General Purpose Radial Type

ALUMINUM ELECTROLYTIC CAPACITORS

The radial type is available in a capacitance range starting at 0.47UF through 10,000UF with a standard tolerance of ±20%.

Operating temperature range: -40°C ~ +85°C.

Capacitance and tolerance: Capacitance measurements shall be made by referred to a frequency of $120Hz^{+10}_{-5}Hz$. The capacitance shall be within the specified tolerance of ±20%. (±10% units are available on request).

Leakage current: Measurement shall be made at rated DC voltage with an application of a steady source of power, such as a regulated power supply. A current-limiting resistor of 1,000 ohms shall be connected in series with each capacitor under test. Rated DC working voltage shall be applied to the capacitor for 5 minutes before making the leakage current measurements.

The maximum leakage current shall not exceed the value determined from the following equation or 4μA, whichever is greater:

$I = 0.03CV$

where: I = Leakage Current (μA)
C = Nominal Capacitance (μF)
V = Rated DC Voltage (V. DC)

Dissipation factor: Measured at a frequency of $120Hz^{+10}_{-5}$ Hz, the dissipation factor shall be less than the values in Table 1.

Table 1.

Rated Voltage (V.DC)	Dissipation Factor (%)
6.3	22
10	19
16	16
25	14
35	12
50	10
63	9
80	9
100	8

In case the nominal capacitance of capacitor exceeds 1000μF, 2% per each 1000μF shall be added to the corresponding value listed in Table 1.

Low-temperature characteristics: The ratio of the impedance of -25°C to that of +20°C shall be less than the values in Table 2.

Table 2.

Rated Voltage (V.DC)	Ratio of Impedance	
	Z @ -25°C / Z @ +20°C	Z @ -40°C / Z @ +20°C
6.3	4	8
10	3	6
16	2	4
25	2	4
35	2	3
50	2	3
63	2	3
80	2	3
100	2	3

Life test: Rated voltage shall be applied to the capacitors in series with a one thousand ohm resistor. All tests shall be conducted in a dry oven with circulating air. Capacitors shall be separated by a distance not less than 2.5CM and air circulation shall be provided to prevent temperature within 15CM of any capacitors from departing more than +0°C-5°C from the norminal ambient temperature of the chamber. Capacitors shall not be exposed to direct radiation from heating elements.

Capacitors shall be subjected to for a period of 1000 hours at 85°C.

After the completion of the life test capacitors shall be returned to standard test conditions.

Table 3.

Leakage current	Same as specified under Leakage Current	
Capacitance	• 16WV or lower • Body Dia.≤6mm	Within ±20% of initial measurement
	• 25WV or higher • Body Dia.>6mm	Within ±15% of initial measurement
Dissipation factor	150% less of values in Table 1.	
Appearance	Free from leakage of electrolyte and/or other noticeable deformation	

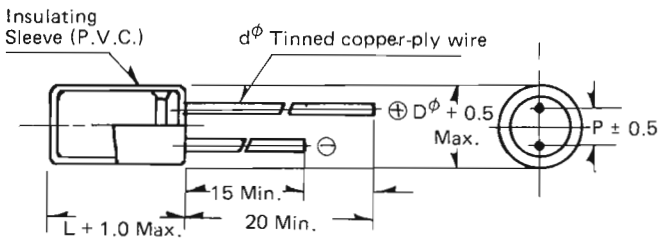
Shelf life test: Capacitors shall be subjected to +85°C± 2°C for 1000±12 hours during which time no voltage shall be applied.

Following this period the capacitors shall be cool to room temperature and then D.C. rated voltage shall be applied to the capacitors for 30 minutes after which the capacitors shall be discharged.

General Purpose Radial Type

• CONFIGURATION

Dimensions: **mm**



Outside Diameter	Dϕ	5	6	8	10	13	16	18	22	25
Lead Spacing	P	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10	12
Lead Wire	dϕ	0.5	0.5	0.6	0.6	0.6	0.8	0.8	0.8	1.0

RIPPLE CURRENT IN mA-RMS (at 120Hz, 85°C)—peak voltage not to exceed rated DC voltage—

Rated Voltage (V) / Surge Voltage (V) / CAP. (μF)	6.3	10	16	25	35	50	63	80	100
	8	13	20	32	44	63	79	100	125
0.47	26	26	26	26	26	26	27	27	27
1	39	39	39	39	39	39	40	40	40
2.2	57	57	57	57	57	57	60	60	60
3.3	70	70	70	70	70	70	75	75	75
4.7	84	84	84	84	84	85	90	90	90
10	125	125	125	125	125	125	130	140	140
22	140	140	140	140	170	190	190	200	210
33	160	160	160	180	210	240	240	250	260
47	170	170	200	220	250	290	290	310	310
100	240	260	300	320	370	430	440	470	470
220	370	400	450	490	570	670	680	710	740
330	460	500	560	610	720	820	830	900	910
470	550	600	670	750	870	1020	1020	1090	1130
1000	820	920	1020	1130	1310	1500	1550	1560	1580
2200	1270	1410	1560	1740	1900	2100	2170	2180	
3300	1600	1770	1900	2220	2660	2940	3030	3060	
4700	1950	2000	2280	3100	3720	4120	4250		
10000	2800	2800	3190	4660					

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DIMENSIONS: Diameter (D^{Φ}) x Length (L): mm

Rated Voltage (V) / Surge Voltage (V) / CAP. (μF)	6.3	10	16	25	35	50	63	80	100
	8	13	20	32	44	63	79	100	125
0.47	5x11	5x11	5x11	5x11	5x11	5x11	5x11	5x11	5x11
1	5x11	5x11	5x11	5x11	5x11	5x11	5x11	5x11	5x11
2.2	5x11	5x11	5x11	5x11	5x11	5x11	5x11	5x11	5x11
3.3	5x11	5x11	5x11	5x11	5x11	5x11	5x11	5x11	5x11
4.7	5x11	5x11	5x11	5x11	5x11	5x11	5x11	5x11	5x11
10	5x11	5x11	5x11	5x11	5x11	5x11	5x11	6x11	6x11
22	5x11	5x11	5x11	5x11	5x11	6x11	6x11	8x11.5	8x11.5
33	5x11	5x11	5x11	5x11	5x11	6x11	6x11	10x12.5	10x12.5
47	5x11	5x11	5x11	5x11	6x11	6x11	8x11.5	10x16	10x16
100	5x11	5x11	6x11	6x11	8x11.5	8x11.5	10x12.5	13x20	13x20
220	6x11	6x11	8x11	8x11.5	10x12.5	10x16	10x20	13x25	16x25
330	8x11.5	8x11.5	8x11.5	10x12.5	10x16	10x20	13x20	16x25	16x25
470	8x11.5	8x11.5	10x12.5	10x16	10x20	13x21.5	13x25	16x31.5	16x31.5
1000	10x16	10x16	10x18	13x20	13x20	16x25	16x31.5	18x40	22x40
2200	10x20	10x20	13x20	16x25	16x31.5	16x41	22x40	25x50	
3300	13x20	13x20	13x25	16x31.5	16x41	22x40	25x40	25x50	
4700	13x25	13x25	16x31.5	16x41	18x41	22x41	25x50		
10000	16x34.5	16x34.5	18x41	25x40					