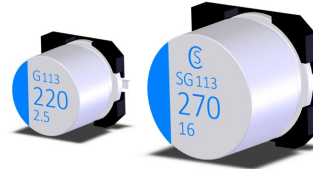


# CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS



## VSG Series

- Low ESR at a high frequency ranged
- High ripple current capability
- 2,000 hours at 105°C



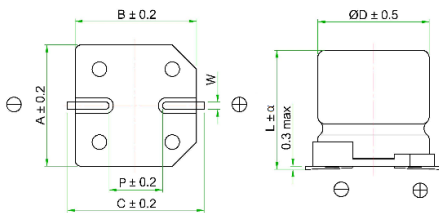
### ◆ SPECIFICATIONS

Item	Performance Characteristics								
Category Temperature Range	-55 ~ +105°C								
Working Voltage Range	2.5 ~ 63Vdc								
Surge Voltage	Rated Voltage × 1.15								
Capacitance Tolerance	M: ±20% (at 25°C and 120Hz)								
ESR	See the standard ratings table (at 25°C, 100~300KHz)								
Dissipation Factor (Tanδ)	See the standard ratings table (at 25°C, 120Hz)								
Leakage Current ※1	See the standard ratings table (Impress the rated voltage for 2 minutes)								
Low Temperature Characteristics Impedance Ratio	Z(-25°C)/Z(+25°C) ≤ 1.15 at 100KHz Z(-55°C)/Z(+25°C) ≤ 1.25 at 100KHz								
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25°C after subjected to DC voltage for 2,000 hours at 105°C. <table border="1"> <tr> <td>Capacitance change</td> <td>≦ ±20% of the initial value</td> </tr> <tr> <td>ESR</td> <td>≦ 150% of the specified value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≦ 150% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≦ specified value</td> </tr> </table>	Capacitance change	≦ ±20% of the initial value	ESR	≦ 150% of the specified value	Dissipation factor(tanδ)	≦ 150% of the specified value	Leakage current	≦ specified value
Capacitance change	≦ ±20% of the initial value								
ESR	≦ 150% of the specified value								
Dissipation factor(tanδ)	≦ 150% of the specified value								
Leakage current	≦ specified value								
Damp Heat (Steady State)	The following requirements shall be satisfied when the capacitor are restored to 25°C after exposing them for 1,000 hours at 60°C 90 to 95% RH. <table border="1"> <tr> <td>Capacitance change</td> <td>≦ ±20% of the initial value</td> </tr> <tr> <td>ESR</td> <td>≦ 150% of the specified value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≦ 150% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≦ specified value</td> </tr> </table>	Capacitance change	≦ ±20% of the initial value	ESR	≦ 150% of the specified value	Dissipation factor(tanδ)	≦ 150% of the specified value	Leakage current	≦ specified value
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ESR	≦ 150% of the specified value								
Dissipation factor(tanδ)	≦ 150% of the specified value								
Leakage current	≦ specified value								
Others	Conforms to JIS-C-5101-25 (2009)								

※1 In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 105°C.

※2 ESR should be measured at both of the terminal ends closest to the capacitor body.

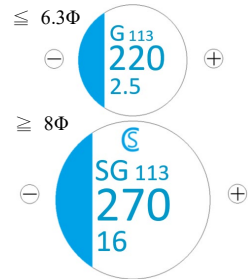
### ◆ DIMENSIONS (mm)



### ◆ LEAD

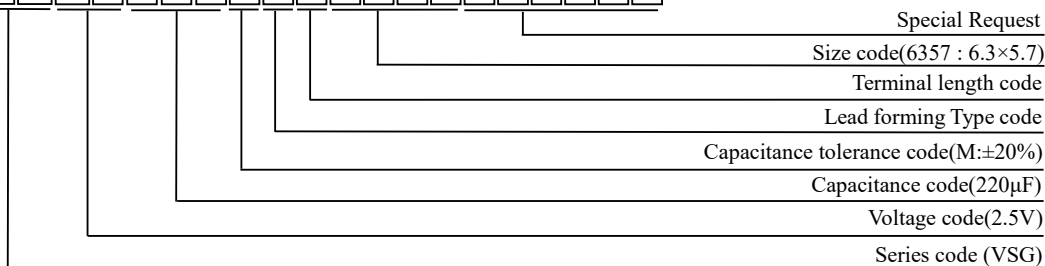
Code	Case size	ΦD	L	α	A	B	C	W	P
0557	5×5.7	5	5.7	0.3	5.3	5.3	5.9	0.5~0.8	1.4
6357	6.3×5.7	6.3	5.7	0.3	6.6	6.6	7.3	0.5~0.8	2.1
6309	6.3×9	6.3	9	1	6.6	6.6	7.3	0.7~1.1	2.1
0867	8×6.7	8	6.7	0.3	8.3	8.3	9	0.7~1.1	3.2
0897	8×9.7	8	9.7	0.5	8.3	8.3	9	0.7~1.1	3.2
1008	10×8	10	8	0.5	10.3	10.3	11	0.7~1.1	4.6
1012	10×12	10	12	0.5	10.3	10.3	11	0.7~1.1	4.6

### ◆ MARKING



### ◆ PART NUMBER SYSTEM ( Example : 2.5V 220μF )

V S G 0 E 2 2 1 M C B 6 3 5 7



# CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS



## VSG Series

### ◆ STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case Size (mm) ΦD×L	ESR 100~300KHz (mΩmax)	Rated Ripple current (mArms/ 105°C, 100KHz)	Tanδ max	Leakage Current (μA max)	Part Number
2.5 (0E)	220	6.3×5.7	25	2500	0.12	300	VSG0E221MCB6357
	560	6.3×5.7	25	2500	0.12	420	VSG0E561MCB6357
	560	6.3×5.7	16	3500	0.12	300	VSG0E561MCB6357E
	680	8×6.7	20	3370	0.12	510	VSG0E681MCB0867
	1500	10×12	12	5400	0.12	1125	VSG0E152MCB1012
	2700	10×12	12	5070	0.12	2025	VSG0E272MCB1012
4.0 (0G)	100	6.3×5.7	35	2200	0.12	300	VSG0G101MCB6357
	150	5×5.7	30	1490	0.12	300	VSG0G151MCB0557
	330	6.3×5.7	27	2700	0.12	400	VSG0G331MCB6357
	680	10×8	20	4130	0.12	816	VSG0G681MCB1008
	1200	10×12	12	5500	0.12	1440	VSG0G122MCB1012
6.3 (0J)	82	6.3×5.7	35	2200	0.12	300	VSG0J820MCB6357
	100	5×5.7	35	1380	0.12	300	VSG0J101MCB0557
	220	6.3×5.7	27	2320	0.12	416	VSG0J221MCB6357
	330	10×8	22	3600	0.12	624	VSG0J331MCB1008
	390	8×6.7	18	3220	0.12	737	VSG0J391MCB0867
	820	10×12	12	5500	0.12	1550	VSG0J821MCB1012
10 (1A)	47	6.3×5.7	40	2100	0.12	300	VSG1A470MCB6357
	56	6.3×5.7	40	2100	0.12	300	VSG1A560MCB6357
	120	8×6.7	30	2600	0.12	360	VSG1A121MCB0867
	270	10×8	25	3500	0.12	810	VSG1A271MCB1008
	330	10×8	25	3770	0.12	990	VSG1A331MCB1008
	560	10×12	13	5300	0.12	1680	VSG1A561MCB1012
16 (1C)	33	6.3×5.7	37	2050	0.12	300	VSG1C330MCB6357
	39	6.3×5.7	45	2000	0.12	300	VSG1C390MCB6357
	82	8×6.7	40	2300	0.12	394	VSG1C820MCB0867
	100	5×5.7	27	3000	0.12	700	VSG1C101MCB0557
	100	6.3×5.7	24	2490	0.12	300	VSG1C101MCB6357
	100	10×8	30	3200	0.12	480	VSG1C101MCB1008
	180	6.3×5.7	22	3300	0.12	576	VSG1C181MCB6357
	180	10×8	29	3200	0.12	864	VSG1C181MCB1008
	270	6.3×9	22	3300	0.12	864	VSG1C271MCB6309
	270	8×6.7	22	3300	0.12	864	VSG1C271MCB0867
	330	8×9.7	16	3890	0.12	1584	VSG1C331MCB0897
	330	10×12	16	4800	0.12	1584	VSG1C331MCB1012
	560	10×12	16	4720	0.12	1792	VSG1C561MCB1012
1000	10×12	18	4300	0.12	3200	VSG1C102MCB1012	
25 (1E)	27	6.3×5.7	40	2100	0.12	135	VSG1E270MCB6357L
	47	6.3×5.7	30	2800	0.12	235	VSG1E470MCB6357
35 (1V)	47	10×12	28	3800	0.12	410	VSG1V470MCB1012
	100	10×12	29	2600	0.12	700	VSG1V101MCB1012
	220	10×12	28	2600	0.12	1540	VSG1V221MCB1012
50 (1H)	100	10×12	27	3600	0.12	1000	VSG1H101MCB1012
63 (1J)	22	8×9.7	37	1700	0.12	300	VSG1J220MCB0897