

SGV SERIES

UPGRADE

105°C Standard

- Load Life : 105°C 2000~5000 hours.
- AEC-Q200.
- High Temperature Reflow soldering is available. (JGV series)
(http://www.rubycon.co.jp/catalog/j_pdfs/aluminum/j_JGV.pdf)



SPECIFICATIONS

Items	Characteristics																																					
Category Temperature Range	-55~+105°C	-40~+105°C	-25~+105°C																																			
Rated Voltage Range	6.3~50Vdc	63, 100Vdc	160~450Vdc																																			
Capacitance Tolerance	±20% (20°C, 120Hz)																																					
Leakage Current(MAX)	6.3~100Vdc		160~450Vdc																																			
	I=0.01CV or 3μA whichever is greater. (After 2 minutes application of rated voltage)		I=0.04CV+100μA (1minute) I=0.02CV+25μA (5minutes)																																			
	I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(Vdc)																																					
Dissipation Factor(MAX) (tanδ)	Rated Voltage (Vdc)																																					
	<table border="1"> <tr> <td></td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>160~250</td> <td>400</td> <td>450</td> </tr> <tr> <td>φ4,φ5,φ6.3×6.1</td> <td>0.30</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>φ6.3×8,φ8~φ18</td> <td>0.35</td> <td>0.26</td> <td>0.24</td> <td>0.18</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> <td>0.10</td> <td>0.15</td> <td>0.20</td> <td>-</td> </tr> </table> <p>When rated capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.</p>				6.3	10	16	25	35	50	63	100	160~250	400	450	φ4,φ5,φ6.3×6.1	0.30	0.24	0.20	0.16	0.14	0.12	-	-	-	-	-	φ6.3×8,φ8~φ18	0.35	0.26	0.24	0.18	0.14	0.12	0.12	0.10	0.15	0.20
	6.3	10	16	25	35	50	63	100	160~250	400	450																											
φ4,φ5,φ6.3×6.1	0.30	0.24	0.20	0.16	0.14	0.12	-	-	-	-	-																											
φ6.3×8,φ8~φ18	0.35	0.26	0.24	0.18	0.14	0.12	0.12	0.10	0.15	0.20	-																											
Endurance	After applying rated voltage with rated ripple current for specified time at 105°C, the capacitors shall meet the following requirements.																																					
	Capacitance Change	Within ±25% of the initial value.	Rated Voltage (Vdc)	Life Time (hrs)																																		
	Dissipation Factor	Not more than 200% of the specified value.	6.3~100	2000																																		
Low Temperature Stability Impedance Ratio(MAX)	Rated Voltage (Vdc)																																					
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	6.3	10	16	25	35	50	63	100	160~250	400	450																											
Z(-25°C)/Z(20°C)	4	3	2	2	2	2	2	2	3	6	-																											
Z(-40°C)/Z(20°C)	8	8	4	4	3	3	5	5	-	-	-																											

DIMENSIONS

(mm)

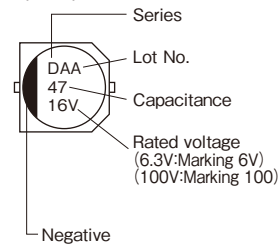
φD	L	A1	B1	C	W1	P	K	α
4	6.1	4.3	4.3	1.8	0.5~0.8	1.0	0.5 MAX	0
5	6.1	5.3	5.3	2.2	0.5~0.8	1.3	0.5 MAX	0
6.3	6.1	6.6	6.6	2.7	0.5~0.8	1.8	0.5 MAX	0
6.3	8	6.6	6.6	2.7	0.5~0.8	1.8	0.5 MAX	0
8	6.5	8.3	8.3	3.4	0.5~0.8	2.2	0.5 MAX	0
8	10.5	8.3	8.3	2.9	0.8~1.1	3.1	0.5 MAX	※1
10	10.5	10.3	10.3	3.2	0.8~1.1	4.5	0.5 MAX	※1
12.5	13.5	13	13	4.9	0.8~1.1	4.5	0.7±0.4	0.5
12.5	16	13	13	4.9	0.8~1.1	4.5	0.7±0.4	0.5
16	16.5	17	17	6	1.0~1.6	6.8	0.7±0.4	0.5
16	21.5	17	17	6	1.0~1.6	6.8	0.7±0.4	0.5
18	16.5	19	19	7	1.0~1.6	6.8	0.7±0.4	0.5
18	21.5	19	19	7	1.0~1.6	6.8	0.7±0.4	0.5

※1: α dimensions

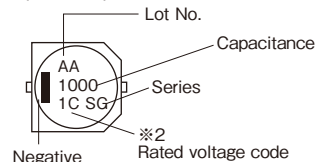
Rated Voltage	α
6.3~100	0
160~400	0.2

MARKING

〈φ4~φ10〉



〈φ12.5~φ18〉



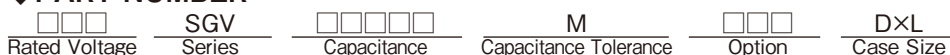
※2 Voltage code

Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	100	160	200	250	400	450
Rated Voltage code	0J	1A	1C	1E	1V	1H	1J	2A	2C	2D	2E	2G	2W

MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)	60(50)	120	500	1k	10k≦	
Coefficient	0.47~1μF	0.50	1.00	1.20	1.30	1.50
	2.2~6.8μF	0.65	1.00	1.20	1.30	1.50
	10~68μF	0.80	1.00	1.20	1.30	1.50
	100~1000μF	0.80	1.00	1.10	1.15	1.20
	2200~6800μF	0.80	1.00	1.05	1.10	1.15

PART NUMBER



◆ STANDARD SIZE

 Size $\phi D \times L$ (mm), Rated Ripple Current (mA r.m.s./105°C, 120Hz)

Vdc	Cap (μ F)	Size (ϕ DXL)	Ripple	Vdc	Cap (μ F)	Size (ϕ DXL)	Ripple	Vdc	Cap (μ F)	Size (ϕ DXL)	Ripple			
6.3	22	4×6.1	26	35	4.7	4×6.1	15	160	12	8×10.5	115			
	33	4×6.1	29		10	5×6.1	28		22	10×10.5	150			
	47	5×6.1	46		22	6.3×6.1	55		39	12.5×13.5	250			
	100	6.3×6.1	71		33	6.3×8	76		47	12.5×16	310			
	220	6.3×8	121			8×6.5	84		68	16×16.5	400			
	470	8×10.5	210		100	8×10.5	180		100	18×16.5	480			
	1000	10×10.5	495			10×10.5	305		120	16×21.5	560			
		12.5×13.5			220	10×10.5	450		150	18×21.5	690			
	2200	12.5×16	750			330			12.5×16	460	200	10	8×10.5	100
	3300	16×21.5	930		470	16×16.5	490		15	10×10.5		130		
		18×16.5			1000	16×21.5	750		33	12.5×13.5		230		
	4700	18×21.5	1200			18×16.5			750	42		12.5×16	270	
6800	18×21.5	1350	50	0.47	4×6.1	4	56	16×16.5	350					
10	33	5×6.1		43	1	4×6.1	8	68	18×16.5	440				
	100	6.3×6.1		71	2.2	4×6.1	11	100	16×21.5	500				
	330	8×10.5		195	3.3	4×6.1	14	120	18×21.5	620				
	470	8×10.5		210	4.7	5×6.1	19	250	6.8	8×10.5		85		
		10×10.5		440	10	6.3×6.1	35		12	10×10.5		115		
	1000	12.5×16		500	22	6.3×8	67		22	12.5×13.5		190		
	2200	16×16.5		810		8×6.5	70		33	12.5×16		240		
	3300	16×21.5		1000	33	8×10.5	140		47	16×16.5	320			
18×16.5		47			8×10.5	167	56		18×16.5	400				
4700	18×21.5			1200	10×10.5	180	68		16×21.5	450				
16	10	4×6.1		28	100	8×10.5	230		100	18×21.5	560			
	22	5×6.1	39	100		10×10.5	315		400	2.7	8×10.5	45		
	47	6.3×6.1	70	220	12.5×16	380	4.7			10×10.5	75			
	100	6.3×8	111	330	16×16.5	470	10			12.5×13.5	135			
	220	8×10.5	185	470	16×21.5	550	12			12.5×16	165			
	330	8×10.5	290		18×16.5		550	18		16×16.5	220			
		10×10.5	440	1000	18×21.5	820	22	18×16.5		280				
	470	8×10.5	320		63	22	8×10.5	55		33	16×21.5	320		
		10×10.5	460	33		8×10.5	115	47		18×21.5	400			
	1000	16×16.5	630	47		8×10.5	120	450		6.8	12.5×13.5	110		
	2200	16×21.5	930	100		12.5×16	225			8.2	12.5×16	150		
		18×16.5		330		16×16.5	385			12	16×16.5	195		
3300	18×21.5	1150	330			16×21.5	490			18	18×16.5	245		
25	33	6.3×6.1	65	470		18×21.5	590		22	16×21.5	275			
	47	6.3×8	79	100		10	8×10.5		65	27	18×21.5	345		
		8×6.5	91			22	10×10.5		90	63	33	16×21.5	320	
	100	8×10.5	180			33	10×10.5		135		100	6.8	12.5×13.5	110
	220	8×10.5	320			47	12.5×13.5		160			8.2	12.5×16	150
		10×10.5	355			100	16×16.5		285			12	16×16.5	195
	330	10×10.5	450		220	16×21.5	440		18			18×16.5	245	
		12.5×13.5				450			22			16×21.5	275	
	470	10×10.5	490		330	18×16.5	490	27	18×21.5			345		
	1000	16×21.5	700			470		18×21.5	590			160	12	10×10.5
		18×16.5			700	10	8×10.5	65	22				10×10.5	150
	2200	18×21.5	1050		22	10×10.5	90	39	12.5×13.5				250	
18×21.5		1050			33	10×10.5	135	47	12.5×16				310	
3300	18×21.5	1700	47	12.5×13.5	160	68	16×16.5	400						
6.3	22	4×6.1	26	100	16×16.5	285	100	18×16.5	480					
	33	4×6.1	29	220	16×21.5	440	120	16×21.5	560					
	47	5×6.1	46		18×16.5		440	150	18×21.5	690				
	100	6.3×6.1	71	330	12.5×16	460	200	10	8×10.5	100				
	220	6.3×8	121		16×16.5			490	15	10×10.5	130			
	470	8×10.5	210	1000	16×21.5	750		33	12.5×13.5	230				
	1000	10×10.5	495		18×16.5			750	42	12.5×16	270			
		12.5×13.5		495	2200	12.5×16		750	56	16×16.5	350			
	2200	12.5×16	750	16×16.5		490			68	18×16.5	440			
	3300	16×21.5	930	470	16×16.5	490		100	16×21.5	500				
		18×16.5			930			120	18×21.5	620				
	4700	18×21.5	1200	50	0.47	4×6.1		4	250	6.8	8×10.5	85		
6800	18×21.5	1350	1		4×6.1	8		12		10×10.5	115			
10	33	5×6.1	43		2.2	4×6.1		11		22	12.5×13.5	190		
	100	6.3×6.1	71		3.3	4×6.1		14		33	12.5×16	240		
	330	8×10.5	195		4.7	5×6.1	19	47		16×16.5	320			
	470	8×10.5	210		10	6.3×6.1	35	56		18×16.5	400			
		10×10.5	440		22	6.3×8	67	68		16×21.5	450			
	1000	12.5×16	500			8×6.5	70	100		18×21.5	560			
	2200	16×16.5	810		33	8×10.5	140	400		2.7	8×10.5	45		
	3300	16×21.5	1000		47	8×10.5	167			4.7	10×10.5	75		
18×16.5		1000			10×10.5	180	10			12.5×13.5	135			
4700	18×21.5	1200	100		10×10.5	230	12			12.5×16	165			
16	10	4×6.1	28	220	12.5×16	380	18		16×16.5	220				
	22	5×6.1	39	330	16×16.5	470	22		18×16.5	280				
	47	6.3×6.1	70	470	16×21.5	550	33		16×21.5	320				
	100	6.3×8	111		18×16.5		550		47	18×21.5	400			
	220	8×10.5	185	1000	18×21.5	820	450		6.8	12.5×13.5	110			
	330	8×10.5	290		22				8×10.5	55	8.2	12.5×16	150	
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		8×6.5	91	33	10×10.5	135			100	18×16.5	480			
	100	8×10.5	180	47	12.5×13.5	160	200		10	8×10.5	100			
	220	8×10.5	320	100	16×16.5	285			15	10×10.5	130			
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	470	10×10.5	490	16×16.5		490				68	18×16.5	440		
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