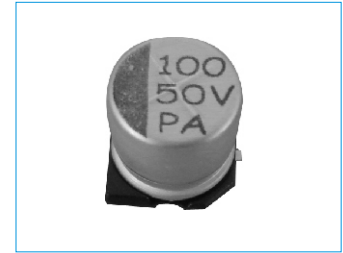
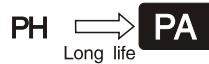


Chip Type Aluminum Electrolytic Capacitors

PA Chip Type Series



- Chip type, with load life of 5000 hours at + 105°C.
- Designed for surface mounting on high density PC board.
- Applicable to automatic insertion machine using carrier tape.
- Adapted to the RoHS directive(2002/95/EC).

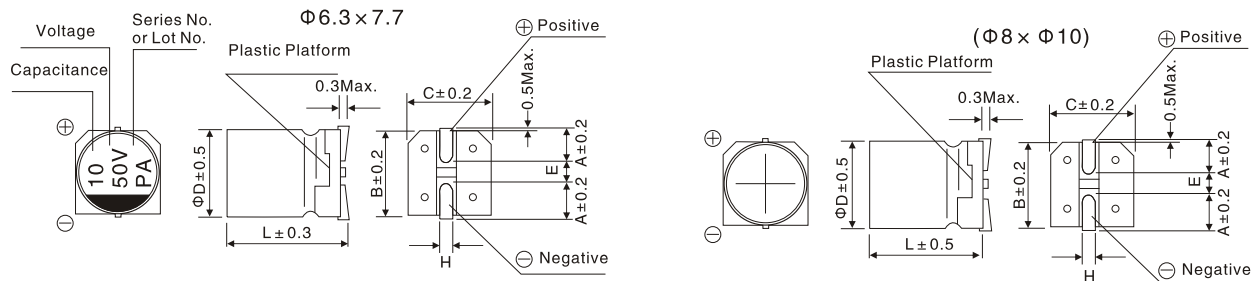
■ Specifications

Item	Characteristics																					
Operating Temperature Range	-55°C~+105°C																					
Rated Voltage Range	6.3V ~ 50V																					
Nominal Capacitance Range	22 μ F ~ 1000 μ F																					
Capacitance Tolerance	M (± 20%) (20°C, 120Hz)																					
Leakage Current	$I \leq 0.02CV$ or $3(\mu A)$, whichever is greater. C:Nominal capacitance (μ F) V:Rated voltage(V) (20°C, after 2 minutes)																					
Dissipation Factor (Max)	<table border="1"> <thead> <tr> <th>WV</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>tan δ</td> <td>0.28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.13</td> <td>0.12</td> </tr> </tbody> </table> <p>(20°C, 120Hz)</p>	WV	6.3	10	16	25	35	50	tan δ	0.28	0.24	0.20	0.16	0.13	0.12							
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Low Temperature Stability (Impedance Ratio)	<table border="1"> <thead> <tr> <th>WV</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>10</td> <td>7</td> <td>5</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table> <p>(120Hz)</p>	WV	6.3	10	16	25	35	50	Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	Z(-40°C)/Z(+20°C)	10	7	5	3	3	3
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Load Life	<p>After 5000 hours' (Φ6.3 × 7.7: 3000 hours')application of rated voltage at 105°C, the capacitors shall meet the following requirement:</p> <table border="1"> <tbody> <tr> <td>Capacitance change</td> <td>Within ± 30% of the initial value.</td> </tr> <tr> <td>Dissipation factor</td> <td>Not more than 300% of the initial specified value.</td> </tr> <tr> <td>Leakage current</td> <td>Not more than the initial specified value.</td> </tr> </tbody> </table>	Capacitance change	Within ± 30% of the initial value.	Dissipation factor	Not more than 300% of the initial specified value.	Leakage current	Not more than the initial specified value.															
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Shelf Life	After storage for 1000 hours at +105°C, the capacitors shall meet the requirement of load life above.																					
Rated Ripple Current & Frequency Multipliers	<table border="1"> <tbody> <tr> <td>Frequency</td> <td>50Hz</td> <td>120Hz</td> <td>300Hz</td> <td>1kHz</td> <td>≥10kHz</td> </tr> <tr> <td>Multiplier</td> <td>0.70</td> <td>1.00</td> <td>1.17</td> <td>1.36</td> <td>1.50</td> </tr> </tbody> </table>	Frequency	50Hz	120Hz	300Hz	1kHz	≥10kHz	Multiplier	0.70	1.00	1.17	1.36	1.50									
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■ Dimensions



(mm)

	6.3×7.7	8×10	10×10
A	2.4	2.9	3.2
B	6.6	8.3	10.3
C	6.6	8.3	10.3
E	2.2	3.1	4.5
L	7.7	10	10
H	0.5~0.8	0.8~1.1	

■ Nominal capacitance, rated voltage, rated ripple current and case size table

WV Item μ F	6.3		10		16		25		35		50	
	D×L mm	I~	D×L mm	I~	D×L mm	I~	D×L mm	I~	D×L mm	I~	D×L mm	I~
22											6.3×7.7	58
33									6.3×7.7	57	8×10	140
47							6.3×7.7	63	8×10	92	8×10	170
100			6.3×7.7	81	6.3×7.7	81	8×10	116	10×10	151	10×10	310
220	6.3×7.7	120	8×10	141	10×10	216	10×10	320	10×10	375		
330	8×10	290	10×10	290	10×10	290	10×10	450				
470	10×10	320	10×10	320	10×10	320						
1000	10×10	410	↑ Rated ripple current (mA rms) (105°C, 120Hz)									