

RA series

+105°C, Low cost(低成本)

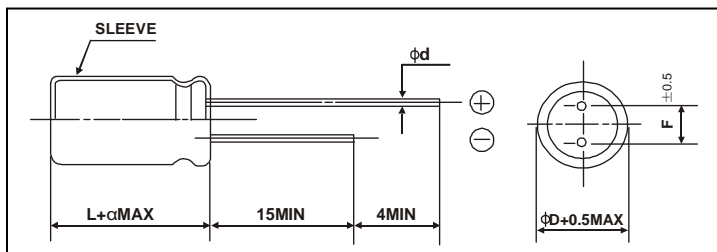
◆ FEATURES

- For low cost.
- Life 1000 hours at +105°C.
- Wide CV value range.

◆ SPECIFICATIONS

Items	Characteristics										
Category Temperature Range	-40~+105°C (6.3~100V)	-25~+105°C (160~450V)									
Rated Voltage Range	6.3~450V.DC										
Nominal Capacitance Range	0.1~22000μ F										
Capacitance Tolerance	±20%(120Hz,+20°C)										
Leakage Current(MAX, 20°C)	I=0.01CV or 3(μA) after 2 minutes with rated working voltage	I=0.03CV+40(μA) after 2 minutes with rated working voltage									
Dissipation Factor(MAX) Tanδ (20°C,120Hz)	Rated Voltage(V)	6.3	10	16	25	35	50	63	100	~250	350~
	Tanδ	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.20	0.24
	When nominal capacitance is over 1000μ F,tanδ shall be added 0.02 to the listed value with Increase of every 1000μ F										
Load Life	After applying rated voltage with max ripple current for 1000 hrs at 105°C,the capacitors shall meet the following requirements										
	Capacitance Change	Within ±20% of the initial value									
	Dissipation Factor	Not more than 200% of the specified value									
	Leakage Current	Not more than the specified value									
Shelf Life	After Leaving capacitors under no load at 105°C for 1000hrs,they meet the characteristic requirements listed at right										
	Capacitance change	Within ±20% of the initial value									
	Tanδ	≤200% of initial specified value									
	Leakage current	≤200% of initial specified value									
Low Temperature Stability Impedance Rate(MAX)	Rated Voltage(V)	6.3	10	16	25	35	50	63	100	160~250	350~450
	Z-25°C/Z+20°C	5	4	3	2	2	2	2	2	3	6
	Z-40°C/Z+20°C	10	8	6	4	3	3	3	3	---	---
Other	JISC-5141 EIAJ RC-2372										

◆ CASE SIZE TABLE



φD	5	6.3	8	10	13	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φd	0.5			0.6		0.8	
α	L≤16:α =1.5					L≥20:α =2.0	

◆ RIPPLE CURRENT MULTIPLIER

Rated Voltage(v)	Cap (μ F)	Frequency(Hz)					Rated Voltage(v)	Cap (μ F)	Frequency(Hz)				
		50	120	300	1K	10K~			50	120	300	1K	10K~
6.3~100	≤47	0.75	1.0	1.35	1.57	1.15	160~450	1~220	0.80	1.00	1.25	1.40	1.60
	56~470	0.8	1.0	1.23	1.34	1.5		≥270	0.90	1.00	1.10	1.13	1.15
	≥560	0.85	1.0	1.10	1.13	2.0		---					

◆ STANDARD RATINGS

size:ΦD×L(mm)

Voltage		6.3V		10V		16V		25V		35V		50V		63V	
Cap(μF)	Code	OJ		1A		1C		1E		1V		1H		1J	
0.1	104											5×11	2.1		
0.22	224											5×11	3.2		
0.33	334											5×11	6.3		
0.47	474											5×11	10		
1	105											5×11	13		
2.2	225											5×11	18		
3.3	335											5×11	30		
4.7	475							5×11	37	5×11	37	5×11	37		
10	106					5×11	35	5×11	37	5×11	40	5×11	54	5×11	59
22	226			5×11	48	5×11	53	5×11	56	5×11	67	5×11	79	6.3×11	87
33	336	5×11	52	5×11	56	5×11	60	5×11	75	5×11	80	6.3×11	115	6.3×11	122
47	476	5×11	61	5×11	66	5×11	80	5×11	84	5×11	101	6.3×11	133	6.3×11	146
100	107	5×11	94	5×11	105	5×11	125	6.3×11	159	6.3×11	168	8×12	229	8×14	215
220	227	5×11	153	6.3×11	193	6.3×11	213	8×12	285	8×14	294	10×16	509	10×20	504
330	337	6.3×11	216	6.3×11	239	8×12	315	8×14	340	10×13	419	10×20	650	13×21	720
470	477	6.3×11	258	8×12	295	8×12	366	8×14	400	10×16	547	13×21	801	13×21	790
680	687	8×12	365	8×12	380	8×16	480	10×16	620	10×20	720	13×21	923	13×25	1160
1000	108	8×12	443	8×16	571	10×16	680	10×20	821	13×21	915	13×25	1287	16×25	1340
2200	228	10×16	800	10×20	886	13×21	1108	13×25	1297	16×25	1450	18×32	1884	18×35	1760
3300	338	10×20	1032	13×21	1205	13×25	1389	16×25	1646	16×35	1610	18×35	1860		
4700	478	13×21	1280	13×25	1492	16×25	1740	16×30	2012	18×35	1820	18×40	1956		
6800	688	13×25	1554	16×25	1824	16×30	2081	16×40	2452						
10000	109	16×25	1897	16×30	1980	18×32	2527								
15000	159	16×35	2344	16×40	2480										
22000	229	18×35	2420	18×40	2616										

Maximum Allowable Ripple Current(mA rms) at 105°C 120Hz

◆ STANDARD RATINGS

Voltage		100V		160V		200V		250V		350V		400V		450V	
Cap(μF)	Code	2A		2C		2D		2E		2V		2G		2W	
1	105	5×11	16	5×11	16	5×11	14	6.3×11	17	6.3×11	18	6.3×11	19	6.3×11	16
2.2	225	5×11	21	5×11	21	6.3×11	20	6.3×11	27	6.3×11	25	8×12	30	8×12	24
3.3	335	5×11	34	6.3×11	34	6.3×11	30	6.3×11	35	8×12	40	8×12	45	10×13	33
4.7	475	5×11	40	6.3×11	41	6.3×11	40	8×12	45	10×13	50	10×13	52	10×13	48
6.8	685	5×11	42	8×12	46	8×12	52	10×13	57	10×13	61	10×16	68	10×16	57
10	106	6.3×11	61	8×12	61	8×12	64	10×13	75	10×16	80	10×20	86	10×20	75
22	226	8×12	110	10×13	110	10×16	121	10×20	130	13×21	150	13×21	163	13×25	132
33	336	8×12	144	10×20	156	10×20	165	13×21	184	16×25	200	16×25	222	16×25	165
47	476	10×13	199	13×21	205	13×21	220	13×25	238	16×25	265	18×20	290	18×25	196
68	686	10×16	260	13×21	292	13×21	335	13×25	362	18×25	386	18×25	405	18×30	265
100	107	10×20	349	16×25	360	16×25	386	16×25	405	18×30	435	18×35	380	18×40	332
220	227	13×25	662	16×35	680	18×30	690	18×35	710						
330	337	13×25	800	18×35	863	18×40	886								
470	477	16×30	1072												
1000	108	18×35													

Maximum Allowable Ripple Current(mA rms) at 105°C 120Hz