

ALUMINUM ELECTROLYTIC CAPACITORS

HP series 105°C 2000HR

- 105°C Standard for snap-in Terminals
- High Ripple Current And Low Impedance
- Used in Switch Power Supply, Smoothing Circuits.
AD Adapter, Inverter Lighting System.

SPECIFICATIONS

Item	Performance Characteristics						
Operating Temperature Range	-25°C ~ +105°C (200~450V)						
Rated Voltage Range	160~450W.V						
Capacitance Range	47~1200uF						
Capacitance Tolerance	±20% (120Hz, +20°C)						
Leakage Current (MAX)	$I \leq 3 \sqrt{CV}$ After 5 minutes application of rated voltage at +20°C Where: C = Nominal capacitance in uF V = Rated voltage in V						
Dissipation Factor (tan δ)	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>160-400</td> <td>420 以上</td> </tr> <tr> <td>Tan δ (MAX)</td> <td>0.15</td> <td>0.20</td> </tr> </table> (120HZ/ +20°C)	Rated voltage (V)	160-400	420 以上	Tan δ (MAX)	0.15	0.20
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Low Temperature Stability Impedance Ratio	Impedance ratio at 120Hz <table border="1"> <tr> <td>Rated Voltage (V)</td> <td>160-400</td> <td>450</td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>4</td> <td>8</td> </tr> </table>	Rated Voltage (V)	160-400	450	Z(-25°C)/Z(+20°C)	4	8
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Load Life	Application of rated voltage for 2000HR at 105°C, the capacitor shall meet the following limits. <table border="1"> <tr> <td>Capacitance Change</td> <td>≤ ±20% of the initial measured value</td> </tr> <tr> <td>tan δ</td> <td>≤ 200% of the initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>≤ The initial specified value</td> </tr> </table>	Capacitance Change	≤ ±20% of the initial measured value	tan δ	≤ 200% of the initial specified value	Leakage Current	≤ The initial specified value
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tan δ	≤ 200% of the initial specified value						
Leakage Current	≤ The initial specified value						
Shelf Life	After storage it for 1000HR at 105°C with no voltage applied. The capacitor shall meet the following limits. <table border="1"> <tr> <td>Capacitance Change</td> <td>≤ ±20% of the initial measured value</td> </tr> <tr> <td>tan δ</td> <td>≤ 200% of the initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>≤ The initial specified value</td> </tr> </table> Pre-treatment for measurements shall be conducted after application of dc working voltage for 30minutes.	Capacitance Change	≤ ±20% of the initial measured value	tan δ	≤ 200% of the initial specified value	Leakage Current	≤ The initial specified value
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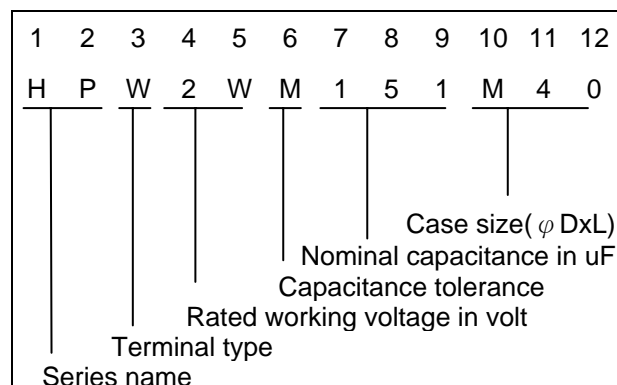
MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Freq(Hz)	50	120	500	1K	10K≤
160~250	0.81	1.00	1.17	1.32	1.45
315~450	0.77	1.00	1.16	1.30	1.41

CATALOG NUMBERING SYSTEM

(Example:450V 150uF)

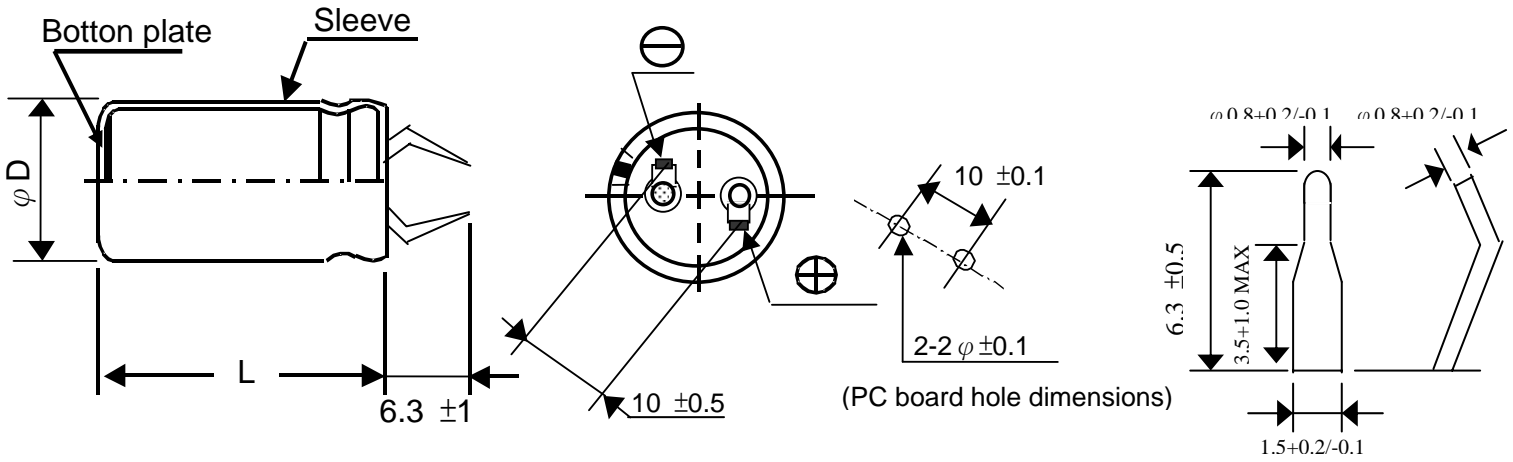


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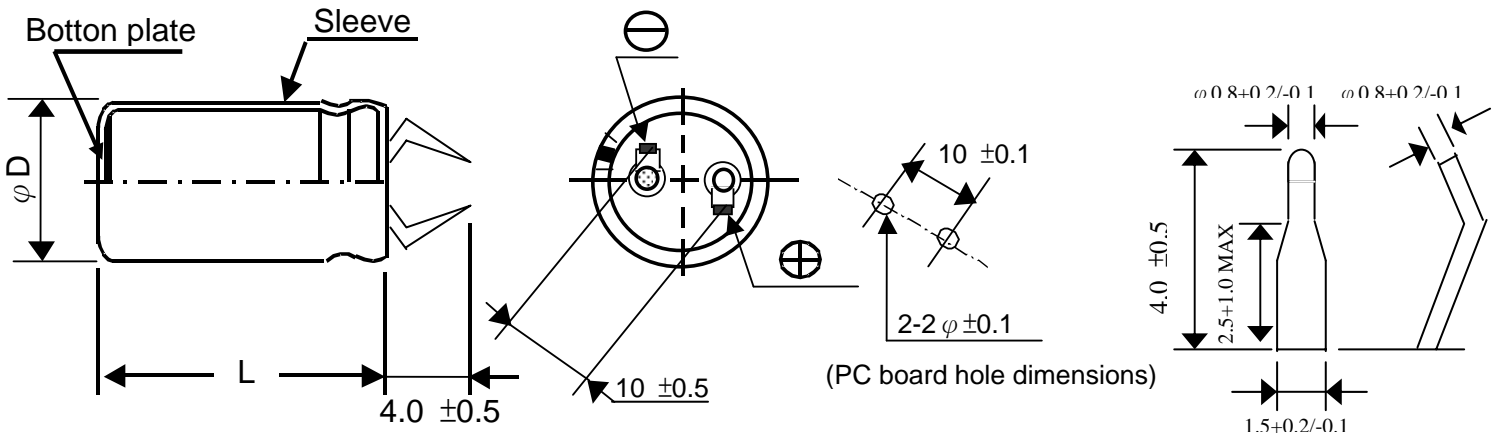
HP series **105°C 2000HR**

DIMENSIONS (mm)

●TYPE. TB($22 \leq D \leq 35$)



●TYPE. TC($22 \leq D \leq 35$)



$\varphi D +1.0$ MAX	22~35					
$L \pm 2.0$	25	30	35	40	45	50

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STANDARD SIZES AND PERMISSIBLE RIPPLE CURRENT

DxL(mm) Ripple Current (A 105°C, 120Hz) r.m.s

Cap(uF)		W.V		200		220		250		400		420		450	
				2D		2B		2E		2G		2H		2W	
47	470													20x25	0.39
56	560									20x25	0.51	20x25	0.51	20x30	0.51
68	680									20x30 22x25	0.56 0.50	20x30 22x25	0.56 0.55	22x30 25x25	0.53
82	820									20x30 22x25	0.64	22x25	0.64	22x30 25x25	0.64
100	101									20x35 22x30	0.7	22x30	0.70	25x30 30x25	0.69 0.72
120	121									20x40 22x35	0.75	22x35	0.75	25x30 30x25	0.8
150	151						20x25	0.79	22x40 25x35	0.88 0.89	22x35	0.83	25x35 30x30	0.88	
180	181						20x30 22x25	0.90 0.88	22x45 25x35	0.98	22x40	0.90	25x40	0.89	
220	221	20x25	1.00	20x30 22x25	1.00	20x35 25x25	1.00 1.08	22x50 25x40	1.10	25x40	1.07	30x35	1.12		
270	271	20x30 22x25	1.10	20x35 22x30	1.15	20x40 25x30	1.18 1.27	25x50 30x35	1.29 1.22	30x35	1.18	30x40	1.28		
330	331	22x30	1.25	22x35	1.25	22x35	1.3	30x45 35x30	1.55 1.44	30x40	1.42	30x45	1.39		
390	391	22x30	1.35	22x35	1.4	22x40	1.49	30x45 35x35	1.60	30x50	1.67	30x50	1.56		
470	471	22x35	1.50	22x40	1.51	22x45	1.57	35x40	1.9			35x45	1.77		
560	561	22x40	1.67	22x40	1.61	25x45	1.8	35x45	2.12	35x45	2.07	35x50	2.02		
680	681	22x45	1.78	22x45	1.80	25x50	2.03								
820	821	25x45	2.10	30x40	2.19	30x45	2.3								
1000	102	25x50	2.42	30x45	2.5	30x50	2.7								
1200	122	30x45	2.65	35x40	2.79	35x45	3.09								