

PSA SERIES

ALUMINUM ELECTROLYTIC CAPACITORS

Computer grade, Large capacitor

Features

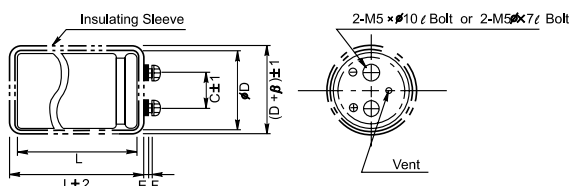
- Screw terminal type
- Smaller dimensions and large capacity
- Ideal for inverter, computer
- Large allowable ripple current
- Load life of 2000 hours at 85°C



Specifications

Item	Performance Characteristics				
Operating temperature range	10V ~ 250V : -40℃ ~ +85℃ 315 ~ 450V : -25℃ ~ +85℃				
Rated working voltage range	10V ~ 450V				
Nominal capacitance range	270μF ~ 680000μF, ±20%(at 20℃, 120Hz)				
D.C Leakage current(at 20℃)	The following specifications shall be satisfied when the rated voltage is applied for the required time. $1 \leq 0.02CV(\mu A)$ or 5mA (5 min), whichever is less. Where 1 =Leakage current (μA) C=Nominal capacitance (μF) V=Rated voltage (V)				
Tanδ(max., at 20℃, 120Hz)	W.V (V)		Tanδ		
	10		0.8 until 50000μF		
	16		0.7 until 50000μF		
	25, 35		0.5 until 50000μF		
	50~100		0.3 until 30000μF		
	160~250		0.15 until 10000μF		
			0.20 until 10000μF		
	when capacitance is over 10000μF,δTan shall be added 0.025 to the listed value with increase of every each 10000μF				
Characteristics at low temperature(max.) (impedance ratio at 120Hz)	W.V (V)	10~16	25~100	160~250	315~450
	Z-25℃/Z20℃	4	3	3	8
	Z-40℃/Z20℃	12	6	8	—
Load life	After applying rated working voltage for 2000hours at +85℃ and then being stabilized at +20℃, capacitors shall meet following limits.				
	Capacitance change		Within ± 15% of initial measured value		
	Tanδ		≤ 175% of initial specified value		
	Leakage current		≤ Initial specified value		
Shelf life	After storage for 1000hours at + 85℃ with no voltage applied and then being stabilized at +20℃, capacitors shall meet following limits.				
	Capacitance change		Within ± 15% of initial measured value		
	Tanδ		≤ 175% of initial specified value		
	Leakage current		≤ Initial specified value		

Case sizes and Dimensions



φD	C	E	F	β
35	12.8	3.0	5.0	1.0
51	21.7	3.0	4.0	1.5
63.5	28.3	3.0	4.0	1.5
76	31.6	3.0	4.0	1.5

Ripple current coefficient

Temperature

W.V	Temp	20°C	40°C	70°C	85°C
10~100V		3.00	2.40	1.45	1.00
160~450V		3.30	2.65	1.65	1.00

Frequency

W.V	Freq(Hz)	50	120	400	1K	10K
10~100		0.8	1.0	1.1	1.2	1.3
160~450		0.8	1.0	1.2	1.3	1.4

PSA SERIES

STANDARD RATINGS OF PSA SERIES

ø DXL (mm)

W.V Cap(μF)	10		16		25		35		50		63		80		100	
	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R
3300															35X50	3.0
3900															35X60	3.4
4700															35X70	3.8
5600													35X50	3.3	35X80	4.2
6800											35X50	3.1	35X60	3.7	35X90	4.5
8200											35X60	3.7	35X70	4.3	35X110	5.0
10000									35X60	3.9	35X70	4.2	35X80	4.9	35X120	5.5
12000							35X50	3.4	35X70	4.4	35X80	5.0	35X90	5.6	51X70	6.2
15000							35X60	4.0	35X80	5.4	35X90	5.8	35X110	6.5	51X80	7.4
18000					35X50	4.8	35X70	4.6	35X90	5.9	35X100	6.4	51X70	7.5	51X90	8.6
22000					35X60	5.5	35X80	5.5	35X100	6.4	35X120	7.2	51X80	8.2	51X100	11.0
27000			35X50	4.2	35X70	6.4	35X90	6.2	35X120	7.7	51X80	8.4	51X100	9.6	51X120	12.4
33000			35X60	5.0	35X80	7.2	35X100	7.2	51X70	8.2	51X80	9.2	51X110	10.	63.5X10	14.0
39000			35X60	5.5	35X90	8.4	35X110	8.0	51X80	9.4	51X100	10.0	51X120	4	0	15.6
47000	35X50	4.6	35X70	6.4	35X100	9.4	51X80	8.8	51X90	10.5	51X120	11.5	63.5X10	11.	63.5X12	16.8
56000	35X60	5.4	35X80	7.0	35X110	10.2	51X90	9.6	51X100	11.4	63.5X9	12.6	0	2	0	18.2
68000	35X70	6.2	35X90	8.0	35X120	10.8	51X100	11.0	51X120	12.8	0	14.6	63.5X12	12.	63.5X14	21.0
82000	35X80	7.4	35X100	9.1	51X80	12.2	51X110	12.2	63.5X100	13.9	63.5X10	16.8	0	0	0	
100000	35X90	8.0	35X120	10.	51X100	13.5	51X120	13.6	63.5X120	14.8	0	17.4	63.5X13	13.	76X120	
120000	35X100	9.2	51X80	5	51X120	14.2	63.5X10	14.8	63.5X140	16.0	63.5X13	20.0	0	8	76X140	
150000	51X80	10.2	51X90	11.	51X120	15.0	0	15.6	76X120	18.2	0	22.0	76X120	15.		
180000	51X90	12.0	51X110	2	63.5X10	16.2	63.5X12	17.2	76X140	20.2	63.5X14	24.2	76X130	6		
220000	51X100	13.2	51X120	12.	0	17.6	0	19.0	89X140	22.4	0		89X130	18.		
270000	63.5X8	13.6	63.5X10	0	63.5X12	18.5	63.5X14	20.4			76X130		0			
330000	0	15.0	0	13.	0	20.5	0	22.5			76X140		21.			
390000	63.5X9	16.3	63.5X11	5	76X100	22.1	76X130				89X140		3			
470000	0	17.0	0	14.	76X120	23.0	89X120						23.			
560000	63.5X10	18.2	76X100	6	76X140		89X140						6			
680000	0	20.5	76X120	15.	89X140											

W.V Cap(μF)	160		180		200		250		315		350		400		450	
	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R	SIZE	I _R
270													35X50	1.4	35X50	1.4
330													35X60	1.6	35X60	1.6
390											35X50	1.7	35X70	1.9	35X70	1.8
470									35X50	1.2	35X60	1.9	35X80	2.2	35X80	2.0
560									35X60	1.4	35X70	2.2	35X90	2.5	35X100	2.4
680							35X50	1.6	35X70	1.7	35X80	2.5	35X100	2.8	35X120	2.8
820							35X60	2.0	35X80	1.9	35X90	3.0	35X110	3.3	51X70	3.0
1000			35X50	2.2	35X50	2.4	35X70	2.4	35X90	2.2	35X100	3.4	51X70	3.5	51X80	3.8
1200			35X60	2.7	36X60	2.8	35X80	2.7	35X100	2.6	35X120	4.0	51X90	4.4	51X100	4.4
1500			35X70	3.1	35X70	3.4	35X100	3.3	35X110	3.2	51X80	4.6	51X100	5.0	51X110	5.2
1800			35X80	3.6	35X80	4.0	35X120	4.0	35X120	4.0	51X90	5.2	51X110	5.6	51X130	5.7
2200	35X80	4.0	35X90	4.2	35X100	4.6	51X80	4.8	51X80	4.8	51X110	6.0	51X130	6.5	63.5X11	6.6
2700	35X100	5.0	35X100	5.0	35X120	5.0	51X90	5.5	51X100	5.8	51X120	6.7	63.5X110	7.6	0	7.8
3300	35X120	6.2	51X70	5.8	51X80	5.6	51X100	6.2	51X120	7.0	63.5X10	8.0	63.5X130	9.0	63.5X13	8.6
3900	51X70	6.8	51X80	6.8	51X90	6.4	51X120	7.0	63.5X10	8.0	0	9.0	63.5X140	9.8	0	10.0
4700	51X80	7.6	51X90	7.6	51X100	7.2	63.5X100	8.1	0	9.2	63.5X12	9.9	76X130	11.5	76X110	11.4
5600	51X90	8.6	51X110	8.6	51X120	8.2	63.5X110	9.2	63.5X11	10.4	0	12.0	76X140	12.6	76X130	12.4
6800	51X100	9.8	51X120	9.4	63.5X9	9.0	63.5X120	10.2	0	11.2	76X100	13.5	89X120	13.8	76X140	14.6
8200	51X120	11.	63.5X10	10.6	0	10.4	76X100	11.4	63.5X12	12.8	76X120	14.8	89X140	15.6	89X120	
10000	63.5X10	0	0	11.5	63.5X10	11.6	76X120	12.5	0	15.0	76X130	16.4			89X140	
12000	0	12.	63.5X12	13.2	0	12.9	76X140	14.0	76X100	17.2	89X120					
15000	63.5X12	4	0	15.4	63.5X12	14.0	89X140	16.4	76X120		89X140					
18000	0	13.	76X100	16.9	0	15.6			89X120							
22000	76X100	6	76X120	19.0	76X100				89X140							
27000	76X120	15.	89X120		76X120											
	0															

Max. permissible ripple current [A(rms) at 85°C, 120Hz]
Case size [øDXL(mm)]