

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)



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)

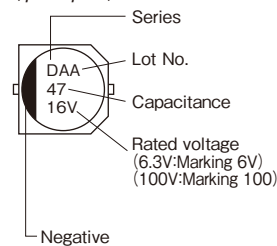
φD	L	A1	B1	C	W1	P	K	α
4	6.1	4.3	4.3	1.8	0.5~0.8	1.0	0.5 MAX	0
5	6.1	5.3	5.3	2.2	0.5~0.8	1.3	0.5 MAX	0
6.3	6.1	6.6	6.6	2.7	0.5~0.8	1.8	0.5 MAX	0
6.3	8	6.6	6.6	2.7	0.5~0.8	1.8	0.5 MAX	0
8	6.5	8.3	8.3	3.4	0.5~0.8	2.2	0.5 MAX	0
8	10.5	8.3	8.3	2.9	0.8~1.1	3.1	0.5 MAX	※1
10	10.5	10.3	10.3	3.2	0.8~1.1	4.5	0.5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

