SGV SERIES

UPGRADE

105℃ Standard

- Load Life : 105℃ 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)

RoHS compliance



◆SPECIFICATIONS

Items	Characteristics		
Category Temperature Range	−55～+105℃	−40～+105℃	−25～+105℃
Rated Voltage Range	6.3～50Vdc	63, 100Vdc	160～450Vdc
Capacitance Tolerance	±20%(20℃,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) (20℃,120Hz)

Rated Voltage (Vdc)		6.3	10	16	25	35	50	63	100	160～250	400 450
tanδ	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

When rated capacitance is over 1000μF,
tanδ shall be added 0.02 to the listed value with increase of every 1000μF.

Endurance

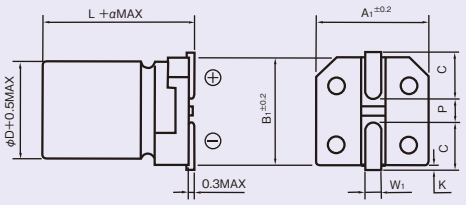
After applying rated voltage with rated ripple current for specified time at 105℃, the capacitors shall meet the following requirements.

		Rated Voltage (Vdc)	Life Time (hrs)
Capacitance Change	Within ±25% of the initial value.	6.3～100	2000
Dissipation Factor	Not more than 200% of the specified value.		
Leakage Current	Not more than the specified value.	160～450	5000

Low Temperature Stability Impedance Ratio(MAX) (120Hz)

Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	100	160～250	400 450
Z(−25℃)/Z(20℃)	4	3	2	2	2	2	2	2	3	6
Z(−40℃)/Z(20℃)	8	8	4	4	3	3	5	5	–	–

◆DIMENSIONS (mm)



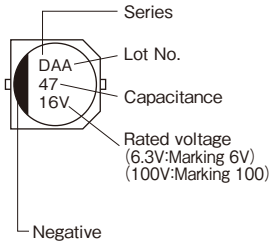
φD	L	A1	B1	C	W1	P	K	α
4	6.1	4.3	4.3	1.8	0.5～0.8	1.0	0.5 MAX	0
5	6.1	5.3	5.3	2.2	0.5～0.8	1.3	0.5 MAX	0
6.3	6.1	6.6	6.6	2.7	0.5～0.8	1.8	0.5 MAX	0
6.3	8	6.6	6.6	2.7	0.5～0.8	1.8	0.5 MAX	0
8	6.5	8.3	8.3	3.4	0.5～0.8	2.2	0.5 MAX	0
8	10.5	8.3	8.3	2.9	0.8～1.1	3.1	0.5 MAX	※1
10	10.5	10.3	10.3	3.2	0.8～1.1	4.5	0.5 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

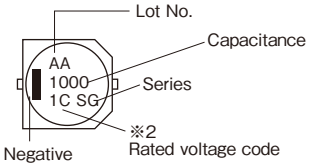
Rated Voltage	α
6.3～100	0
160～400	0.2

◆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

□□□ Rated Voltage / SGV Series / □□□□□ Capacitance / M Capacitance Tolerance / □□□ Option / D×L Case Size

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◆STANDARD SIZE

Size φD×L(mm), Rated Ripple Current (mA r.m.s./105℃, 120Hz)

Vdc	Cap (μF)	Size (φDXL)	Ripple
6.3	22	4×6.1	26
	33	4×6.1	29
	47	5×6.1	46
	100	6.3×6.1	71
	220	6.3×8	121
	470	8×10.5	210
	1000	10×10.5	495
		12.5×13.5	
	2200	12.5×16	750
	3300	16×21.5	930
		18×16.5	
	4700	18×21.5	1200
	6800	18×21.5	1350
10	33	5×6.1	43
	100	6.3×6.1	71
	330	8×10.5	195
	470	8×10.5	210
		10×10.5	440
	1000	12.5×16	500
	2200	16×16.5	810
	3300	16×21.5	1000
		18×16.5	
	4700	18×21.5	1200
16	10	4×6.1	28
	22	5×6.1	39
	47	6.3×6.1	70
	100	6.3×8	111
	220	8×10.5	185
	330	8×10.5	290
		10×10.5	440
	470	8×10.5	320
		10×10.5	460
	1000	16×16.5	630
	2200	16×21.5	930
		18×16.5	
	3300	18×21.5	1150
25	33	6.3×6.1	65
	47	6.3×8	79
		8×6.5	91
	100	8×10.5	180
	220	8×10.5	320
		10×10.5	355
	330	10×10.5	450
		12.5×13.5	
	470	10×10.5	490
	1000	16×21.5	700
		18×16.5	
	2200	18×21.5	1050
	3300	18×21.5	1700

Vdc	Cap (μF)	Size (φDXL)	Ripple
35	4.7	4×6.1	15
	10	5×6.1	28
	22	6.3×6.1	55
	33	6.3×8	76
		8×6.5	84
	100	8×10.5	180
		10×10.5	305
	220	10×10.5	450
		12.5×13.5	
	330	12.5×16	460
	470	16×16.5	490
	1000	16×21.5	750
		18×16.5	
50	0.47	4×6.1	4
	1	4×6.1	8
	2.2	4×6.1	11
	3.3	4×6.1	14
	4.7	5×6.1	19
	10	6.3×6.1	35
	22	6.3×8	67
		8×6.5	70
	33	8×10.5	140
	47	8×10.5	167
		10×10.5	180
	100	8×10.5	230
		10×10.5	315
	220	12.5×16	380
	330	16×16.5	470
	470	16×21.5	550
		18×16.5	
	1000	18×21.5	820
63	22	8×10.5	55
	33	8×10.5	115
	47	8×10.5	120
	100	12.5×16	225
	220	16×16.5	385
	330	16×21.5	490
		18×16.5	
	470	18×21.5	590
100	10	8×10.5	65
	22	10×10.5	90
	33	10×10.5	135
	47	12.5×13.5	160
	100	16×16.5	285
	220	16×21.5	440
		18×16.5	

Vdc	Cap (μF)	Size (φDXL)	Ripple
160	12	8×10.5	115
	22	10×10.5	150
	39	12.5×13.5	250
	47	12.5×16	310
	68	16×16.5	400
	100	18×16.5	480
	120	16×21.5	560
	150	18×21.5	690
200	10	8×10.5	100
	15	10×10.5	130
	33	12.5×13.5	230
	42	12.5×16	270
	56	16×16.5	350
	68	18×16.5	440
	100	16×21.5	500
	120	18×21.5	620
250	6.8	8×10.5	85
	12	10×10.5	115
	22	12.5×13.5	190
	33	12.5×16	240
	47	16×16.5	320
	56	18×16.5	400
	68	16×21.5	450
	100	18×21.5	560
400	2.7	8×10.5	55
	4.7	10×10.5	75
	10	12.5×13.5	135
	15	12.5×16	165
	22	16×16.5	220
	27	18×16.5	280
	33	16×21.5	320
	47	18×21.5	400
450	6.8	12.5×13.5	110
	10	12.5×16	150
	15	16×16.5	195
	18	18×16.5	245
	27	16×21.5	275
	33	18×21.5	345

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