



ENGLISH

Datasheet

Aluminium Electrolytic Capacitor

RS Stock number 711-2107



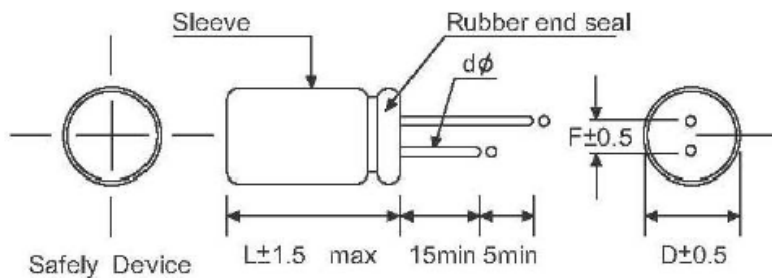
Specifications:

Item	Performance Characteristics																																												
Operating Temperature Range	-40 to +105°C	-25 to +105°C																																											
Rated Voltage Range	6.3 to 100 VDC	160 to 450 VDC																																											
Capacitance Tolerance	± 20% (120Hz, +20°C)																																												
Leakage Current (at 20°C, max.)	I < 0.01 CV or 3 (µA). After 1 minute whichever is greater measured with rated working voltage applied.	I < 0.03 CV or 3 (µA). After 1 minute with rated working voltage applied.																																											
Dissipation Factor (120Hz, 20°C)	<table border="1"> <thead> <tr> <th>Working voltage (VDC)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>D.F (%) Max.</td> <td>23</td> <td>20</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>10</td> <td>10</td> <td>15</td> <td>15</td> <td>16</td> <td>20</td> <td>20</td> <td>20</td> </tr> </tbody> </table>															Working voltage (VDC)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	D.F (%) Max.	23	20	16	14	12	10	10	10	15	15	16	20	20	20
	Working voltage (VDC)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450																														
D.F (%) Max.	23	20	16	14	12	10	10	10	15	15	16	20	20	20																															
For capacitance > 1000µ F, add 2% per another 1000µ (+20°C at 120Hz)																																													

Specifications:

Item	Performance Characteristics														
Low Temperature Characteristics (at 120Hz)	Impedance ratio max.														
	W.V (VDC)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
	Z-25°C/+20°C	4	3	2	2	2	2	2	2	3	3	3	5	6	15
Z-40°C/+20°C	9	6	4	4	3	3	3	3	-	-	-	-	-	-	
For capacitance value 1000µF, add 0.5 per another 1000µF for -25°C/+20°C For capacitance value 1000µF, add 1 per another 1000µF for -40°C/+20°C															
Load Life	Test Conditions: Duration time: 2000hrs Ambient temperature: +105°C Applied voltage: Rated DC working voltage After test requirements: +20°C After test requirements: ≤ ± 20% of initial measured value Dissipation Factor: ≤ 200% of the initial specified value Leakage Current: ≤ the initial specified value														
Shelf Life	Test Conditions: Duration time: 1000hrs Ambient temperature: +105°C Applied Voltage: None After test requirements at +20°C: Same limits as load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.														

Diagram of Dimensions:



	(Unit: mm)									
D	5	6	8	10	13	16	18	22	25	
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10	12	
φd	0.5			0.6			0.8			1.0



Features:

- Used in communication equipment's, switching power supply, etc.
- Safety vent construction design

Ripple Current & Temperature

Temperature (°C)	45	60	70	85	105
Multiplier	2.10	1.90	1.65	1.40	1.00

Ripple Current & Frequency Multipliers

CAP (μF)/Hz	50 (60)	120	400	1K	10K	50 – 100K
CAP ≤ 10	0.8	1.0	1.30	1.45	1.65	1.70
10 < CAP ≤ 100	0.8	1.0	1.23	1.36	1.48	1.53
100 < CAP ≤ 1000	0.8	1.0	1.16	1.25	1.35	1.38
1000 < CAP	0.8	1.0	1.11	1.18	1.25	1.28

Case Size

 \varnothing D x L (mm)

WV (SV) uF	6.3		(8)		10		(13)		16		(20)		25		(32)		35		(44)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
4.7													5x11	27	5x11	29				
6.8													5x11	35	5x11	38				
10									5x11	38	5x11	40	5x11	42						
22			5x11	50	5x11	56	5x11	60	5x11	65	5x11	70	5x11	78						
33	5x11	56	5x11	60	5x11	65	5x11	70	5x11	78	5x11	85	5x11	95	5x11	105	5x11	115	5x11	125
47	5x11	68	5x11	72	5x11	78	5x11	85	5x11	95	5x11	105	5x11	115	5x11	125	5x11	135	5x11	145
68	5x11	77	5x11	82	5x11	88	5x11	95	5x11	105	5x11	115	5x11	125	5x11	135	5x11	145	5x11	155
100	5x11	98	5x11	110	5x11	120	5x11	130	5x11	140	5x11	150	5x11	160	5x11	170	5x11	180	5x11	190
220	5x11 6.3x11	160 180	6.3x11	180	6.3x11	200	6.3x11	220	6.3x11	240	6.3x11	260	6.3x11	280	6.3x11	300	6.3x11	320	6.3x11	340
330	6.3x11	200	6.3x11	220	6.3x11	240	6.3x11	260	6.3x11	280	6.3x11	300	6.3x11	320	6.3x11	340	6.3x11	360	6.3x11	380
470	6.3x11 8x11	280 310	6.3x11 8x11	300 315	6.3x11 8x11	330 345	6.3x11 8x11	360 375	6.3x11 8x11	390 405	6.3x11 8x11	420 435	6.3x11 8x11	450 465	6.3x11 8x11	480 495	6.3x11 8x11	510 525	6.3x11 8x11	540 555
560	8x11	320	8x11	330	8x11	340	8x11	350	8x11	360	8x11	370	8x11	380	8x11	390	8x11	400	8x11	410
680	8x11	360	8x11	370	8x11	380	8x11	390	8x11	400	8x11	410	8x11	420	8x11	430	8x11	440	8x11	450
820	8x11	390	8x11	400	8x11	410	8x11	420	8x11	430	8x11	440	8x11	450	8x11	460	8x11	470	8x11	480
1000	8x11	420	8x11	430	8x11	440	8x11	450	8x11	460	8x11	470	8x11	480	8x11	490	8x11	500	8x11	510
1200	10x15	480	10x15	490	10x15	500	10x15	510	10x15	520	10x15	530	10x15	540	10x15	550	10x15	560	10x15	570
1500	10x15	620	10x15	630	10x15	640	10x15	650	10x15	660	10x15	670	10x15	680	10x15	690	10x15	700	10x15	710
2200	10x17 10x20	780 800	10x17 10x20	800 820	10x17 10x20	840 860	10x17 10x20	880 900	10x17 10x20	920 940	10x17 10x20	960 980	10x17 10x20	1000 1020	10x17 10x20	1040 1060	10x17 10x20	1080 1100	10x17 10x20	1120 1140
2700	10x20	850	10x20	860	10x20	870	10x20	880	10x20	890	10x20	900	10x20	910	10x20	920	10x20	930	10x20	940
3300	10x20 13x21	970 1010	10x20 13x21	1000 1040	10x20 13x21	1080 1120	10x20 13x21	1160 1200	10x20 13x21	1240 1280	10x20 13x21	1320 1360	10x20 13x21	1400 1440	10x20 13x21	1480 1520	10x20 13x21	1600 1640	10x20 13x21	1720 1760
4700	10x25 13x21	1160 1200	10x25 13x21	1200 1240	10x25 13x21	1280 1320	10x25 13x21	1360 1400	10x25 13x21	1440 1480	10x25 13x21	1520 1560	10x25 13x21	1600 1640	10x25 13x21	1680 1720	10x25 13x21	1800 1840	10x25 13x21	1920 1960
5600	13x26	1320	13x26	1330	13x26	1340	13x26	1350	13x26	1360	13x26	1370	13x26	1380	13x26	1390	13x26	1400	13x26	1410
6800	16x26	1470	16x26	1480	16x26	1490	16x26	1500	16x26	1510	16x26	1520	16x26	1530	16x26	1540	16x26	1550	16x26	1560
8200	16x26	1520	16x26	1530	16x26	1540	16x26	1550	16x26	1560	16x26	1570	16x26	1580	16x26	1590	16x26	1600	16x26	1610
10000	16x26 16x31	1690 1740	16x26 16x31	1720 1770	16x26 16x31	1800 1850	16x26 16x31	1880 1930	16x26 16x31	1960 2010	16x26 16x31	2040 2090	16x26 16x31	2120 2170	16x26 16x31	2200 2250	16x26 16x31	2320 2370	16x26 16x31	2400 2450
15000	16x36 18x36	2080 2190	16x36 18x36	2120 2230	16x36 18x36	2160 2270	16x36 18x36	2200 2310	16x36 18x36	2240 2350	16x36 18x36	2280 2390	16x36 18x36	2320 2430	16x36 18x36	2360 2470	16x36 18x36	2400 2510	16x36 18x36	2440 2550

Ripple Current(mA,rms)at105□120Hz

Case Size uF	50 {63}		63 {79}		100 {125}		160 {200}		200 {250}	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1	5x11	1.3	5x11	1.3	5x11	1.3	-	-	-	-
0.22	5x11	2.9	5x11	2.9	5x11	2.9	-	-	-	-
0.33	5x11	4.2	5x11	4.2	5x11	4.2	-	-	-	-
0.47	5x11	8	5x11	8	5x11	8	5x11	12	5x11	12
1	5x11	14	5x11	14	5x11	15	5x11	17	6.3x11	17
2.2	5x11	20	5x11	21	5x11	22	6.3x11	28	6.3x11	33
3.3	5x11	28	5x11	28	5x11	30	6.3x11	32	6.3x11	43
4.7	5x11	32	5x11	34	5x11	38	6.3x11 8x11	38 42	8x11	51
6.8	5x11	40	5x11	42	6.3x11	47	8x11	56	10x12	63
10	5x11	50	5x11	51	6.3x11	60	8x11 10x12	75 78	10x12 10x15	83 90
22	5x11	75	5x11 6.3x11	75 85	6.3x11 8x11	98 105	10x15	105	10x20	135
33	5x11 6.3x11	90 95	6.3x11 8x11	105 115	8x11 10x12	145 155	10x20	170	13x21	180
47	6.3x11	120	6.3x11 8x11	145 155	10x12 10x15	170 180	13x21	210	13x21 13x26	220 230
68	8x11	155	8x11	185	10x15	240	13x26	280	16x26	300
100	8x11	200	10x12	240	10x20	290	13x26 16x26	320 330	16x26	360
220	10x12 10x15	350 380	10x17 10x20	400 430	13x26 16x26	530 560	16x36	580	18x36	590
330	10x17 10x20	450 470	13x21	570	16x26	680	18x31	710	18x36	740
470	13x21	610	13x21 13x26 16x26	640 700 720	16x26 16x31	840 860	18x41	880	22x42	890
560	13x21	660	13x26	770	16x36	880	-	-	-	-
680	13x26	770	16x26	880	16x36	920	-	-	-	-
820	13x26	850	16x26	920	18x31	970	-	-	-	-
1000	13x26 16x26	900 1010	16x32 16x36	1190 1220	18x41	1250	-	-	-	-
1500	16x31	1300	18x31	1350	22x42	1500	-	-	-	-
2200	18x36	1550	18x36	1590	25x44	1880	-	-	-	-
2700	18x36	1610	22x42	1720	-	-	-	-	-	-
3300	18x36	1780	22x42	1900	-	-	-	-	-	-
4700	22x42	2050	25x44	2200	-	-	-	-	-	-
5600	25x42	2160	-	-	-	-	-	-	-	-
6800	25x44	2280	-	-	-	-	-	-	-	-

Ripple Current(mA,rms)at105□120Hz

Case Size		Ø D x L (mm)												
uF	WV (SV)	{250}		{300}		{350}		{400}		{450}		{500}		
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	
0.47		5x11	12	6.3x11	15	6.3x11	15	6.3x11	15	6.3x11	15	6.3x11	15	
1		6.3x11	17	6.3x11	20	8x11	22	8x11	22	8x11	22	8x11	22	
2.2		8x11	36	10x12	39	10x12	39	10x12	39	10x12	39	10x12	39	
3.3		8x11	43	10x12	53	10x12 10x15	53	55	55	10x15 10x20	53	55	55	
4.7		10x12	51	10x12 10x15	63	66	66	66	66	10x15	69	69	64	
6.8		10x12	70	10x15	79	79	79	79	79	10x15	85	85	75	
10		10x15	90	10x20	110	110	110	110	110	10x15 10x20 13x21	100 112 115	100 112 115	92	98
22		10x20	160	13x26	180	180	180	180	180	13x21 16x26	170 190	170 190	175 180	180
33		13x21 13x26	175	180	16x26	190	190	190	190	16x26	220	220	16x36	210
47		13x26	240	240	16x31	250	250	250	250	16x31	300	300	16x36	280
68		16x26	320	320	16x31	330	330	330	330	16x36	355	355	18x36	330
100		16x31	400	400	18x36	420	420	420	420	18x36	450	450	-	-
120										18x31	440	440		

Ripple Current(mA,rms)at105±120Hz