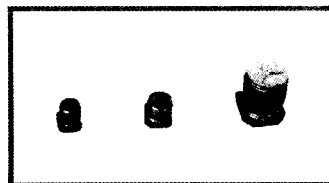


V-CHIP ALUMINUM ELECTROLYTIC CAPACITORS 片式铝电解电容器

SS Standard Series

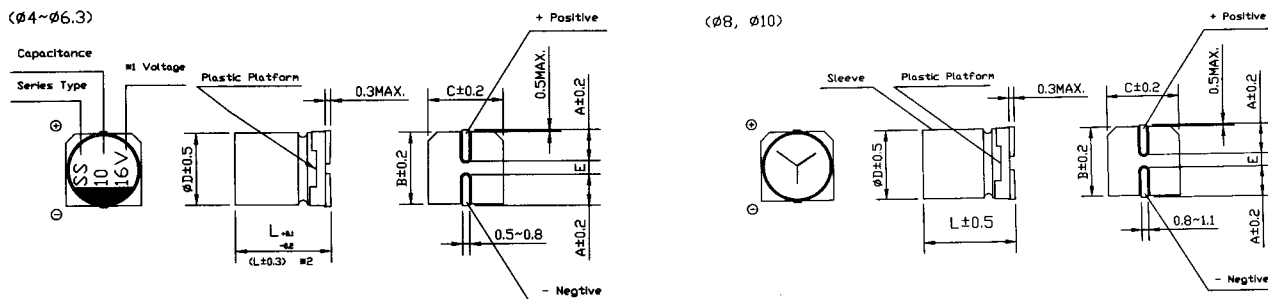
- Designed for surface mounting on high density circuit board.
- Emboss carrier tape packing system is available for automatic insertion.



◆ Specifications

Items	Performance Characteristics																														
Operating Temperature Range	-40~85°C																														
Voltage Range	4~100V																														
Capacitance Range	0.1~1500μF																														
Capacitance Tolerance	±20% at 120Hz, 20°C																														
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3μA, whichever is greater.																														
Tan δ	Measurement frequency: 120Hz, Temperature: 20°C <table border="1"> <tr> <td>Rated voltage(V)</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>Tan δ (max)</td> <td>0.35</td> <td>0.26</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> </tr> </table>	Rated voltage(V)	4	6.3	10	16	25	35	50	63	100	Tan δ (max)	0.35	0.26	0.20	0.16	0.14	0.12	0.12	0.10	0.08										
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Stability at Low Temperature	Measurement frequency: 120Hz <table border="1"> <tr> <td>Rated voltage(V)</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>Impedance ratio</td> <td>Z-25°C/Z+20°C</td> <td>7</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>ZT/Z20(max)</td> <td>Z-40°C/Z+20°C</td> <td>15</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	Rated voltage(V)	4	6.3	10	16	25	35	50	63	100	Impedance ratio	Z-25°C/Z+20°C	7	4	3	2	2	2	2	2	ZT/Z20(max)	Z-40°C/Z+20°C	15	8	6	4	4	3	3	3
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Load Life	After 2000 hours' application of rated voltage at 85°C, capacitors meet the characteristics requirements listed at right <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ± 20% of initial value (Within ± 25% of initial value for 4V)</td> </tr> <tr> <td>Tan δ</td> <td>200% or less of initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Initial specified value or less</td> </tr> </table>	Capacitance Change	Within ± 20% of initial value (Within ± 25% of initial value for 4V)	Tan δ	200% or less of initial specified value	Leakage Current	Initial specified value or less																								
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Self Life	After leaving capacitors under no load at 85°C for 1000 hours, they meet the specified value for load life characteristics listed above.																														
Resistance to Soldering Heat	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristics requirements listed at right. <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ± 10% of initial value</td> </tr> <tr> <td>Tan δ</td> <td>Initial specified value or less</td> </tr> <tr> <td>Leakage Current</td> <td>Initial specified value or less</td> </tr> </table>	Capacitance Change	Within ± 10% of initial value	Tan δ	Initial specified value or less	Leakage Current	Initial specified value or less																								
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Tan δ	Initial specified value or less																														
Leakage Current	Initial specified value or less																														
Applicable Standards	JIS C-5141 and JIS C-5102																														

◆ Chip Type



*1 Voltage mark for 6.3V is [6V]
 *2 Applicable to 6.3 × 7.7

	(mm)					
ΦD × L	4 × 5.4	5 × 5.4	6.3 × 5.4	6.3 × 7.7	8 × 10.5	10 × 10.5
A	1.8	2.1	2.4	2.4	2.9	3.2
B	4.3	5.3	6.6	6.6	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	10.3
E	1.0	1.3	2.2	2.2	3.1	4.5
L	5.4	5.4	5.4	7.7	10.5	10.5

V-CHIP ALUMINUM ELECTROLYTIC CAPACITORS 片式铝电解电容器

SS Series

◆ Dimensions

Cap. (μ F)	WV	4		6.3		10		16		25	
		0G		0J		1A		1C		1E	
4.7	4R7									4×5.4	19
10	100							4×5.4	25	5×5.4 (4×5.4)	28 (24)
15	150							4×5.4	28	5×5.4	34
22	220			4×5.4	31	5×5.4 (4×5.4)	35 (30)	5×5.4	39	6.3×5.4 (5×5.4)	52 (46)
33	330	4×5.4	28	5×5.4 (4×5.4)	39 (34)	5×5.4 (4×5.4)	43 (35)	6.3×5.4 (5×5.4)	57 (45)	6.3×5.4	63
47	470	4×5.4	33	5×5.4	47	6.3×5.4 (5×5.4)	52 (47)	6.3×5.4	68	6.3×5.4	68
56	560	4×5.4	39	5×5.4	54	6.3×5.4	68	6.3×5.4	74	6.3×5.4	82
68	680	5×5.4	45	6.3×5.4	62	6.3×5.4	72	6.3×5.4	80	6.3×5.4	94
100	101	5×5.4	56	6.3×5.4	71	6.3×5.4	76	6.3×5.4	86	6.3×7.7	145
150	151	6.3×5.4	74	6.3×5.4	78	6.3×5.4	88	6.3×7.7	150	8×10.5	190
220	221	6.3×5.4	96	6.3×5.4	95	6.3×7.7	170	6.3×7.7	160	8×10.5	230
330	331	6.3×7.7	150	6.3×7.7	190	8×10.5	250	8×10.5	280	10×10.5	305
470	471	6.3×7.7	200	8×10.5	270	8×10.5	300	10×10.5	330		
680	681	8×10.5	285	8×10.5	320	10×10.5	380	10×10.5	390		
1000	102	8×10.5	340	10×10.5	400	10×10.5	450				
1500	152	10×10.5	390								

Cap. (μ F)	WV	35		50		63		100	
		1V		1H		1J		2A	
0.1	0R1			4×5.4	1.0	4×5.4	1.0		
0.22	R22			4×5.4	2.3	4×5.4	2.3		
0.33	R33			4×5.4	3.5	4×5.4	3.5		
0.47	R47			4×5.4	5.0	4×5.4	5.0		
1	010			4×5.4	10	4×5.4	10	4×5.4	10
1.5	1R5			4×5.4	12	4×5.4	12	6.3×5.4	15
2.2	2R2			4×5.4	15	4×5.4	15	6.3×5.4	20
3.3	3R3	4×5.4	18	4×5.4	18	4×5.4	20	6.3×5.4	28
4.7	4R7	4×5.4	20	5×5.4 (4×5.4)	23 (19)	5×5.4	23	6.3×5.4	35
10	100	5×5.4 (4×5.4)	30 (25)	6.3×5.4	34	6.3×5.4	34	6.3×7.7	50
22	220	6.3×5.4	54	6.3×5.4	45	6.3×7.7	70	8×10.5	120
33	330	6.3×5.4	60	6.3×7.7	85	6.3×7.7	85	10×10.5	190
47	470	6.3×5.4	70	6.3×7.7	90	8×10.5	170		
56	560	6.3×7.7	80	6.3×7.7	110	8×10.5	200		
68	680	6.3×7.7	110	8×10.5	170	10×10.5	230		
100	101	6.3×7.7	130	8×10.5	200	10×10.5	280		
150	151	8×10.5	215	10×10.5	240				
220	221	10×10.5	270					Case size	Allowable ripple

() Smaller can size is available

Allowable ripple (mA rms) at 85°C 120Hz

◆ Frequency Coefficient of allowable ripple current

Frequency	50Hz	120Hz	300Hz	1kHz	10kHz~
Coefficient	0.70	1.00	1.17	1.36	1.50