Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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FINAL ACCEPTED ORDER DATE [2007/09]

Rubycon LARGE CAN TYPE ALUMINUM ELECTROLYTIC CAPACITORS USR

USR SERIES Previous Series

85℃ Standard, Snap-in Terminal Type

◆FEATURES

- Load Life : 85℃ 3000 hours.
- Smaller size with higher ripple current endurance than USP series.

◆SPECIFICATIONS

Items	Characteristics	
Category Temperature Range	−40～+85℃	−25～+85℃
Rated Voltage Range	10～250V.DC	315～450V.DC
Capacitance Tolerance	±20%（20℃，120Hz）	
Leakage Current(MAX)	$I=3\sqrt{CV}$ (After 5 minutes application of rated voltage) I=Leakage Current(μA)　V=Rated Voltage(V)　C=Rated Capacitance(μF)	
Dissipation Factor(MAX)	See table below (20℃，120Hz)	
Impedance Ratio(MAX)	See table below (120Hz)	
Endurance	See table below	

Rated Voltage(V)	10	16	25	35	50	63	80	100	160～400	420～450
tan δ	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.15	0.25

Rated Voltage(V)	10～250	315～400	420～450
Z(−25℃)/Z(20℃)	3	4	12
Z(−40℃)/Z(20℃)	12		

After applying rated voltage with rated ripple current for 3000hrs at 85℃, 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.

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Frequency (Hz)		60(50)	120	500	1k	10k≦
Coefficient	10～100WV	0.90	1.00	1.05	1.10	1.15
	160～250WV	0.80	1.00	1.20	1.30	1.50
	315～450WV	0.80	1.00	1.05	1.10	1.15

◆PART NUMBER

□□□	USR	□□□□□	□	OOE	□□	D×L
Rated Voltage	Series	Rated Capacitance	Capacitance Tolerance	Option	Terminal Code	Case Size

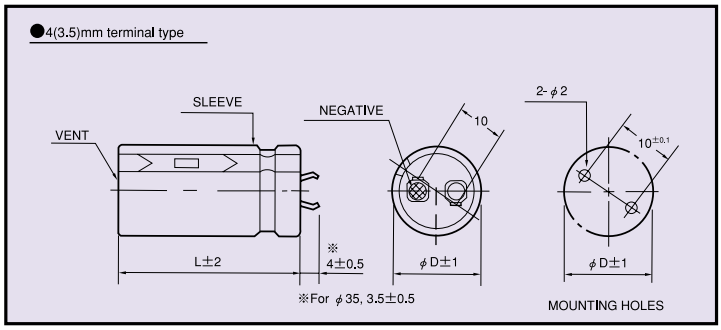
◆Option

	Code
without plate	OOE
with plate	Blank

FINAL ACCEPTED ORDER DATE [2007/09]

Rubycon LARGE CAN TYPE ALUMINUM ELECTROLYTIC CAPACITORS USR

◆DIMENSIONS (mm)



◆STANDARD SIZE, RATED RIPPLE CURRENT

WV / Cap (μF) / φD	10										16									
	φ20		φ22		φ25		φ30		φ35		φ20		φ22		φ25		φ30		φ35	
6800											20×25	2.33								
8200											20×30	2.56	22×25	2.56						
10000	20×25	2.22									20×35	2.85	22×30	2.81						
12000	20×30	2.44	22×25	2.41							20×40	3.20	22×30	3.13	25×25	2.96				
15000	20×35	2.90	22×30	2.88	25×25	2.88							22×35	3.69	25×30	3.64	30×25	3.73		
18000	20×40	3.31	22×35	3.22	25×30	3.08							22×40	3.98	25×35	3.98	30×30	3.88		
22000			22×40	3.79	25×30	3.66	30×25	3.53					22×50	4.52	25×40	4.44	30×30	4.38		
27000			22×45	4.04	25×35	4.04	30×30	3.99							25×45	4.98	30×35	4.82	35×30	4.82
33000			22×50	4.58	25×40	4.56	30×30	4.58							25×50	5.49	30×40	5.38	35×35	5.33
39000					25×45	5.29	30×35	5.21	35×30	5.05							30×45	6.11	35×35	6.01
47000					25×50	5.78	30×40	5.78	35×35	5.55							30×50	6.80	35×40	6.80
56000							30×45	6.59	35×35	6.40									35×45	7.62
68000							30×50	7.50	35×40	7.48										
82000									35×50	8.50										

WV / Cap (μF) / φD	25										35									
	φ20		φ22		φ25		φ30		φ35		φ20		φ22		φ25		φ30		φ35	
2700											20×25	1.76								
3300											20×30	2.14								
3900											20×30	2.28	22×25	2.22						
4700	20×25	2.18									20×35	2.46	22×30	2.46	25×25	2.43				
5600	20×30	2.33	22×25	2.31									22×35	2.79	25×30	2.75				
6800	20×35	2.56	22×30	2.56									22×40	2.89	25×30	2.89	30×25	3.09		
8200	20×40	2.91	22×35	2.81	25×25	2.78							22×45	3.47	25×35	3.33	30×30	3.29		
10000			22×35	3.18	25×30	3.16							22×50	3.59	25×40	3.59	30×30	3.61		
12000			22×40	3.53	25×35	3.48	30×25	3.53							25×45	4.01	30×35	4.01	35×30	4.02
15000			22×50	4.08	25×40	4.00	30×30	4.00									30×40	4.80	35×35	4.80
18000					25×45	4.68	30×35	4.66	35×30	4.68							30×45	5.18	35×40	5.71
22000							30×40	5.19	35×35	5.20									35×45	6.38
27000							30×45	6.02	35×40	6.02									35×50	6.90
33000									35×45	6.75										
39000									35×50	7.56										

WV / Cap (μF) / φD	50										63									
	φ20		φ22		φ25		φ30		φ35		φ20		φ22		φ25		φ30		φ35	
1500											20×25	1.69								
1800	20×25	1.70									20×30	2.04	22×25	1.90						
2200	20×30	2.07	22×25	1.93							20×35	2.40	22×30	2.35	25×25	2.30				
2700	20×35	2.21	22×30	2.21							20×40	2.52	22×35	2.50	25×30	2.49				
3300	20×40	2.41	22×30	2.41	25×25	2.38							22×40	2.69	25×30	2.69	30×25	2.78		
3900			22×35	2.72	25×30	2.68							22×45	3.10	25×35	3.09	30×30	3.09		
4700			22×40	3.01	25×30	3.03	30×25	3.01					22×50	3.49	25×40	3.37	30×30	3.37		
5600			22×45	3.43	25×35	3.37	30×30	3.43							25×45	3.80	30×35	3.81	35×30	3.75
6800			22×50	3.94	25×40	3.87	30×35	3.87							25×50	4.41	30×40	4.41	35×35	4.33
8200					25×45	4.37	30×35	4.42	35×30	4.41							30×45	4.90	35×35	4.80
10000							30×40	5.02	35×35	4.92							30×50	5.49	35×40	5.47
12000							30×50	5.60	35×40	5.60									35×50	6.30
15000									35×45	6.44										
18000									35×50	6.71										

Ripple Current A r.m.s./120Hz·85℃

Case Size φD±1×L±2(mm)

FINAL ACCEPTED ORDER DATE [2007/09]

Rubycon LARGE CAN TYPE ALUMINUM ELECTROLYTIC CAPACITORS USR

◆STANDARD SIZE, RATED RIPPLE CURRENT

WV / Cap (μF) \ φD	80										100									
	φ20		φ22		φ25		φ30		φ35		φ20		φ22		φ25		φ30		φ35	
680											20×25	1.66								
820											20×30	1.85	22×25	1.86						
1000	20×25	1.56									20×35	2.02	22×30	2.02						
1200	20×30	1.80	22×25	1.77							20×40	2.12	22×30	2.12	25×25	2.10				
1500	20×35	2.10	22×30	2.01									22×35	2.45	25×30	2.43				
1800	20×40	2.30	22×35	2.25	25×25	2.26							22×40	2.77	25×35	2.77	30×25	2.65		
2200			22×40	2.53	25×30	2.53	30×25	2.50					22×45	3.12	25×40	3.20	30×30	3.10		
2700			22×45	2.93	25×35	2.93	30×30	2.91							25×45	3.61	30×35	3.60	35×30	3.71
3300			22×50	3.25	25×40	3.25	30×30	3.23							25×50	4.06	30×40	4.05	35×35	4.07
3900					25×45	3.62	30×35	3.62									30×45	4.60	35×35	4.50
4700					25×50	4.28	30×40	4.15	35×30	4.10							30×50	5.13	35×40	5.12
5600							30×45	4.55	35×35	4.51									35×45	5.75
6800							30×50	5.18	35×40	5.14									35×50	6.01
8200									35×45	5.83										

WV / Cap (μF) \ φD	160										180									
	φ20		φ22		φ25		φ30		φ35		φ20		φ22		φ25		φ30		φ35	
270	20×25	1.22									20×25	1.23								
330	20×30	1.48									20×30	1.48	22×25	1.42						
390	20×30	1.55	22×25	1.55							20×30	1.58	22×30	1.61						
470	20×35	1.81	22×30	1.77	25×25	1.77					20×35	1.82	22×30	1.80	25×25	1.80				
560	20×40	2.04	22×35	2.05	25×30	2.05					20×40	2.04	22×35	2.09	25×30	2.05				
680			22×40	2.24	25×30	2.22	30×25	2.22					22×40	2.36	25×35	2.34	30×25	2.27		
820			22×45	2.55	25×35	2.52	30×30	2.51					22×45	2.72	25×35	2.58	30×30	2.56		
1000			22×50	2.88	25×40	2.86	30×30	2.82							25×45	2.91	30×35	2.95		
1200					25×45	3.27	30×35	3.25	35×30	3.24					25×50	3.46	30×40	3.38	35×30	3.32
1500							30×40	3.77	35×35	3.75							30×45	3.90	35×35	3.83
1800							30×45	4.10	35×35	4.08							30×50	4.33	35×40	4.32
2200									35×45	4.72									35×45	4.60
2700									35×50	5.30									35×50	5.05

WV / Cap (μF) \ φD	200										220									
	φ20		φ22		φ25		φ30		φ35		φ20		φ22		φ25		φ30		φ35	
180											20×25	1.09								
220	20×25	1.13									20×30	1.15	22×25	1.09						
270	20×30	1.32	22×25	1.30							20×30	1.38	22×25	1.31						
330	20×30	1.49	22×25	1.44							20×35	1.51	22×30	1.58	25×25	1.49				
390	20×35	1.66	22×30	1.65	25×25	1.63					20×40	1.73	22×35	1.69	25×30	1.71				
470	20×40	1.93	22×35	1.88	25×30	1.86							22×40	1.99	25×30	1.95	30×25	1.89		
560			22×40	2.08	25×30	2.05	30×25	2.05					22×45	2.28	25×35	2.22	30×30	2.19		
680			22×45	2.36	25×35	2.36	30×30	2.36					22×50	2.46	25×40	2.40	30×30	2.39		
820			22×50	2.68	25×40	2.66	30×30	2.62							25×45	2.81	30×35	2.70	35×30	2.62
1000					25×45	3.12	30×35	3.00	35×30	2.96					25×50	3.13	30×40	3.08	35×35	3.05
1200					25×50	3.44	30×40	3.44	35×35	3.40							30×45	3.60	35×40	3.51
1500							30×50	3.93	35×40	3.87									35×45	3.92
1800									35×45	4.37										
2200									35×50	5.00										

WV / Cap (μF) \ φD	250										315									
	φ20		φ22		φ25		φ30		φ35		φ20		φ22		φ25		φ30		φ35	
120																				
150											20×30	0.95								
180	20×25	1.14									20×35	1.08	22×30	1.23	25×25	1.31				
220	20×30	1.20	22×25	1.18							20×40	1.23	22×35	1.34	25×30	1.40				
270	20×30	1.35	22×30	1.43									22×40	1.60	25×30	1.62				
330	20×35	1.60	22×30	1.58	25×25	1.53							22×45	1.82	25×35	1.85	30×30	1.89		
390	20×40	1.83	22×35	1.79	25×30	1.79							22×50	1.97	25×40	2.01	30×30	2.05		
470			22×40	2.05	25×35	2.05	30×25	1.94							25×45	2.20	30×35	2.27	35×30	2.25
560			22×45	2.36	25×35	2.24	30×30	2.24									30×40	2.50	35×35	2.56
680					25×40	2.54	30×35	2.58									30×45	2.67	35×40	2.90
820					25×50	2.87	30×35	2.84	35×30	2.82							30×50	3.12	35×45	3.29
1000							30×45	3.39	35×35	3.31									35×50	3.40
1200							30×50	3.80	35×40	3.66										
1500									35×45	4.12										
1800									35×50	4.31										

Ripple Current A r.m.s./120Hz·85℃

Case Size φD$^{\pm1}$×L$^{\pm2}$(mm)

Rubycon LARGE CAN TYPE ALUMINUM ELECTROLYTIC CAPACITORS USR

◆STANDARD SIZE, RATED RIPPLE CURRENT

Cap (μF) \ WV / φD	350										385									
	φ20		φ22		φ25		φ30		φ35		φ20		φ22		φ25		φ30		φ35	
68											20×25	0.60								
82											20×30	0.67	22×25	0.70						
100											20×30	0.80	22×30	0.82						
120	20×30	0.91	22×25	0.99							20×35	0.89	22×30	0.91	25×25	0.95				
150	20×35	1.05	22×30	1.14	25×25	1.16					20×40	1.05	22×35	1.04	25×30	1.08				
180	20×40	1.18	22×35	1.28	25×30	1.30							22×40	1.18	25×35	1.20	30×25	1.28		
220			22×40	1.40	25×35	1.46	30×25	1.47					22×45	1.33	25×35	1.44	30×30	1.40		
270			22×45	1.62	25×35	1.65	30×30	1.71							25×40	1.56	30×35	1.62		
330			22×50	1.78	25×40	1.88	30×35	1.93							25×50	1.80	30×40	1.85	35×30	1.85
390					25×45	2.04	30×35	2.12	35×30	2.19							30×40	2.04	35×35	2.06
470							30×40	2.41	35×35	2.43							30×50	2.27	35×40	2.30
560							30×45	2.60	35×35	2.62									35×45	2.57
680									35×40	3.00									35×50	2.80
820									35×50	3.30										

Cap (μF) \ WV / φD	400										420									
	φ20		φ22		φ25		φ30		φ35		φ20		φ22		φ25		φ30		φ35	
68	20×25	0.71									20×25	0.65								
82	20×30	0.78	22×25	0.80							20×30	0.73	22×25	0.75						
100	20×30	0.90	22×30	0.94							20×35	0.85	22×30	0.87	25×25	0.92				
120	20×35	1.02	22×30	1.04	25×25	1.08					20×35	0.99	22×30	1.01	25×25	1.03				
150	20×40	1.16	22×35	1.18	25×30	1.21					20×45	1.15	22×35	1.19	25×30	1.19	30×25	1.14		
180			22×40	1.34	25×35	1.37	30×25	1.45					22×45	1.36	25×35	1.37	30×25	1.35		
220			22×45	1.50	25×35	1.56	30×30	1.58					22×50	1.69	25×40	1.58	30×30	1.56		
270					25×40	1.70	30×35	1.73							25×45	1.83	30×35	1.72	35×30	1.76
330					25×50	1.90	30×40	1.95	35×30	1.95					25×50	2.18	30×40	1.98	35×35	2.04
390							30×40	2.15	35×35	2.17							30×45	2.34	35×35	2.26
470							30×50	2.39	35×40	2.42							30×50	2.67	35×40	2.60
560									35×45	2.71									35×45	2.93
680									35×50	2.95										

Cap (μF) \ WV / φD	450									
	φ20		φ22		φ25		φ30		φ35	
56	20×25	0.58								
68	20×30	0.67	22×25	0.68						
82	20×35	0.76	22×30	0.82						
100	20×35	0.84	22×35	0.90	25×25	0.92				
120	20×40	0.94	22×35	1.02	25×30	1.04	30×25	1.07		
150			22×40	1.12	25×35	1.19	30×30	1.23		
180			22×50	1.26	25×40	1.33	30×30	1.38		
220					25×45	1.51	30×35	1.56	35×30	1.58
270					25×50	1.65	30×40	1.80	35×35	1.81
330							30×45	2.02	35×35	2.05
390							30×50	2.24	35×40	2.27
470									35×45	2.55

Ripple Current A r.m.s./120Hz·85℃

Case Size φ D$^{\pm 1}$×L$^{\pm 2}$(mm)