A31 - 2000H at 85°C Snap-In type Aluminum Electrolytic Capacitor

Features

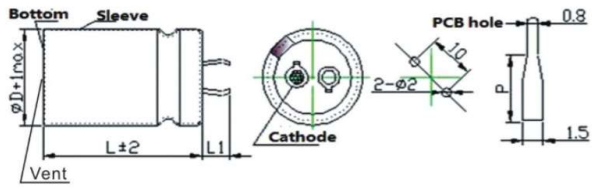
- 2000hrs at 85°C, standard product
- Designed for Power supply, low voltage inverter
- RoHS Compliant

Specifications

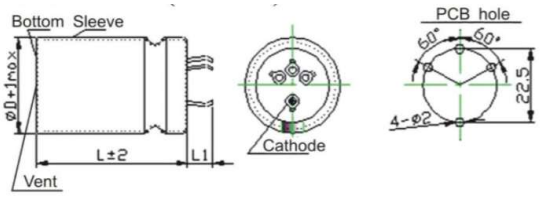
Item	Performance Characteristics
Operating Temperature Range	(16V~100V) -40~+85℃ (160V~450V) -25~+85℃
Rated Voltage Range	16V ~ 450VDC
Nominal Capacitance Range	100uF ~ 56000μF
Norminal Capacitance Tolerance	±20% (+20℃ ,120Hz)
Leakage Current	I ≤ 0.01CV(μA) or 1.5mA, whichever is the smaller, 5 minutes test @20°C
	I=Leakage Current (μA) C=Rated Capacitance (μF) V=Rated Voltage (V)
Dissipation Factor (MAX)	0.15 (+20°C, 120Hz)
Temperature characteristics (120Hz)	C (-25°C) / C (+20°C) ≥ 0.6
Insulating resistance	The value measured by applying DC 500V insulation resistance tester between all terminals and snap ring with insulating sleeve ≥ 100MΩ
Insulating voltage	Apply AC 2000V between all terminals and snap ring with insulating sleeve for 1 minute and no abnormality appears
Durability	Apply rated ripple current on capacitor with voltage not more than rated voltage under 85°C environment and apply rated voltage for 2000 hours, then recover to 20°C environment and the test results should satisfy the requirements as below. Capacitance change rate (△C) ≤ initial value ±20% DF ≤ 200% of initial specifications value Leakage current ≤ initial specification value
High-temperature zero load characteristics	Capacitor kept in 85°C environment for 1000 hours, then tested in 20°C environment and the test result should satisfy the requirements as below. Capacity change rate (△C) ≤ initial specification value +/-15% DF ≤ 150% of initial specification value ; Leakage current ≤ initial specification value (Voltage pretreatment should be done before test: apply rated voltage on both ends of capacitor through a resistor of about 1000Ω for 1 Hrs, then discharge electricity through 1Ω/V resistor after pretreatment. Place capacitor under normal temperature for 24hrs after total discharging, then starts test.

Diagram of Dimensions

Terminal code T2 (Φ22-Φ45): Standard



Terminal code T4 (Φ22-Φ45)



Frequency correction coefficient of rated ripple current

Frequency(Hz)	50	120	500	1K	≥10K
Coefficient	0.80	1.00	1.20	1.25	1.40

Temperature correction coefficient of rated ripple current

Temperature (°C) / Voltage (V)	40	60	85
< 160	2.10	1.70	1.00
≥ 160	1.70	1.40	1.00

Standard Size (mm)

Rated Voltage (Vdc)	16V			25V			35V			50V		
Capacitance (μF)	DxL (mm)	Ripple Current (Arms)	Impedance (Max, mΩ)	DxL (mm)	Ripple Current (Arms)	Impedance (Max, mΩ)	DxL (mm)	Ripple Current (Arms)	Impedance (Max, mΩ)	DxL (mm)	Ripple Current (Arms)	Impedance (Max, mΩ)
2200										22 x 25	1.62	122.3
2700										22 x 30	1.86	102.4
										25 x 25	1.89	102.6
3300							22 x 25	1.82	101.34	22 x 35	1.99	98.6
3900							22 x 30	2.13	86.58	22 x 35	2.11	86.9
										25 x 30	2.13	87.2
										30 x 25	2.14	87.6
4700							25 x 25	2.16	72.14	22 x 40	2.41	72.5
										25 x 35	2.43	72.8
5600				22 x 25	2.1	83.5	22 x 35	2.32	73.24	22 x 50	2.54	74.6
							25 x 30	2.36	74.12	25 x 40	2.56	74.7
										30 x 30	2.58	74.8
										35 x 25	2.6	74.9
6800				22 x 30	2.4	69.4	22 x 40	2.73	59.35	25 x 45	2.82	60.4
				25 x 25	2.42	68.3	25 x 35	2.76	62.63	30 x 35	2.84	60.6
							30 x 25	2.79	64.56			
8200	22 x 25	2.2	65.2	22 x 35	2.59	57.4	22 x 50	3.05	58.46	25 x 50	3.24	58.6
							25 x 40	3.08	56.46	30 x 40	3.26	58.8
							30 x 30	3.11	54.65	35 x 30	3.28	59.1
							35 x 25	3.14	52.34			
10000	22 x 30	2.5	54.3	22 x 40	2.84	47.5	25 x 45	3.31	48.63	30 x 45	3.42	47.6
	25 x 25	2.6	54.1	25 x 30	2.86	47.6	30 x 35	3.34	48.57	35 x 35	3.44	47.8
				30 x 25	2.88	47.3						
12000	22 x 35	2.9	45.6	22 x 45	3.28	39.6	25 x 50	3.54	39.65	30 x 50	3.82	39.4
				25 x 35	3.3	39.5	30 x 40	3.56	39.62	35 x 40	3.84	39.6
				30 x 30	3.32	39.3	35 x 30	3.58	39.59			
15000	22 x 40	3.2	36.5	25 x 40	3.68	31.6	30 x 45	4.12	31.45	35 x 50	4.52	31.6
	25 x 30	3.3	36.1	35 x 25	3.7	31.4	35 x 35	4.15	31.41			
	30 x 25	3.4	36.02									
22000	22 x 50	4.1	25.4	30 x 40	4.86	22.6	35 x 45	5.26	22.45			
	25 x 40	4.2	25.35	35 x 35	4.88	22.5						
	30 x 30	4.3	25.24									
	35 x 25	4.4	25.36									
33000	30 x 40	5.6	17.6	35 x 40	6.53	15.4						
	35 x 30	5.4	17.4									
47000	30 x 50	7	12.3									
	35 x 40	7.2	12.4									
56000	35 x 45	8	9.6									

Rated Voltage (Vdc)	63V			80V			100V			160V		
Capacitance (μF)	DxL (mm)	Ripple Current (Arms)	Impedance (Max, mΩ)	DxL (mm)	Ripple Current (Arms)	Impedance (Max, mΩ)	DxL (mm)	Ripple Current (Arms)	Impedance (Max, mΩ)	DxL (mm)	Ripple Current (Arms)	Impedance (Max, mΩ)
220										22 x 25	1.06	602.54
330										22 x 25	1.29	405.6
470										22 x 35	1.92	238.6
680							22 x 25	1.05	294.2	22 x 50	2.41	165.6
										25 x 40	2.43	165.9
1000				22 x 25	1.26	198.6	22 x 35	1.54	167.4	25 x 50	3.12	114.6
1200				22 x 30	1.46	166.4	22 x 40	1.74	134.6	30 x 45	3.62	93.5
										35 x 40	3.67	93.9
2200	22 x 30	2.1	92.4	22 x 40	2.14	92.4	25 x 50	2.62	75.6			
	25 x 25	2.12	92.6	25 x 35	2.16	92.6	30 x 40	2.67	75.8			
				30 x 25	2.18	92.8						
3300	22 x 40	2.35	82.4	25 x 45	2.74	62.1						
	25 x 35	2.37	82.6	30 x 35	2.76	62.4						
	30 x 25	2.39	82.8									
4700				30 x 45	3.54	44.62	30 x 50	3.92	44.6			
				30 x 50	3.57	44.67						
5600	25 x 45	3.14	48.5	30 x 50	3.46	49.24						
	30 x 35	3.17	48.7	35 x 40	3.48	49.26						
	35 x 30	3.21	48.9									
6800	30 x 40	3.62	41.2	35 x 40	4.12	41.32						
	35 x 35	3.66	41.4									
10000	35 x 50	4.76	28.4									

Rated Voltage (Vdc)	200V			250V			400V			450V		
Capacitance (μF)	DxL (mm)	Ripple Current (Arms)	Impedance (Max, mΩ)	DxL (mm)	Ripple Current (Arms)	Impedance (Max, mΩ)	DxL (mm)	Ripple Current (Arms)	Impedance (Max, mΩ)	DxL (mm)	Ripple Current (Arms)	Impedance (Max, mΩ)
100				22 x 25	0.65	1992.2						
220	22 x 25	1.02	604.5	22 x 30	1.02	908.4	22 x 45	1.3	869.65	22 x 55	1.01	889.56
				25 x 25	1.06	908.8	25 x 35	1.23	869.84	25 x 45	0.97	889.74
							30 x 30	1.17	870.23	30 x 30	0.92	889.78
330	22 x 30	1.36	406.7	22 x 40	1.36	604.5	22 x 60	1.74	589.12	25 x 55	1.36	598.23
	25 x 25	1.39	406.9	25 x 30	1.38	604.8	25 x 50	1.72	589.23	30 x 40	1.34	598.32
				30 x 25	1.4	605.1	30 x 35	1.69	589.35	35 x 35	1.32	598.36
390	22 x 35	1.56	343.4	22 x 45	1.66	512.6	22 x 70	1.89	492.62	30 x 50	1.61	501.36
	25 x 30	1.58	343.8	25 x 35	1.69	512.8	25 x 55	1.87	419.68	35 x 40	1.58	501.39
							30 x 40	1.85	419.72	40 x 30	1.56	501.42
470	22 x 40	1.82	284.7	22 x 50	1.76	426.56	25 x 65	2.16	412.65	30 x 55	1.85	414.62
	30 x 25	1.86	284.9	25 x 40	1.78	426.59	30 x 50	2.13	412.69	35 x 45	1.83	414.71
				30 x 30	1.8	427.21	35 x 40	2.11	412.72	40 x 35	1.8	414.76
				35 x 25	1.82	427.27						
560	22 x 45	2.06	239.4	25 x 45	2.13	357.12	30 x 55	2.35	352.61	30 x 60	2.08	354.63
	25 x 35	2.09	239.8	30 x 35	2.16	357.26	35 x 45	2.33	352.65	35 x 50	2.06	354.69
	30 x 30	2.11	240.5				40 x 35	2.31	352.69	40 x 40	2.04	354.72
	35 x 25	2.14	241.4									
680	25 x 40	2.31	197.4	30 x 40	2.45	294.25	30 x 65	2.6	284.62	35 x 55	2.24	287.54
				35 x 30	2.49	294.28	35 x 50	2.57	284.68	40 x 45	2.22	287.62
							40 x 40	2.55	284.72	45 x 40	2.2	287.68
1000	30 x 45	2.92	136.5	35 x 40	2.96	201.62	35 x 65	3.1	223.54	40 x 60	2.76	226.35
	35 x 35	2.96	137.2				40 x 50	3.08	223.62	45 x 50	2.74	226.39
							45 x 45	3.06	223.71			
1200	30 x 50	3.32	113.5	35 x 45	3.36	167.54	40 x 60	3.34	201.23	40 x 70	2.99	209.45
	35 x 40	3.36	114.2				45 x 50	3.32	201.32	45 x 60	2.97	209.52
1500	35 x 40	3.76	109.4				40 x 70	3.54	165.65	40 x 85	3.23	169.54
							45 x 60	3.52	165.71	45 x 70	3.21	169.62

Arms Rated ripple crrent (85℃,120kHz)

Customer products are available on request.