

ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UPH

High Voltage, Miniature-sized



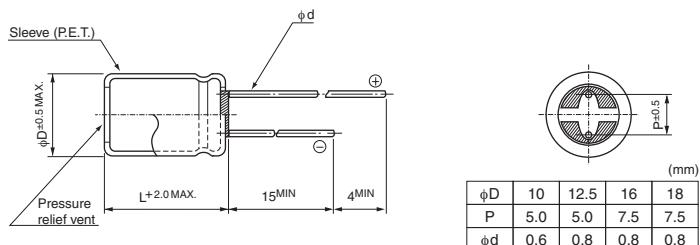
- High ripple current.
- Load life of 2000 hours at 105°C.
- Suited for ballast applications.
- Compliant to the RoHS directive (2011/65/EU).



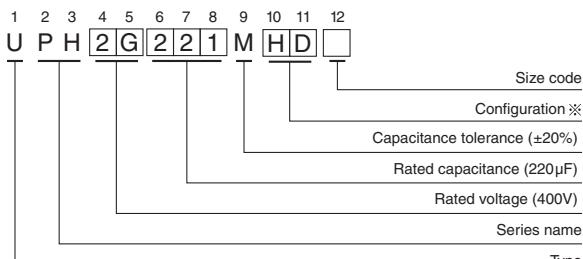
■ Specifications

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 minute's application of rated voltage at 20°C, leakage current is not more than $0.04CV+100$ (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>0.15</td> <td>0.20</td> <td>0.20</td> </tr> </table>	Rated voltage (V)	400	420	450	tan δ (MAX.)	0.15	0.20
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Stability at Low Temperature	Measurement frequency : 120Hz							
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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 2000 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	12.5×35.5	490
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	16×35.5	730
120	121	16×35.5	800	16×35.5	780	16×40	820
				▲18×31.5	800	▲18×31.5	800
150	151	16×40	920	18×35.5	920	18×40	970
		▲18×31.5	890				
180	181	18×40	1060	18×40	1040	18×46	1090
220	221	18×46	1200			Case size ΦD × L (mm)	Rated ripple

- 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

Bated ripple current (mAmps) at 105°C 120Hz

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

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