

AP (CD291)



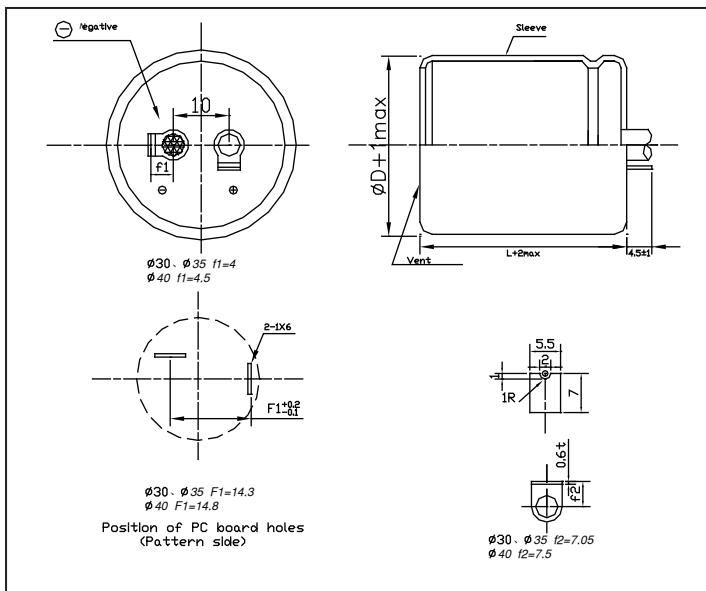
◎ High ripple current ,Smaller size ,Load life of 2000 hours at 85°C.

◎ Adapted to the ROHS directive (2002/95/EC).

■ Specifications

Item	Performance Characteristics																																													
Operating temperature range	-40°C ~ +85°C				-25°C ~ +85°C																																									
Rated voltage range	10 ~ 100 V				160 ~ 450 V																																									
Capacitance tolerance	±20% (120Hz, +20°C)																																													
Leakage current	$I \leq 0.01CV$ (μA) 1.5mA (Whichever is smaller) 5 (at 20°C ,after 5 minutes)																																													
Dissipation factor (tg δ) (+20°C, 120Hz)	<table border="1"> <thead> <tr> <th>Rated voltage(V) Cap(μF)</th> <th>10~16</th> <th>25</th> <th>30~50</th> <th>63</th> <th>80~100</th> </tr> </thead> <tbody> <tr> <td>≤ 2700</td> <td></td> <td></td> <td>0.20</td> <td>0.15</td> <td>0.15</td> </tr> <tr> <td>3300~4700</td> <td></td> <td>0.35</td> <td>0.25</td> <td>0.20</td> <td>0.15</td> </tr> <tr> <td>5600~6800</td> <td>0.40</td> <td>0.35</td> <td>0.30</td> <td>0.20</td> <td>0.20</td> </tr> <tr> <td>≥ 8200</td> <td>0.40</td> <td>0.35</td> <td>0.35</td> <td>0.25</td> <td></td> </tr> </tbody> </table>					Rated voltage(V) Cap(μF)	10~16	25	30~50	63	80~100	≤ 2700			0.20	0.15	0.15	3300~4700		0.35	0.25	0.20	0.15	5600~6800	0.40	0.35	0.30	0.20	0.20	≥ 8200	0.40	0.35	0.35	0.25		<table border="1"> <thead> <tr> <th>Rated voltage ΦD(mm)</th> <th>160~250</th> <th>315~450</th> </tr> </thead> <tbody> <tr> <td>30</td> <td>0.15</td> <td>0.18</td> </tr> <tr> <td>35~40</td> <td>0.18</td> <td>0.20</td> </tr> </tbody> </table>		Rated voltage ΦD(mm)	160~250	315~450	30	0.15	0.18	35~40	0.18	0.20
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Temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th>U_R (V)</th> <th>10</th> <th>16~35</th> <th>50~100</th> <th>160~200</th> <th>250~400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>Z-25°C/+20°C</td> <td>5</td> <td>4</td> <td>3</td> <td>3</td> <td>4</td> <td>4</td> </tr> <tr> <td>Z-40°C/+20°C</td> <td>18</td> <td>15</td> <td>10</td> <td>6</td> <td>8</td> <td></td> </tr> </tbody> </table>						U_R (V)	10	16~35	50~100	160~200	250~400	450	Z-25°C/+20°C	5	4	3	3	4	4	Z-40°C/+20°C	18	15	10	6	8																				
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Load life	<p>After applying rated voltage with specified ripple current for 2000 hours at +85°C and then resumed 16 hours: Capacitance change : ±20% Initial measured value Leakage current : ≤ Initial specified value Dissipation factor : ≤ 2 times Initial specified value</p>																																													
Shelf life	<p>After storage for 1000 hours at +85°C, U_R to be applied for 30 minutes and then resumed 16 hours Capacitance change : ±15% Initial measured value Leakage current : ≤ Initial specified value Dissipation factor : ≤ 1.5times Initial specified value</p>																																													

■ Case table



Frequency coefficient

(Hz)	50	100	1K	10K	100K
≤ 1000	0.95	1.00	1.10	1.15	1.15
160~250	0.87	1.00	1.11	1.18	1.20
≥ 315	0.80	1.00	1.14	1.19	1.20

Temperature coefficient

(°C)	+40	+55	+70	+85
<160	2.1	1.8	1.5	1.0
≥160	1.7	1.5	1.3	1.0

Dimensions

$\text{ØD} \times L(\text{mm})$

W _V (V) (mm) $\Phi D \times L$	10		16		25		35		50		63		80		100	
	Cap μF	Ripple Arms														
30x25	22000	4.1	15000	3.4	10000	3.0	6800	2.7	3900	2.4	3300	2.3	2200	2.2	1500	1.8
30x30	33000	4.8	22000	4.2	12000	3.4	8200	2.8	5600	2.5	3900	2.6	2700	2.5	1800	2.1
30x35	39000	5.3	27000	5.0	18000	4.2	10000	3.2	6800	2.8	5600	3.2	3300	2.8	2200	2.3
30x40	47000	6.0	33000	5.6	22000	4.8	12000	3.5	8200	3.0	6800	3.6	3900	3.2	2700	2.7
30x45	56000	6.7	39000	6.2			15000	4.1	10000	3.4			4700	3.6	3300	3.0
30x50	68000	7.5	47000	7.0			18000	4.6	12000	3.8	8200	3.7	5600	3.5	3900	3.4
35x25	33000	4.8	22000	4.4	15000	3.9	8200	2.9	5600	2.6	3900	2.7	2700	2.5	1800	2.2
35x30	47000	6.0	33000	5.6	18000	4.4	12000	3.6	8200	3.0	5600	3.3	3900	3.2	2200	2.5
35x35	56000	6.8	39000	6.3	22000	5.0	15000	4.1	10000	3.4	6800	3.7	4700	3.6	3300	3.1
35x40	68000	7.7	47000	7.2	33000	6.5	18000	4.7	12000	3.8	8200	3.8	5600	3.5	3900	3.4
35x45	82000	8.7	56000	8.0	39000	7.5	22000	5.3			10000	4.3				
35x50							27000	7.0	15000	4.5	12000	4.8	6800	4.1	4700	4.0

W _V (V) (mm) $\Phi D \times L$	160		180		200		250		315		350		400		450	
	Cap μF	Ripple Arms														
30x25	560	2.0	470	1.8	470	1.9	330	1.5	220	1.1	180	1.1	150	0.95		
30x30	820	2.5	680	2.3	560	2.1	470	1.8	270	1.3	220	1.2	180	1.1	150	0.98
30x35	1000	2.8	820	2.6	680	2.4	560	2.0	330	1.4	270	1.4	220	1.2	180	1.1
30x40	1200	3.2	1000	2.9	820	2.7	680	2.3	390	1.6	390	1.7	270	1.4	220	1.3
30x45	1500	3.7	1200	3.3	1000	3.1	820	2.6	470	1.8	470	2.0	330	1.6	270	1.4
30x50					1200	3.4			560	2.0			390	1.8		
35x25	820	2.4	680	2.2	560	2.0	470	2.4	270	1.3	220	1.3	180	1.2	180	1.2
35x30	1000	2.7	820	2.5	820	2.5	680	2.6	390	1.6	330	1.6	270	1.5	220	1.3
35x35	1200	3.0	1200	3.1	1000	2.8	820	2.6	470	1.8	390	1.8	330	1.7	270	1.5
35x40	1500	3.5			1200	3.2	1000	3.0	560	2.0	470	2.0	390	1.8		
35x45	1800	3.9	1500	3.6			1200	3.4	680	2.3	560	2.3	470	2.1	390	1.9
35x50	2200	4.5	1800	4.1	1500	3.8					680	2.6	560	2.3	470	2.2
35x50													680	2.7		
40x45															560	2.6

 Rated ripple current(A,+85°C,120Hz)