

Aluminum Electrolytic Capacitors

EAR1-CD110X Mini Radial Aluminum Electrolytic Capacitors



Elecsound is a leading manufacturer of aluminum electrolytic capacitors. Mainly include radial type electrolytic capacitors and chip aluminum electrolytic capacitors.

- Load life of 2000 hours at 85 °C
- High and stable quality
- Small size and low cost
- For general consumer electronic products application

Specifications:

- Operating Temperature Range(°C): -40~+85
- Rated Voltage Range(V): 6.3~450
- Nominal Capacitance Ranges(μF): 0.1~22000
- Capacitance Tolerance(20 °C,120Hz) : 20%
- Leakage current (6.3~100V: 0.01CV or whichever is smaller(at 25 °C ,after 2 minutes)
μA): 160~450V: 0.03CV+10(at 25 °C ,after 2 minutes)



Dissipation Factor(25 °C,120Hz)

Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
tan δ	0.28	0.22	0.2	0.16	0.14	0.12	0.1	0.08	0.2	0.2	0.24	0.24	0.24	0.24

when nominal capacitance is over 1000uF tan δ shall be added 0.02 to the listed

Temperature Stability(120Hz)

Rated voltage(v)	6.3	10	16	25	35	50~100	160~250	350~450
Impedance Ratio	Z-25°C/Z+20°C	-	-	-	-	-	≦ 6	≦ 12
	Z-40°C/Z+20°C	≦ 12	≦ 10	≦ 8	≦ 5	≦ 4	≦ 3	-

Load Life(+85 °C)

Time	After applying rated voltage for 2000 Hours at +85°C and then resumed 16 Hours
Leakage Current	Not more than the specified value.
Capacitance Change	Within ±20% of the initial value.
Dissipation Factor	Not more than 200% of the specified value.

Shelf Life(+85 °C)

Time	After applying rated voltage for 1000 Hours at +85°C and then resumed 16 Hours
Leakage Current	Not more than the specified value.
Capacitance Change	Within ±15% of the initial value.
Dissipation Factor	Not more than 200% of the specified value.

After test:Rated Voltage to be applied for 30 minutes, 24 to 48 hours before measurement.

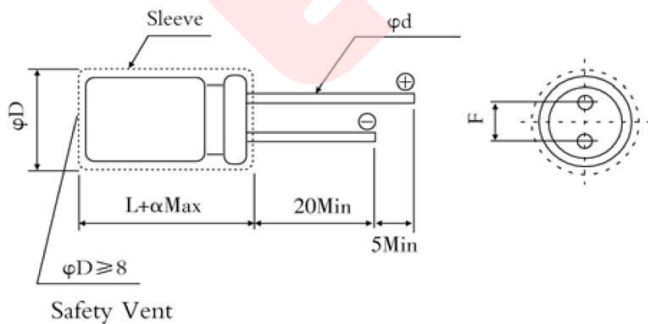
Frequency coefficient

Rated Voltage (V)	Frequency (Hz)					
	50Hz	120Hz	1KHz	10KHz	100K	
6.3~16	All CV value					
25~35	≤1000	0.8	1.00	1.10	1.20	1.20
	>1000	0.8	1.00	1.20	1.30	1.30
50~100	≤1000	0.8	1.00	1.60	1.90	1.90
	>1000	0.8	1.00	1.20	1.30	1.30
160~450	All CV value					

Temperature Coefficient

Temperature (°C)	+70	+85
Coefficient	1.35	1.00

Dimensions: (Unit:MM)



Lead spacing and diameter: (Unit:MM)

ΦD	5	6.3	8	10	12.5	16	18	
F	2	2.5	3.5	5		7.5		
φd	0.5		0.6				0.8	
a	1		L<16: 1.0 ; L≥16: 2.0					

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Standard Ratings

WV(V)	6.3		10		16		25		35		50		63	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
	ΦDxL	mArms	ΦDxL	mArms	ΦDxL	mArms	ΦDxL	mArms	ΦDxL	mArms	ΦDxL	mArms	ΦDxL	mArms
0.1	-	-	-	-	-	-	-	-	-	-	5x11	5	-	-
0.22	-	-	-	-	-	-	-	-	-	-	5x11	7	-	-
0.33	-	-	-	-	-	-	-	-	-	-	5x11	9	-	-
0.47	-	-	-	-	-	-	-	-	-	-	5x11	10	-	-
1	-	-	-	-	-	-	-	-	-	-	5x11	15	-	-
2.2	-	-	-	-	-	-	-	-	-	-	5x11	20	-	-
3.3	-	-	-	-	-	-	-	-	-	-	5x11	25	-	-
4.7	-	-	-	-	-	-	5x11	25	5x11	30	5x11	30	5x11	35
10	-	-	-	-	5x11	40	5x11	40	5x11	45	5x11	45	5x11	50
22	-	-	5x11	50	5x11	55	5x11	60	5x11	60	5x11	70	6.3x11	85
33	5x11	60	5x11	65	5x11	70	5x11	70	5x11	80	6.3x11	100	6.3x11	100
47	5x11	70	5x11	75	5x11	80	5x11	90	6.3x11	110	6.3x11	120	8x11.5	150
100	5x11	100	5x11	110	6.3x11	140	6.3x11	150	8x11.5	190	8x11.5	210	10x12.5	260
220	6.3x11	170	6.3x11	190	8x11.5	240	8x11.5	260	10x12.5	330	10x16	400	10x20	460
330	6.3x11	210	8x11.5	270	8x11.5	300	10x12.5	380	10x16	450	10x20	540	12.5x20	650
470	8x11.5	300	8x11.5	330	10x12.5	420	10x16	500	10x20	590	12.5x20	740	12.5x25	850
1000	10x12.5	530	10x16	620	10x20	740	12.5x20	1000	12.5x20	1050	16x25	1350	16x31.5	1550
2200	12.5x20	990	12.5x20	1050	12.5x25	1200	16x25	1500	16x31.5	1750	18x35.5	2100	-	-
3300	12.5x20	1150	12.5x25	1350	16x25	1650	16x31.5	1900	18x35.5	2250	-	-	-	-
4700	16x25	1700	16x25	1800	16x31.5	2100	18x35.5	2450	-	-	-	-	-	-
6800	16x25	1900	16x31.5	2200	18x35.5	2600	-	-	-	-	-	-	-	-
10000	16x31.5	2250	18x35.5	2750	-	-	-	-	-	-	-	-	-	-
15000	18x35.5	2900	18x35.5	3100	-	-	-	-	-	-	-	-	-	-
22000	18x40	3340	-	-	-	-	-	-	-	-	-	-	-	-

WV(V)	100		160		200		250		350		400		450	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
	ΦDxL	mArms	ΦDxL	mArms	ΦDxL	mArms	ΦDxL	mArms	ΦDxL	mArms	ΦDxL	mArms	ΦDxL	mArms
0.1	5x11	5	-	-	-	-	-	-	-	-	-	-	-	-
0.22	5x11	8	-	-	-	-	-	-	-	-	-	-	-	-
0.33	5x11	10	-	-	-	-	-	-	-	-	-	-	-	-
0.47	5x11	10	6.3x11	10	6.3x11	10	6.3x11	10	6.3x11	10	-	-	-	-
1	5x11	15	6.3x11	15	6.3x11	15	6.3x11	1	8x11.5	15	8x11.5	15	10x12.5	15
2.2	5x11	25	6.3x11	20	6.3x11	20	8x11.5	25	10x12.5	30	10x12.5	20	10x16	25
3.3	5x11	30	8x11.5	35	8x11.5	35	10x12.5	35	10x12.5	35	10x16	35	10x20	35
4.7	5x11	35	8x11.5	40	10x12.5	50	10x12.5	40	10x16	45	10x20	45	12.5x20	45
10	6.3x11	60	10x12.5	70	10x16	75	10x20	75	10x20	75	12.5x20	75	12.5x25	75
22	8x11.5	110	10x20	120	10x20	120	12.5x25	140	12.5x25	140	16x25	140	16x31.5	140
33	10x12.5	160	12.5x20	180	12.5x25	190	12.5x25	170	16x25	200	16x31.5	190	18x35.5	200
47	10x16	210	12.5x25	230	12.5x25	220	16x25	240	16x31.5	260	18x35.5	260	22x35	350
100	12.5x20	380	16x25	400	16x31.5	430	18x35.5	440	22x30	400	22x30	330	-	-
220	16x25	720	18x35.5	730	18x35	600	22x30	500	22x50	600	25x50	750	-	-
330	16x25	880	19x40	800	22x40	800	22x50	900	25x50	900	-	-	-	-
470	16x31.5	1150	22x40	850	25x40	1100	25x50	1200	-	-	-	-	-	-
1000	19x40	1400	25x50	900	-	-	-	-	-	-	-	-	-	-
2200	22x50	2400	25x50	1300	-	-	-	-	-	-	-	-	-	-
3300	25x50	2900	-	-	-	-	-	-	-	-	-	-	-	-

Rated Ripple Current: 85 °C, 100Hz or 120Hz

The Specific capacitance and case size are available on request by customer