

Aluminum Electrolytic Capacitors

Aluminum Electrolytic Type / Surface Mount Type

RoHS compliance

CAE-AX

Series

Low Impedance



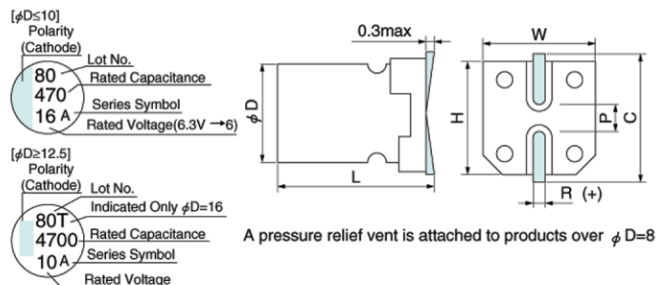
- 105°C, 1,000 to 2,000hrs
- Solvent proof (within 2 minutes)

Specifications

Items	Condition	Specifications					
Rated voltage (V)	—	6.3	10	16	25	35	50
Surge voltage (V)	Room temperature	8.0	13	20	32	44	63
Category temperature range (°C)	—	-55 to +105					
Capacitance tolerance (%)	120Hz/20°C	M : ±20					
Dissipation Factor (DF)	120Hz/20°C	φ 4 to φ 6.3	0.24	0.20	0.16	0.14	0.12
		φ 8 to φ 16	0.28	0.24	0.20	0.16	0.14
		When rated capacitance exceeds 1,000 μF, add 0.02 to the value above for each 1,000 μF increase.					
Leakage current (LC)	μ A/after 2minutes (max)	The greater value of either 0.01CV or 3					
Impedance ratio at low temperature	Based the value at 120Hz, +20°C	-40°C Z/Z _{20°C}	3	2	2	2	2
		-55°C Z/Z _{20°C}	5	4	4	3	3
Endurance	105°C rated voltage applied (With the rated ripple current)	Test	φ 4 to φ 6.3, φ 10×7.7 : 1,000hrs., φ 8 to φ 16 : 2,000hrs.				
		ΔC/C	Within ±25% of the initial value				
		tan δ	≤ 2 times the initial specified value				
		LC	≤ The initial specified value				

Marking, Dimensions

(Unit : mm)



D±0.5max	L±0.3	W±0.2	H±0.2	C±0.2	R	P±0.2
4	6.0	4.3	4.3	5.0	0.5 to 0.8	1.0
5	6.0	5.3	5.3	6.0	0.5 to 0.8	1.4
6.3	6.0	6.6	6.6	7.3	0.5 to 0.8	2.2
6.3	7.7	6.6	6.6	7.3	0.5 to 0.8	2.2
8	10.2	8.3	8.3	9.0	0.7 to 1.0	3.2
10	7.7	10.3	10.3	11.0	1.0 to 1.4	4.6
10	10.2	10.3	10.3	11.0	1.0 to 1.4	4.6
12.5	13.5 ±0.5	12.8	12.8	13.5	1.0 to 1.4	4.6
16	16.5 ±0.5	16.3	16.3	17.3	1.8 to 2.1	7.0

Optional Length (L) Available

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Size List, Impedance, Rated Ripple Current

μF \ V	6.3			10			16			25			35			50		
4.7													4 x 6.0	1.80	80	4 x 6.0	2.90	60
10										4 x 6.0	1.80	80	5 x 6.0	0.76	150	6.3 x 6.0	0.88	165
15							4 x 6.0	1.80	80	5 x 6.0	0.76	150	5 x 6.0	0.76	150			
22				4 x 6.0	1.80	80	5 x 6.0	0.76	150	5 x 6.0	0.76	150	5 x 6.0	0.76	150	6.3 x 6.0	0.88	165
27	4 x 6.0	1.80	80															
33	→			5 x 6.0	0.76	150	→			6.3 x 6.0	0.44	230	6.3 x 6.0	0.44	230	6.3 x 7.7	0.68	195
47	5 x 6.0	0.76	150	→			6.3 x 6.0	0.44	230	6.3 x 6.0	0.44	230	6.3 x 6.0	0.44	230	6.3 x 7.7	0.68	195
56	5 x 6.0	0.76	150							6.3 x 6.0	0.44	230						
68	→			6.3 x 6.0	0.44	230	6.3 x 6.0	0.44	230	6.3 x 6.0	0.44	230	6.3 x 7.7	0.34	280			
100	6.3 x 6.0	0.44	230	→			6.3 x 6.0	0.44	230	6.3 x 7.7	0.34	280	8 x 10.2	0.17	450	8 x 10.2	0.39	300
150	6.3 x 6.0	0.44	230	6.3 x 6.0	0.44	230	6.3 x 7.7	0.34	280	8 x 10.2	0.17	450	8 x 10.2	0.17	450	10 x 10.2	0.21	450
										→			10 x 7.7	0.17	450			
220	6.3 x 6.0	0.44	230	6.3 x 7.7	0.34	280	6.3 x 7.7	0.34	280	8 x 10.2	0.17	450	8 x 10.2	0.17	450	10 x 10.2	0.21	450
										10 x 7.7	0.17	450						
330	6.3 x 7.7	0.34	280	8 x 10.2	0.17	450	8 x 10.2	0.17	450	8 x 10.2	0.17	450	10 x 10.2	0.09	670	12.5 x 13.5	0.14	620
				→			10 x 7.7	0.17	450									
390																12.5 x 13.5	0.14	620
470	8 x 10.2	0.17	450	8 x 10.2	0.17	450	8 x 10.2	0.17	450	10 x 10.2	0.09	670	12.5 x 13.5	0.066	900			
				10 x 7.7	0.17	450												
680	8 x 10.2	0.17	450	→			10 x 10.2	0.09	670				12.5 x 13.5	0.066	900			
	10 x 7.7	0.17	450															
1000	8 x 10.2	0.17	450	10 x 10.2	0.09	670				12.5 x 13.5	0.066	900				16 x 16.5	0.078	790
1500	10 x 10.2	0.09	670				12.5 x 13.5	0.066	900				16 x 16.5	0.052	1250			
2200				12.5 x 13.5	0.066	900				16 x 16.5	0.052	1250						
3300	12.5 x 13.5	0.066	900				16 x 16.5	0.052	1250									
4700				16 x 16.5	0.052	1250												
6800	16 x 16.5	0.052	1250															

→ Use next higher voltage product.

Please refer to page 19 for the ripple current frequency coefficient.

Case size ; ϕ D x L (mm)
10 x 7.7 ; CAE-AXA series
16 x 16.5 ; CAE-AXT series

Rated ripple current
mA rms (100kHz, 105°C)

Impedance (Ω)
max at 100kHz, 20°C

Model No.

16 CAE 470 AX-V
└─ RoHS
└─ Series code
└─ Rated capacitance code
└─ Type code
└─ Rated voltage

10 CAE 470 AXA-V
└─ RoHS
└─ Series code
└─ Rated capacitance code
└─ Type code
└─ Rated voltage

10 CAE 4700 AXT-V
└─ RoHS
└─ Series code
└─ Rated capacitance code
└─ Type code
└─ Rated voltage