

## Radial Aluminum Electrolytic Capacitor - JRB

### **FEATURES**

- Wide temperature range, long life:  $105^{\circ}$ C 2000 hours.
- Miniature and large capacity

### **SPECIFICATIONS**

Operating Temperature

-40°C ~ +105°C Range (°C)

-25℃ ~ +105℃

Rated Voltage Range

6.3V ~ 100V (V)

160V ~ 450V

Capacitance Range

 $0.1 \mu F \sim 22000 \mu F$ 

 $0.47 \mu F \sim 470 \mu F$ 

Capacitance Tolerance

(20°C, 120Hz) Leakage Current

I≤0.01CV or 3  $\mu$  A

I $\leq$ 0.03CV(  $\mu$  A)+40  $\mu$  A

(+20°C, max)

Dissipation Factor

(after 2 minutes, whichever is greater)

(after 2 minutes)

(+20°C, 120Hz)

U <sub>R</sub> (V)	6.3	10	16	25	35	50	63	100	160~250	350~400	450
Tan δ(Max.)	0.22	0.17	0.15	0.14	0.12	0.10	0.09	0.08	0.12	0.15	0.17

When nominal capacitance exceeds  $1000\mu F$ , add 0.02 to the value above for each  $1000\mu F$  increase.

Temperature Characteristics

(Impedance ratio at

120Hz)

400 25~100 160 200 250 350 450  $U_R(V)$ 6.3 10 16 Z-25°C/Z+20°C 6 6 Z-40°C/Z+20°C

Load Life

After applying rated voltage with specified ripple current for 2000 hours at +105℃ and then resumed 24 hours:

Capacitance change: ±20% of the initial measured value

Leakage current: <the initial specified value

Dissipation factor: ≤200% of the initial specified value

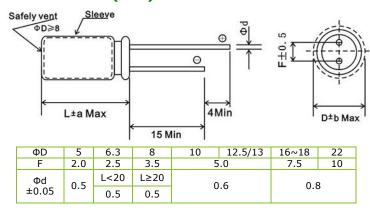
Shelf Life After storage for 1000 hours at  $+105^{\circ}$ C , UR to be applied for 30 minutes and then resumed 24 hours:

Capacitance change: ±20% of the initial measured value

Leakage current: ≤the initial specified value

Dissipation factor: ≤200% of the initial specified value

## **DIMENSIONS (mm)**



a Max.	D<18	D=	D>18	
	D<10	L<35.5	L≥35.5	D>10
	+1.5 -1.0	+1.5 -1.0	+2.0 -1.0	+2.0 -1.0

h May	(D<18)	0.5
b Max.	(D≥18)	1.0

## MULTIPLIER FOR RIPPLE CURRENT

#### Frequency coefficient

Frequency (Hz) Cap(µF)	50 (60)	120	400	1K	10K	50K-100K
CAP ≤10	0.8	1	1.30	1.45	1.65	1.70
10 <cap≤100< td=""><td>0.8</td><td>1</td><td>1.23</td><td>1.36</td><td>1.48</td><td>1.53</td></cap≤100<>	0.8	1	1.23	1.36	1.48	1.53
100 <cap≤1000< td=""><td>0.8</td><td>1</td><td>1.16</td><td>1.25</td><td>1.35</td><td>1.38</td></cap≤1000<>	0.8	1	1.16	1.25	1.35	1.38
1000 <cap< td=""><td>0.8</td><td>1</td><td>1.11</td><td>1.17</td><td>1.25</td><td>1.28</td></cap<>	0.8	1	1.11	1.17	1.25	1.28

## Temperature coefficient

Temperature ( $^{\circ}\!$	+70	+85	+105
Coefficient	1.96	1.68	1.0

Please visit our website to get more update data, those data & specification are subject to change without notice.



Tel: (852)2790 5091 Fax: (852)8169 8283





# Radial Aluminum Electrolytic Capacitor – JRB

**STANDARD RATINGS** Ripple Current: 105℃, 120Hz

	6.3 10		.0	16		25		35		50		63		100		
\wv	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
	(mm)	Current	(mm)	Current	(mm)	Current	(mm)	Current	(mm)	Current	(mm)	Current	(mm)	Current	(mm)	Current
μF	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms
0.1~ 0.47											5x11	3	5x11	3	5x11	3
1											5x11	9	5x11	9	5x11	9
2.2							5x11	11			5x11	11	5×11	11	5×11	15
3.3							5x11	15			5x11	15	5x11	15	5x11	18
4.7							5x11	18			5x11	18	5x11	20	5×11	20
6.8											5x11	20	5x11	25	5×11	25
10			5x11	20	5x11	20	5x11	25	5x11	25	5x11	25	5x11	30	6.3x12	35
22			5x11	20	5x11	30	5x11	35	5×11	35	5x11	40	6.3x11	50	6.3x12	65
33			5x11	20	5x11	40	5x11	40	5x11	50	5x12	50	6.3x11	60	8x12	85
47			5x11	45	5x11	50	5x11	50	6.3x11	65	6.3x11	70	6.3x12	90	10x12.5	120
68			5x11	60											10x16	180
100			5x11	180	5x11 6x11	70 80	6.3x11	90	6.3x12	102	8x12	120	10x12	150	10×20	220
120							6.3x11	100	8x12	120	8x16	140	10x16	180	10x20	250
150							6.3x11	110	8x12	140	10x12	160	10x16	210	13x20	280
180							8x12	135	8x12	165	10x12	190	10x16	230	13x20	310
220	5x11	75	5x11 6.3x11	110 130	6.3x11	95	8x12	150	8x12	180	10x17	240	10×17	270	13x25	380
330	6.3x12	100	6.3x11	110	8x12	180	8x12	170	8x16	200	10x17	320	13x20	380	16x25	510
470	6.3x12	130	6.3x12 8x12	120 190	8x12	210	8x16 10x12	190 250	10x17	310	13x20	430	13x25	500	16x25	680
560			8x12 10x12	200 220					10×20	400	13x20	600	13x25	600	16x35	750
680			8x16	320			10×16	380	10x20	450	13x25	720	16x25	700	16x35	850
820			10x12	350					13x20	500	13x25	750	16x25	800	18x35	1000
1000	8x14	300	8x14	400	10×17	440	10x21	500	13x20	580	13x25	790	16x30	900	18x40	1200
1200									13x20	700	16x25	850	16x35	1100		
1500			10x16	520			13x20	600	13x25	860	16x30	980	18x35	1210		
1800									16x25	900	16x35	1150				
2200	10x20	540	10x20	600	10x20 13x20	600 700	13x25	800	16x25	937	16x35	1230	18x35	1310		
2700							16x25	900			18x35	1320				
3300	13x20	670	13x20	800	13x25	920	16x25	1000	16x30	1080	18x40	1400				
3900			13x20	900												
4700	13x20	900	13x25	1000	16x25	1050	16x35	1380	18x40	1540						
6800	13x25	1020	16x25	1200	16x35	1430	18x35	1630								
8200			16x30	1450			18x35	2000								
10000	16x25	1220	16x35	1600	18x35	1700										
12000			16x35	1650												
15000	16x35	1300	18x35	1700												
22000	18x40	1400														

	10	60	20	00	2!	50	3	50	40	00	450		
wv	Size (mm)	Ripple Current	Size (mm)	Ripple Current									
μF	ØDxL	mArms	ØDxL	mArms									
1	6.3x11	14			6.3x12	9	6.3x11	15	8x12	19	6.3x11	12	
2.2	6.3x11	15	6.3x11	15	6.3x11	15	6.3x11	20	8x12	30	8x12	24	
3.3	6.3x11	20	8x11	20	8x11	35	8x11	30	8x12	35	8x12	38	
4.7	6.3x11	45	8x12	40	8x12	40	8x12	35	8x12	42	10x12	42	
6.8					8x12	50	10x12	45	10x13	58	10x20	58	
10	8x12	65	10x12	70	10×17	70	10x20	75	10x16	78	10x20	80	
22	10x12	110	10x16	110	10x17	120	13x20	130	13x20	140	13x20	150	
33	10x16	150	10x16	135	13x20	170	13x25	190	13x20	210	13x25 16x20	198 230	
47	10x20	190	13x20	190	13x25	225	16x25	300	16x20	390	16x25	400	
56					13x25	270	16x25	340			16x30	320	
68	13x20	260	13x25	250	13x25	295	16x30	370	16x25	420	18x26	366	
82					16x25	310	16x35	410	18x30	450	18x30	440	
100	13x25	350	13x25	310	16x25	340	18x30	450	18x31	490	18x40	490	
120									18x32	530	18x40	540	



www.jbcapacitors.hk
Tel: (852)2790 5091 Fax: (852)8169 8283





## Radial Aluminum Electrolytic Capacitor – JRB

**Higher Ripple Current** 

Ripple	<b>Current:</b>	105℃,	120Hz
--------	-----------------	-------	-------

	6	.3	1	.0	1	.6	2	:5	3	15	5	0		53	1	00
wv	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
	(mm)	Current	(mm)	Current	(mm)	Current	(mm)	Current	(mm)	Current	(mm)	Current	(mm)	Current	(mm)	Current
μF	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms	ØDxL	mArms
0.1~0.47											5x11	8	5x11	8	5x11	14
1											5×11	11	5x11	13	5x11	19
2.2							5x11	16			5x11	20	5x11	15	5x11	30
3.3							5×11	25			5×11	30	5x11	19	5x11	32
4.7							5x11	28			5×11	33	5x11	22	5x11	38
6.8											5×11	42	5x11	34	5x11	52
10			5x11	40	5x11	50	5x11	38	5x11	41	5x11	50	5x11	50	6.3x12	73
22			5x11	50	5x11	54	5x11	57	5x11	61	5x11	78	6.3x11	86	6.3x12	104
33			5x11	60	5x11	64	5x11	69	5x11	75	5x12	95	6.3x11	100	8x12	150
47			5×11	71	5x11	80	5x11	106	6.3x11	110	6.3x11	125	6.3x12	130	10x12.5	190
68			5x11	83											10x16	239
100					5x11 6x11	120 135	6.3x11	145	6.3x12	150	8x12	188	10x12	200	10x20	320
120							6.3x11	150	8x12	180	8x16	225	10x16	275	10x20	430
150							6 3x11	155	8x12	205	10x12	268	10x16	308	13x20	455
180							8x12	202	8x12	218	10x12	294	10x16	342	13x20	492
220	5x11	150	5x11 6.3x11	155 175	6.3x11	190	8x12	236	8x12	270	10×17	370	10x17	440	13x25	450
330	6.3x12	170	6.3x11	200	8x12	270	8x12	310	8x16	455	10x17	420	13x20	560	16x25	580
470	6.3x12	230	6.3x12 8x12	260 290	8x12	310	8x16 10x12	350 380	10x17	520	13x20	630	13x25	700	16x25	780
560			8x12 10 x12	314 365					10x20	513	13x20	690	13x25	726	16x35	835
680			8×16	390			10×16	520	10x20	590			16x25	800	16x35	1021
820			10×12	410					13x20	565	13x25	760	16x25	820	18x35	1155
1000	8x14	355	8x14	415	10x17	645	10×21	775	13x20	810	13x25	950	16x30	915	18x40	1344
1200									13x20	815	16x25	890	16x35	1175		
1500			10x16	549			13x20	715	13x25	895	16x30	1035	18x35	1410		
1800									16x25	945	16x35	1210				
2200	10x20	615	10x20	760	10x20 13x20	735 760	13x25	1110	16x25	1260	16x35	1470	18x35	2180		
2700							16x25	955			18x35	1485				
3300	13x20	920	13x20	885	13x25	1170	16x25	1440	16x30	1420	18x40	1750				
3900			13x20	980												
4700	13x20	1025	13x25	1280	16x25	1320	16x35	1680	18x40	1650						
6800	13x25	1185	16x25	1310	16x35	1930	18x35	2160								
8200			16x30	1530			18x35	2240								
10000	16x25	1335	16x35	2220	18x35	2350										
12000			16x35	2250												
15000	16x35	1856	18x35	2485												
22000	18x40	1765														

	10	60	2(	00	2!	50	:	350	40	00	4!	50
wv	Size (mm)	Ripple Current										
μF	ØDxL	mArms										
1	6.3x11	17			6.3x12	16	6.3x11	16	8x12	21	6.3x11	22
2.2	6.3x11	23	6.3x11	30	6.3x11	35	6.3x11	28	8x12	39	8x12	39
3.3	6.3x11	34	8x11	40	8x11	42	8x11	43	8x12	45	8x12	45
4.7			8x12	46	8x12	45	8x12	50	8x12	50	10×12	55
6.8					8x12	52	10x12	56	10x13	72	10×20	73
10					10×17	116	10x20	88	10x16	95	10×20	98
22	10x12	118	10x16	140	10x17	140	13x20	220	13x20	160	13x20	191
33	10x16	155	10×16	155	13x20	190	13x25	215	13x20	216		
47	10x20	198	13x20	220	13x25	250			16x20	415		
56					13x25	305	16x25	380			16x30	355
68	13x20	275	13x25	270	13x25	322			16x25	445	18x26	404
82					16x25	355	16x35	450	18x30	485	18x30	515
100	13x25	355	13x25	328	16x25	395	18x30	505	18x31	500	18x40	560
120									18x32	545	18x40	560

Please visit our website to get more update data, those data & specification are subject to change without notice



w.jbcapacitors.com www.jbcapacitors.hk

o@jbcapacitors.com Tel: (852)2790 5091 Fax: (852)8169 8283