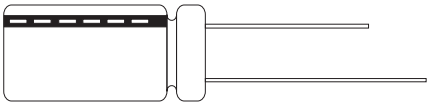
Aluminum Electrolytic Capacitors

RNG Series: Radial Bi-Polar, 105°C

FEATURES

- 105°C, 2000 hours assured, standard bi-polar series.
- Suitable for use in circuits which have a reversed or unknown polarity.
- RoHS Compliant



SPECIFICATIONS

Item	Performance											
Operating Temp.	-40° ~ 105°C											
Capacitance Tolerance	± 20% (120Hz, 20°C)											
Leakage Current (at 20°C)	Rated Voltage	≤ 100V		> 100V								
	Time	After 2 minutes		After 5 minutes								
	Leakage Current	I=0.03CV or 4 (μA) whichever is greater		CV ≤ 1000 I=0.03CV +15 (μA)		CV > 1000 I=0.02CV +25 (μA)						
	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	160	200	250
	Tan δ (max)	0.25	0.22	0.18	0.16	0.14	0.12	0.10	0.09	0.15	0.15	0.20
	When the capacitance exceeds 1000 μF, 0.02 shall be added every 1000 μF increase											
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	160	200	250
	Impedance Ratio	Z(-25°C)/Z(+20°C)	4	3	3	2	2	2	2	2	2	2	2
		Z(-40°C)/Z(+20°C)	8	6	6	4	4	3	3	3	4	4	4
Load Life Test at 20°C (after rated voltage is applied for 2000 hours at 105°C)	Test Time	2000 Hrs		Shelf Life Test at 20°C after rated voltage applied for 1000 hours at 105°C)	Test Time	1000 Hrs						
	Capacitance Change	≤ ± 20%			Capacitance Change	≤ ± 20%						
	Dissipation Factor	Less than 200% of specifiec value			Dissipation Factor	Less than 200% of specified value						
	Leakage Current	Within specified values			Leakage Current	Within specified value						
Standards	Satisfies Characteristic W of JIS C 5141											

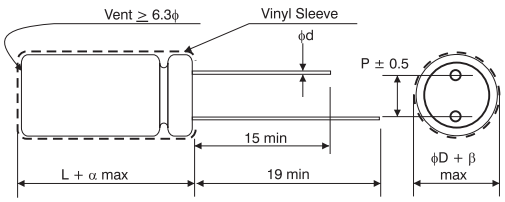
DIMENSIONS & PERMISSABLE RIPPLE CURRENT

Dimension: D×L(mm); Ripple Current: mA/RMS at 120Hz 105°C

VDC / F	Code	6.3V(OJ)		10V(1A)		16V(1C)		25V(1E)		35V(1V)		50V(1H)		63V(1J)H)		100V(2A)		160V(2C)		200V(2D)		250V(2E)	
		DXL	mA	DXL	mA	DXL	mA	DXL	mA	DXL	m	DXL	mA	DXL	m	DXL	m	DXL	m	DXL	m	DXL	m
0.1	0R1																						
0.22	R22																						
0.33	R33																						
0.47	R47																	5 x 11	8	5 x 11	9	6.3 x 11	10
1	010											5 x 11	10	5 x 11	11	5 x 11	12	6.3 x 11	11	8 x 11.5	12	8 x 11.5	13
2.2	2R2											5 x 11	15	5 x 11	16	6.3 x 11	20	8 x 11.5	18	8 x 11.5	22	10 x 12.5	26
3.3	3R3											5 x 11	18	5 x 11	20	6.3 x 11	25	8 x 11.5	26	10 x 12.5	30	10 x 16	37
4.7	4R7									5 x 11	21	5 x 11	22	6.3 x 11	24	6.3 x 11	30	10 x 12.5	31	10 x 16	37	10 x 20	50
10	100					5 x 11	27	5 x 11	27	5 x 11	30	6.3 x 11	37	6.3 x 11	40	8 x 11.5	50	10 x 16	60	10 x 20	66	10 x 20	79
22	220	5 x11	34	5 x 11	34	5 x 11	40	6.3 x 11	46	6.3 x 11	51	8 x 11.5	63	8 x 11.5	68	10 x 16	97	12.5 x 20	117	12.5 x 20	117	12.5 x 25	138
33	330	5 x11	45	5 x 11	45	5 x 11	49	6.3 x 11	56	8 x 11.5	72	8 x 11.5	77	10 x 12.5	98	10 x 20	140	12.5 x 20	143	12.5 x 25	158	16 x 25	169
47	470	5 x11	54	5 x 11	54	6.3 x 11	67	6.3 x 11	67	8 x 11.5	86	10 x 12.5	105	10 x 16	130	12.5 x 20	170	12.5 x 25	188				
100	101	6.3 x11	90	6.3 x 11	90	8 x 11.5	110	8 x 11.5	110	10 x 16	160	10 x 20	190	12.5 x 20	225	16 x 25	300						
220	221	8 x11.5	150	8 x 11.5	150	10 x 12.5	195	10 x 16	215	12.5 x 20	290	12.5 x 25	340	16 x 25	405	16 x 35.5	510						
330	331	8 x11.5	185	10 x 16	240	10 x 16	265	12.5 x 20	320	12.5 x 20	350	16 x 25	460	16 x 31.5	535								
470	471	10 x 12.5	260	10 x 16	290	10 x 20	345	12.5 x 25	380	16x 25	465	16 x 25	590	18 x 35.5	680								
1000	102	10 x 20	460	12.5 x 20	510	12.5 x 25	605	16 x 25	670	16 x 31.5	805												
2200	222	12.5 x 25	820	16 x 25	940	16 x 31.5	1070	18 x 35.5	1140														

LEAD SPACING AND DIAMETER

D	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
d	0.5		0.6			0.8	
α	1.0			1.5			
β	0.5						



PART NUMBER EXAMPLE

RNG 471 M 0J BK - 100125