

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](http://www.rubycon.co.jp/catalog/j_pdfs/aluminum/j_JGV.pdf))



RoHS compliance



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)	<table border="1"> <tr> <th>Rated Voltage (Vdc)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160~250</th> <th>400</th> <th>450</th> </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>			Rated Voltage (Vdc)	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	-
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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°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																																			
	Leakage Current	Not more than the specified value.	160~450	5000																																			
Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <tr> <th>Rated Voltage (Vdc)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160~250</th> <th>400</th> <th>450</th> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td>6</td> <td>-</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>8</td> <td>8</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>5</td> <td>5</td> <td>-</td> <td>-</td> <td>-</td> </tr> </table>			Rated Voltage (Vdc)	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	-	-	-
	Rated Voltage (Vdc)	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	-	-	-																												
	(120Hz)																																						

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

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

DIMENSIONS

(mm)

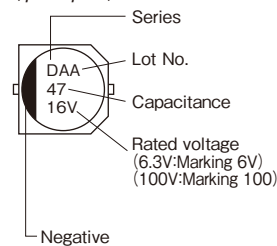
φD	L	A1	B1	C	W1	P	K	α
4	6.1	4.3	4.3	1.8	0.5~0.8	1.0	0.5 MAX	0
5	6.1	5.3	5.3	2.2	0.5~0.8	1.3	0.5 MAX	0
6.3	6.1	6.6	6.6	2.7	0.5~0.8	1.8	0.5 MAX	0
6.3	8	6.6	6.6	2.7	0.5~0.8	1.8	0.5 MAX	0
8	6.5	8.3	8.3	3.4	0.5~0.8	2.2	0.5 MAX	0
8	10.5	8.3	8.3	2.9	0.8~1.1	3.1	0.5 MAX	※1
10	10.5	10.3	10.3	3.2	0.8~1.1	4.5	0.5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

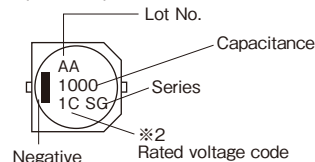
Rated Voltage	α
6.3~100	0
160~400	0.2

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

**◆ STANDARD SIZE**

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

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

# Mouser Electronics

Authorized Distributor

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## Rubycon:

[100SGV33M10X10.5](#) [100SGV47M12.5X13.5](#) [160SGV120M16X21.5](#) [10SGV330M8X10.5](#) [35SGV33M6.3X8](#)  
[400SGV2R7M8X10.5](#) [50SGV3R3M4X6.1](#) [6.3SGV1000M12.5X13.5](#) [200SGV15M10X10.5](#) [250SGV12M10X10.5](#)  
[250SGV33M12.5X16](#) [25SGV100M8X10.5](#) [35SGV1000M16X21.5](#) [35SGV22M6.3X6.1](#) [25SGV3300M18X21.5](#)  
[35SGV470M16X16.5](#) [35SGV4R7M4X6.1](#) [450SGV6R8M12.5X13.5](#) [63SGV220M16X16.5](#) [10SGV100M6.3X6.1](#)  
[100SGV22M10X10.5](#) [160SGV22M10X10.5](#) [16SGV330M10X10.5](#) [200SGV68M18X16.5](#) [25SGV220M10X10.5](#)  
[25SGV220M8X10.5](#) [63SGV22M8X10.5](#) [35SGV100M10X10.5](#) [35SGV10M5X6.1](#) [50SGV220M12.5X16](#)  
[50SGV22M8X6.5](#) [6.3SGV3300M16X21.5](#) [6.3SGV470M8X10.5](#) [63SGV330M16X21.5](#) [63SGV33M8X10.5](#)  
[6.3SGV6800M18X21.5](#) [6.3SGV47M5X6.1](#) [63SGV100M12.5X16](#) [50SGV0R47M4X6.1](#) [50SGV470M18X16.5](#)  
[50SGV47M10X10.5](#) [50SGV47M8X10.5](#) [50SGV4R7M5X6.1](#) [6.3SGV33M4X6.1](#) [25SGV2200M18X21.5](#)  
[160SGV150M18X21.5](#) [160SGV39M12.5X13.5](#) [400SGV47M18X21.5](#) [35SGV33M8X6.5](#) [400SGV4R7M10X10.5](#)  
[450SGV33M18X21.5](#) [50SGV1M4X6.1](#) [50SGV1000M18X21.5](#) [50SGV100M8X10.5](#) [50SGV330M16X16.5](#)  
[16SGV330M8X10.5](#) [50SGV2R2M4X6.1](#) [6.3SGV100M6.3X6.1](#) [63SGV330M18X16.5](#) [200SGV100M16X21.5](#)  
[250SGV6R8M8X10.5](#) [35SGV220M10X10.5](#) [6.3SGV4700M18X21.5](#) [63SGV470M18X21.5](#) [6.3SGV2200M12.5X16](#)  
[6.3SGV220M6.3X8](#) [6.3SGV22M4X6.1](#) [63SGV47M8X10.5](#) [16SGV470M8X10.5](#) [200SGV42M12.5X16](#)  
[25SGV33M6.3X6.1](#) [400SGV33M18X21.5](#) [450SGV18M18X16.5](#) [6.3SGV1000M10X10.5](#) [450SGV15M16X16.5](#)  
[35SGV1000M18X16.5](#) [35SGV100M8X10.5](#) [400SGV15M12.5X16](#) [450SGV10M12.5X16](#) [50SGV22M6.3X8](#)  
[400SGV27M18X16.5](#) [50SGV100M10X10.5](#) [50SGV10M6.3X6.1](#) [400SGV10M12.5X13.5](#) [400SGV22M16X16.5](#)  
[35SGV220M12.5X13.5](#) [50SGV33M8X10.5](#) [50SGV470M16X21.5](#) [400SGV33M16X21.5](#) [450SGV22M16X21.5](#)  
[6.3SGV3300M18X16.5](#) [35SGV330M12.5X16](#) [25SGV470M10X10.5](#) [200SGV33M12.5X13.5](#) [200SGV56M16X16.5](#)  
[250SGV22M12.5X13.5](#) [25SGV1000M18X16.5](#) [250SGV100M18X21.5](#) [25SGV47M8X6.5](#) [16SGV1000M16X16.5](#)



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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