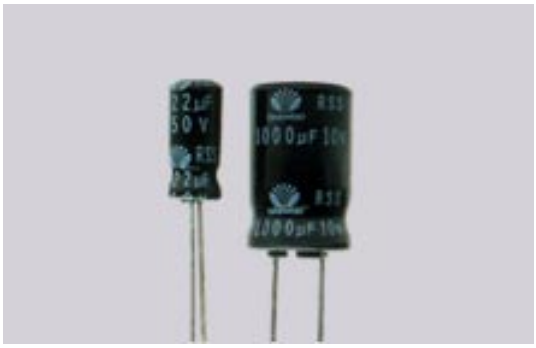
RSS SERIES

ALUMINUM ELECTROLYTIC CAPACITORS
85˚C Standard, Radial Leads

n Features

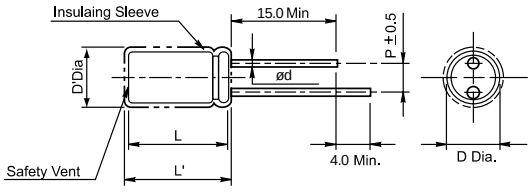
- 85˚C Standard, Radial
- High performance
- Very high CV capacity per unit volume
- Ideal for automatic insertion
- Load life of 2000 hours at 85˚C
- Possible cleaning by Freon TE (to 100V : 3 min)



n Specifications

Item	Performance Characteristics										
Operating temperature range	-40ßC ~ +85ßC			-40ßC ~ +85ßC					-25ßC ~ +85ßC		
Rated working voltage range	6.3V ~ 100V			160V ~ 250V					350V ~ 450V		
Nominal capacitance range	0.1µF ~ 27000µF, -20%(at 20ßC, 120Hz)										
D.C Leakage current(at 20˚C)	The following specifications shall be satisfied when the rated voltage is applied for the required time										
	I= 0.03CV + 3µF (2min)			I† 0.01CV + 10µA (3min)					I† 0.02CV + 30µA		
	Where I= Leakage current(µA) C=Nominal capacitance (µF) V= Rated voltage(V)										
Tan δ (max., at 20˚C, 120Hz)	W.V(V)	6.3	10	16	25	35	50	63	100	160~250	350~450
	Tan δ	0.26	0.22	0.17	0.15	0.12	0.10	0.10	0.08	0.20	0.20
	When capacitance is over 1000µF, Tan δ shall be added 0.02 to the listed value with increase of every each 1000 µF.										
Characteristics at low temperature(max.) (impedance ratio at 120Hz)	W.V(V)	6.3	10	16	25	35	50~100	160~250	350~450		
	Z-25ßC/Z20ßC	4	3	2	2	2	2	2	6		
	Z-40ßC/Z20ßC	10	8	6	4	3	3	3	—		
Load life	After applying rated working voltage for 2000 hours at +85ßC and then being stabilized at +20ßC, capacitors shall meet following limits.										
	Capacitance change	Within - 20% of initial measured value									
	Tan δ	† 150% of initial specified value									
	Leakage current	† Initial sepcified value									
Shelf life	After storage for 1000 hours at +85ßC with no voltage applied and then being stabilized at +20ßC, capacitors shall meet following limits.										
	Capacitance change	Within ± 20% of initial measured value									

n Case sizes and Dimensions



• Standard lead style

ø D	5.0	6.3	8.0	10.0	13.0	16.0	18.0	22.0
P	2.0	2.5	3.5	5.0		7.5		10.0
ø d								

D = [D +0.5] Max. L = [L+1.0]Max. at D † 8.0
L = [L+1.5]Max. at D † 10.0

n Ripple current coefficient

• Frequency

Cap(µF) \ Freq(Hz)	50	120	400	1K	10K	50~100K
Cap ≤ 10	0.8	1	1.30	1.45	1.65	1.70
10 < Cap ≤ 100	0.8	1	1.23	1.36	1.48	1.53
100 < Cap ≤1000	0.8	1	1.16	1.25	1.35	1.38
1000 < Cap						

• Temperature

Temperature	60ßC	70ßC	85ßC
Factor			

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Dimensions & Maximum Permissible ripple current [mA(rms) at 85°C, 120Hz]

øD x L(mm)

W.V(V) / Cap(μF)	6.3(0J)		10(1A)		16(1C)		25(1E)		35(1V)		50(1H)		63(1J)		100(2A)	
	SIZE	I_R	SIZE	I_R	SIZE	I_R	SIZE	I_R	SIZE	I_R	SIZE	I_R	SIZE	I_R	SIZE	I_R
0.1											5x11	6			5x11	6
0.22											5x11	8			5x11	8
0.33											5x11	10			5x11	10
0.47											5x11	14			5x11	14
1.0											5x11	19			5x11	21
2.2											5x11	29			5x11	32
3.3											5x11	37			5x11	45
4.7											5x11	45			5x11	52
10											5x11	68	5x11	72	6.3x1	85
22									5x11	95	5x11	105	6.3x1	120	1	142
33							5x11	110	5x11	120	6.3x1	140	1	157	8x11.5	207
47					5x11	130	5x11	140	6.3x1	157	1	172	6.3x1	210		284
100	5x11	135	5x11	150	6.3x11	200	6.3x11	210	1	258	6.3x1	283	1	365	10x12.	470
220	6.3x1	240	6.3x1	255	8x11.5	330		360	8x11.5	470	1	545	8x11.5	638	5	820
330	1	310	1	365	8x11.5	415	8x11.5	523	10x12.	615	8x11.5	720	10x12.5	910	10x16	109
470	6.3x1	400	8x11.5	430		550		730	5	810	10x16	965	10x12.5	115	13x20	5
1000	1	690	8x11.5	810	10x12.5	1020	10x12.5	122	10x16	151	10x20	1760	10x20	0	16x25	137
2200	8x11.5	124	10x16	131	10x20	1590	10x16	0	10x20	0	13x20	2540	13x20	185	16x25	0
3300	10x12.	0	13x20	0	13x25	2010	13x20	183	13x25	209	16x25	3500	13x25	0	16x31.	261
4700	5	146	13x25	168	16x25	2485	16x25	5	16x31.	0	18x35.	4270	22x40	315	5	0
6800	13x2	0	16x25	5	16x31.5	2990	16x31.5	231	5	274	5		16x31.	0	22x40	351
10000	0	199	16x31.	212	18x35.5	3920	18x35.5	5	18x35.	0	22x40		5	406	25x40	0
15000	13x2	0	5	0	22x40	4590	22x40	287	5	366	25x40		22x40	0		
22000	0	227	18x35.	255	25x40		25x40	5	22x40	0			25x40			
27000	16x2	5	5	0				390	25x40	451						

W.V(V) / Cap(μF)	160(2C)		200(2D)		250(2E)		350(2V)		400(2G)		450(2W)	
	SIZE	I_R	SIZE	I_R	SIZE	I_R	SIZE	I_R	SIZE	I_R	SIZE	I_R
1.0	6.3x11	22	6.3x11	22	6.3x11	22	8x11.5	24	8x11.5	24	8x11.5	24
2.2	6.3x11	33	6.3x11	33	8x11.5	39	10x12.5	45	10x12.5	47	10x12.5	47
3.3	8x11.5	51	8x11.5	51	10x12.5	58	10x12.5	56	10x16	58	10x16	58
4.7	8x11.5	57	10x12.5	64	10x16	73	10x16	72	10x16	74	10x20	76
10	10x16	95	10x16	95	10x20	108	10x20	118	13x20	132	13x20	135
22	10x20	171	10x20	171	13x20	205	13x25	215	16x25	235	16x25	235
33	13x20	248	13x25	265	13x25	275	16x25	270	16x31.5	298	16x35.5	305
47	13x25	295	13x25	305	16x25	340	16x35.5	368	16x35.5	405	18x40	415
100	16x25	530	16x31.5	540	18x35.5	560	18x40	640	22x40	720	25x40	740
220	18x35.5	890	18x40	910	22x40	990	25x50	126				
330	22x40	1220	22x40	129	25x40	141		0				
470	25x40	1740	25x40	0		0						

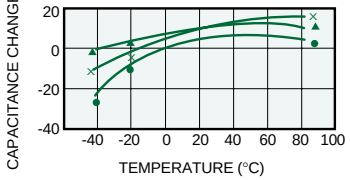
I_R : Maximum permissible ripple current [mA(rms) at 85ßC, 120Hz]

RSS SERIES

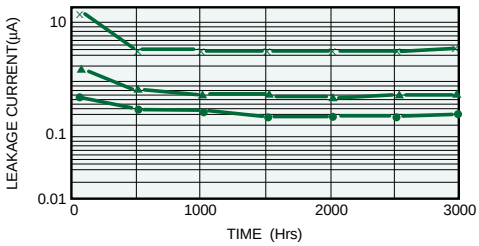
PERFORMANCE CURVES

● ● 10V–100µF
×-× 35V–3300µF
▲-▲ 100V–47µF

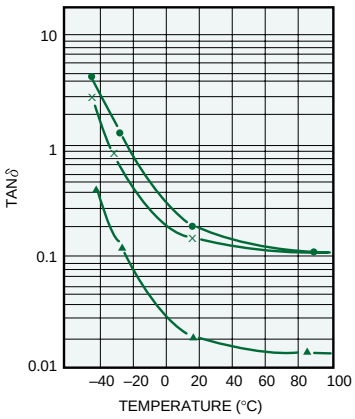
Capacitance-Temperature Characteristics
(At 120 Hz)



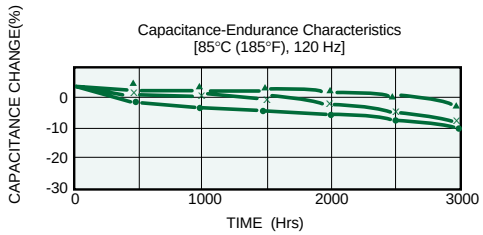
Leakage Current-Endurance Characteristics
[85°C (185°F), 120 Hz]



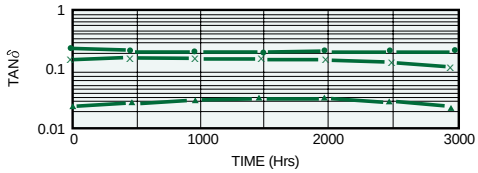
Tan δ -Temperature Characteristics
(At 120 Hz)



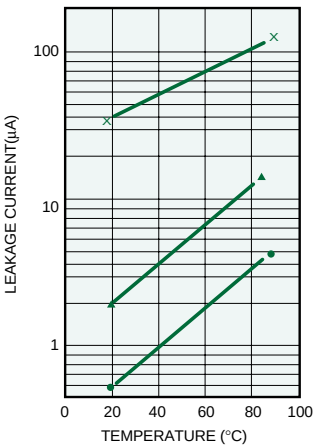
Capacitance-Endurance Characteristics
[85°C (185°F), 120 Hz]



Tanδ-Endurance Characteristics
[85°C (185°C), 120 Hz]



Leakage Current-Temperature Characteristics



Impedamce-Frequency Characteristics