

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)

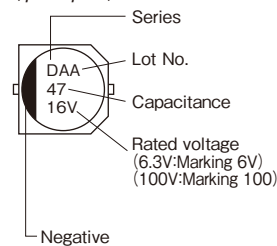
φD	L	A1	B1	C	W1	P	K	α
4	6.1	4.3	4.3	1.8	0.5~0.8	1.0	0.5 MAX	0
5	6.1	5.3	5.3	2.2	0.5~0.8	1.3	0.5 MAX	0
6.3	6.1	6.6	6.6	2.7	0.5~0.8	1.8	0.5 MAX	0
6.3	8	6.6	6.6	2.7	0.5~0.8	1.8	0.5 MAX	0
8	6.5	8.3	8.3	3.4	0.5~0.8	2.2	0.5 MAX	0
8	10.5	8.3	8.3	2.9	0.8~1.1	3.1	0.5 MAX	※1
10	10.5	10.3	10.3	3.2	0.8~1.1	4.5	0.5 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 ( $\phi$ DXL)	Ripple	Vdc	Cap ( $\mu$ F)	Size ( $\phi$ DXL)	Ripple	Vdc	Cap ( $\mu$ F)	Size ( $\phi$ 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			12.5×13.5			330	12.5×16	460
	3300	16×21.5	930		470	16×16.5	490		200	10	8×10.5
4700				18×21.5	1200	1000	16×21.5	750		15	10×10.5
		18×16.5	930				33	12.5×13.5		230	
6800	18×21.5	1350	18×16.5	750	42	12.5×16	270				
10	33	5×6.1	43	50	0.47	4×6.1	4	250	6.8	8×10.5	85
	100	6.3×6.1	71		1	4×6.1	8		12	10×10.5	115
	330	8×10.5	195		2.2	4×6.1	11		22	12.5×13.5	190
	470	8×10.5	210		3.3	4×6.1	14		33	12.5×16	240
		10×10.5	440		4.7	5×6.1	19		47	16×16.5	320
	1000	12.5×16	500		10	6.3×6.1	35		56	18×16.5	400
	2200	16×16.5	810		22	6.3×8	67		68	18×16.5	440
	3300	16×21.5	1000			8×6.5	70		100	16×21.5	500
18×16.5		1000		33	8×10.5	140	120	18×21.5	620		
4700	18×21.5	1200	47	8×10.5	167	400	6.8	8×10.5	45		
16	10	4×6.1		28	10×10.5		180	4.7	10×10.5	75	
	22	5×6.1	39	100	8×10.5		230	10	12.5×13.5	135	
	47	6.3×6.1	70		10×10.5		315	12	12.5×16	165	
	100	6.3×8	111	220	12.5×16		380	18	16×16.5	220	
	220	8×10.5	185	330	16×16.5		470	22	18×16.5	280	
	330	8×10.5	290	470	16×21.5		550	33	16×21.5	320	
		10×10.5	440		18×16.5			400			
	470	8×10.5	320	1000	18×21.5	820	47	18×21.5	400		
		10×10.5	460		63	22	8×10.5	55	450	6.8	12.5×13.5
	1000	16×16.5	630	33		8×10.5	115	8.2		12.5×16	150
2200	16×21.5	930	47	8×10.5		120	12	16×16.5		195	
	18×16.5		930	100		12.5×16	225	18		18×16.5	245
3300	18×21.5	1150	220	16×16.5		385	22	16×21.5		275	
25	33	6.3×6.1	65	330		16×21.5	490	470	18×21.5	345	
	47	6.3×8	79			18×16.5			490	100	10
		8×6.5	91	470		18×21.5	590		22		10×10.5
	100	8×10.5	180	10	8×10.5	65	33		10×10.5		135
	220	8×10.5	320		10×10.5	90	47		12.5×13.5		160
		10×10.5	355	100	16×16.5	285	100	16×16.5	285		
	330	10×10.5	450	220	16×21.5	440	220	16×21.5	275		
		12.5×13.5			450			18×16.5	440		27
	470	10×10.5	490	100	18×16.5	440	450	22	16×21.5		275
	1000	16×21.5	700		220	18×16.5		440	450	33	16×21.5
18×16.5		700				220		16×21.5		440	47
2200	18×21.5	1050	3300		18×21.5			1700		450	6.8
3300	18×21.5	1700		3300	18×21.5	1700	450	8.2			12.5×16

# 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;
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- 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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