

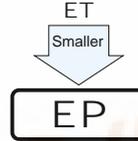
ALUMINUM ELECTROLYTIC CAPACITORS



EP series Bi-Polarized, Wide Temperature Range



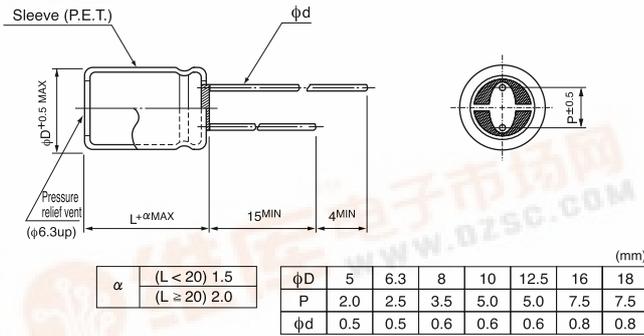
- 1 ~ 2 ranks smaller than ET series.
- Adapted to the RoHS directive (2002/95/EC).



Specifications

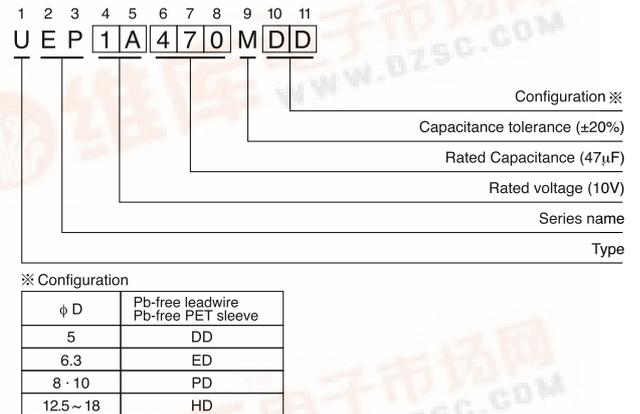
Item	Performance Characteristics																										
Category Temperature Range	-55 ~ +105°C																										
Rated Voltage Range	6.3 ~ 100V																										
Rated Capacitance Range	0.47 ~ 6800μF																										
Capacitance Tolerance	±20% at 120Hz, 20°C																										
Leakage Current	After 5 minutes' application of rated voltage, leakage current is not more than 0.03CV or 3 (μA), whichever is greater.																										
tan δ	Measurement frequency : 120Hz, Temperature : 20°C																										
	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>tan δ (MAX.)</td> <td>0.24</td> <td>0.24</td> <td>0.20</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </table>	Rated voltage (V)	6.3	10	16	25	35	50	63	100	tan δ (MAX.)	0.24	0.24	0.20	0.20	0.16	0.14	0.12	0.10								
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Stability at Low Temperature	Measurement frequency : 120Hz																										
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ZT / Z20 (MAX.)	10	8	6	4	3	3	3	3																			
Endurance	<p>After 1000 hours' application of rated voltage at 105°C, with the polarity inverted every 250 hours, capacitors meet the characteristic requirements listed at right.</p> <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±25% of initial value (6.3~16V) Within ±20% of initial value (25~100V)</td> </tr> <tr> <td>tan δ</td> <td>150% or less of initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Initial specified value or less</td> </tr> </table>	Capacitance change	Within ±25% of initial value (6.3~16V) Within ±20% of initial value (25~100V)	tan δ	150% or less of initial specified value	Leakage current	Initial specified value or less																				
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Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.																										
Marking	Printed with white color letter on black sleeve.																										

Radial Lead Type



• Please refer to page 21 about the end seal configuration.

Type numbering system (Example : 10V 47μF)



Dimensions

Cap. (μF)	Code	6.3		10		16		25		35		50		63		100	
		0J		1A		1C		1E		1V		1H		1J		2A	
0.47	R47											5×11	7			5×11	8
1	010											5×11	10			5×11	12
2.2	2R2											5×11	15			6.3×11	20
3.3	3R3											5×11	18	5×11	20	6.3×11	25
4.7	4R7											5×11	22	6.3×11	24	6.3×11	30
10	100					5×11	27	5×11	27	5×11	30	6.3×11	37	6.3×11	40	8×11.5	50
22	220			5×11	37	5×11	40	6.3×11	46	6.3×11	51	8×11.5	63	8×11.5	68	10×16	97
33	330	5×11	45	5×11	45	5×11	49	6.3×11	56	8×11.5	72	8×11.5	77	10×12.5	98	12.5×20	140
47	470	5×11	54	5×11	54	6.3×11	67	6.3×11	67	8×11.5	86	10×12.5	105	10×16	130	12.5×20	170
100	101	6.3×11	90	6.3×11	90	8×11.5	110	8×11.5	110	10×16	160	10×20	190	12.5×20	225	16×25	300
220	221	8×11.5	150	8×11.5	150	10×12.5	195	10×16	215	12.5×20	290	12.5×25	340	16×25	405	18×35.5	510
330	331	8×11.5	185	10×16	240	10×16	265	12.5×20	320	12.5×20	350	16×25	460	16×31.5	535		
470	471	10×12.5	260	10×16	290	10×16	290	10×20	345	12.5×20	380	12.5×25	465	16×31.5	590	18×35.5	680
1000	102	10×20	460	12.5×20	510	12.5×25	605	16×25	670	16×31.5	805						
2200	222	12.5×25	820	16×25	910	16×31.5	1070	18×35.5	1140								
3300	332	16×25	1110	16×31.5	1200	18×35.5	1400										
4700	472	16×31.5	1430	18×35.5	1520												
6800	682	18×35.5	1830														

Rated Ripple (mArms) at 105°C 120Hz

Please refer to page 21, 22, 23 about the formed or taped product ones.