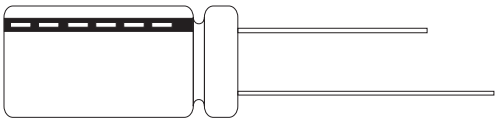
ALUMINUM ELECTROLYTIC CAPACITORS
RL/RLA Series: Radial Low Leakage

RFE INTERNATIONAL

RoHS

FEATURES



- 85°C
- Standard low leakage current series.

SPECIFICATIONS

Item	Performance									
	RL								RLA	
Life	At 85°C 1000 Hrs								At 85°C 2000 Hrs	
Operating Temperature	-40°C ~ +85°C									
Capacitance Tolerance	± 20% (120Hz, 20°C)									
Leakage Current (at 20°C)	I = 0.002CV or 0.4 (A) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF. V=rated DC working voltage in V.									
Dissipaton Factor Tan δ at 120 Hz, 20°C	Rated Voltage	6.3	10	16	25	35	50	63	100	
	Tan δ(max)	0.24	0.21	0.16	0.14	0.12	0.10	0.09	0.08	
	When the capacitance exceed 1000 μF 0.02 shall be added every 1000 μF.									
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below									
	Rated Voltage		6.3	10	16	25	35	50	63	100
	Impedance Ratio	Z(-25°C) /Z(+20°C)	5	4	2	2	2	2	2	2
		Z(-40°C) /Z(+20°C)	10	8	6	4	4	3	3	3
Load Life Test	Test Time	1000 / 2000 Hrs								
	Capacitance Change	≤± 20%								
	Dissipation Factor	Less than 200% of specified value								
	Leakage Current	Within specified value								
	Specification shall be satisfied when the capacitors are restored to 20°C after rated voltage applied for 1000/2000 hrs.at 85°C.									
Shelf Life Test	Test Time	1000 Hrs								
	Capacitance Change	≤± 20%								
	Dissipation Factor	Less than 200% of specified value								
	Leakage Current	Within specified value								
	Specification shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hrs at 85°C without voltage applied.									
Ripple Current & Frequency Multilpiers	Freq. (Hz) / Cap. (μF)	60(50)	120	500	1K	10K up	Riple Current & Temperature Multipliers	Temperature (°C)	Under 50	70	85
	Under 100	0.70	1.00	1.35	1.55	2.00		Multipliers	1.75	1.58	1.00
	220 to 1000	0.83	1.00	1.23	1.32	1.50					
	2200 up above	0.90	1.00	1.12	1.10	1.15					
Standards	Satisfies Characteristic W of JIS C 5141									

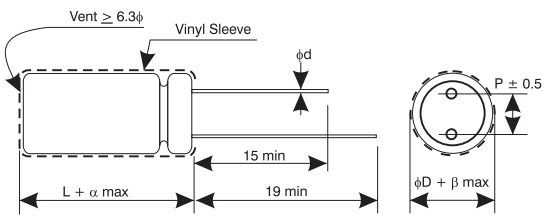
DIMENSIONS AND PERMISSABLE RIPPLE CURRENT

Dimension: φD×L(mm) Ripple Current: mA/RMS at 120Hz 85°C

VDC / μF	Code	6.3V(0J)		10V(1A)		16V(1C)		25V(1E)		35V(1V)		50V(1H)		63V(1J)		100V(2A)	
		DXL	mA	DXL	mA	DXL	mA	DXL	mA	DXL	mA	DXL	mA	DXL	mA	DXL	mA
0.1	0R1											5 x 11	1.3			5 x 11	2.6
0.22	R22											5 x 11	2.9			5 x 11	5.8
0.33	R33											5 x 11	4.4			5 x 11	8.8
0.47	R47											5 x 11	7			5 x 11	12
1	010											5 x 11	13			5 x 11	22
2.2	2R2											5 x 11	29			5 x 11	33
3.3	3R3											5 x 11	35			5 x 11	40
4.7	4R7							5 x 11	31	5 x 11	40	5 x 11	42	5 x 11	45	5 x 11	48
10	100					5 x 11	44	5 x 11	54	5 x 11	58	5 x 11	65	5 x 11	70	6.3 x 11	80
22	220			5 x 11	59	5 x 11	75	5 x 11	80	5 x 11	87	5 x 11	95	6.3 x 11	115	8 x 11.5	135
33	330	5 x 11	55	5 x 11	84	5 x 11	90	5 x 11	97	5 x 11	105	6.3 x 11	125	6.3 x 11	140	10 x 12.5	195
47	470	5 x 11	79	5 x 11	100	5 x 11	110	5 x 11	115	6.3 x 11	145	6.3 x 11	150	8 x 11.5	190	10 x 16	255
100	101	5 x 11	130	5 x 11	145	6.3 x 11	180	6.3 x 11	190	8 x 11.5	240	8 x 11.5	255	10 x 12.5	320	13 x 20	450
220	221	6.3 x 11	230	6.3 x 11	250	8 x 11.5	300	8 x 11.5	320	10 x 12.5	420	10 x 16	490	10 x 20	565	16 x 25	810
330	331	6.3 x 11	280	8 x 11.5	350	8 x 11.5	370	10 x 12.5	470	10 x 16	570	10 x 20	650	13 x 20	765	16 x 25	990
470	471	8 x 11.5	380	8 x 11.5	415	10 x 12.5	520	10 x 16	620	10 x 20	740	13 x 20	860	13 x 25	990	16 x 31.5	1250
1000	102	10 x 12.5	650	10 x 16	790	10 x 20	910	13 x 20	1090	13 x 25	1300	16 x 25	1530	16 x 31.5	1700		
2200	222	13 x 20	1150	13 x 20	1240	13 x 25	1420	16 x 25	1660	16 x 31.5	1890	18 x 35.5	2160				
3300	332	13 x 20	1380	13 x 25	1590	16 x 25	1840	16 x 31.5	2070	18 x 35.5	2340						
4700	472	16 x 25	1880	16 x 25	1980	16 x 31.5	2260	18 x 35.5	2520	18 x 40	2690						

LEAD SPACING AND DIAMETER

φd	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φd	0.5		0.6			0.8	
α	1.0		1.5				
β	0.5						



PART NUMBER EXAMPLE

RL 220 M 1C BK 050 110