UCP

High Voltage, Miniature sized, Long Life Assurance



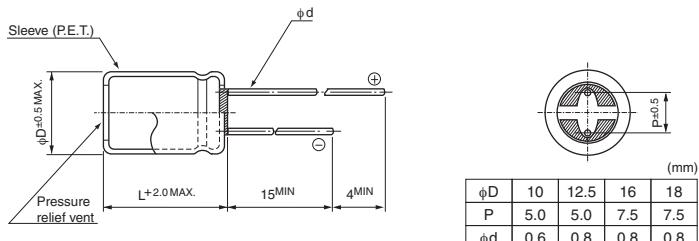
- High ripple current.
- Load life of 10000 hours at 105°C.
- Suited for ballast applications.
- Compliant to the RoHS directive (2011/65/EU).



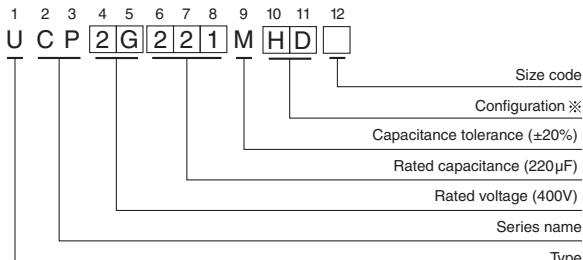
■ Specifications

Item	Performance Characteristics											
Category Temperature Range	−25 to +105°C											
Rated Voltage Range	400 to 450V											
Rated Capacitance Range	27 to 220μF											
Capacitance Tolerance	±20% at 120Hz, 20°C											
Leakage Current	After 1 minutes' application of rated voltage at 20°C, leakage current is not more than $I=0.04CV+100$ (μA).											
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C <table border="1"> <tr> <td>Rated voltage (V)</td> <td>400</td> <td>420</td> <td>450</td> </tr> <tr> <td>tan δ (MAX.)</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> </tr> </table>				Rated voltage (V)	400	420	450	tan δ (MAX.)	0.24	0.24	0.24
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Stability at Low Temperature	Measurement frequency : 120Hz <table border="1"> <tr> <td>Rated voltage (V)</td> <td>400</td> <td>420</td> <td>450</td> </tr> <tr> <td>Impedance ratio (MAX.) Z-25°C / Z+20°C</td> <td>8</td> <td>8</td> <td>8</td> </tr> </table>				Rated voltage (V)	400	420	450	Impedance ratio (MAX.) Z-25°C / Z+20°C	8	8	8
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Endurance	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 10000 hours at 105°C, the peak voltage shall not exceed the rated voltage. <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±20% 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 ±20% 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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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



Type numbering system (Example : 400V 220μF)



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

■ Dimensions

Cap	V	400	420	450	
Code		2G	W6	2W	
27	270			10×31.5	300
33	330	10×31.5	330	10×31.5	320
47	470			12.5×31.5	430
56	560	12.5×31.5	470	12.5×31.5	460
68	680	12.5×35.5	540	12.5×40	560
82	820	12.5×40	620	16×31.5	640
100	101	16×31.5	710	16×31.5	690
120	121	16×35.5	800	16×40	820
			▲18×31.5	800	▲18×31.5
150	151	16×40	920	18×35.5	920
		▲18×31.5	890		18×40
180	181	18×40	1060	18×40	1040
220	221	18×46	1200	Case size ΦD × L(mm)	Rated ripple

Rated ripple current (mA rms) at 105°C 120Hz

▲: In this case, [6] will be put at 12th digit of type numbering system.

• Frequency coefficient of rated ripple current

Frequency	60Hz	120Hz	500Hz	1kHz	10kHz or more
Coefficient	0.80	1.00	1.25	1.40	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.