



VSE Series

- 2021 Change series code SE → VSE
- Super low ESR at a high frequency range
- High ripple current capability
- 5,000 hours at 105°C



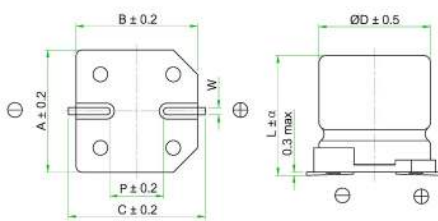
SPECIFICATIONS

Item	Performance Characteristics								
Category Temperature Range	-55 ~ +105°C								
Working Voltage Range	2.5 ~ 35Vdc								
Surge Voltage	Rated Voltage x1.15								
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 with the rated ripple current is applied for 5,000 hours at 105°C <table border="1" style="margin-left: 20px;"> <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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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" style="margin-left: 20px;"> <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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Leakage current	≤ specified value								

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

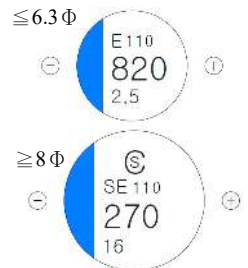
※2 ESR should be measured at both of the terminal ends closest to the capacitor body

DIMENSIONS

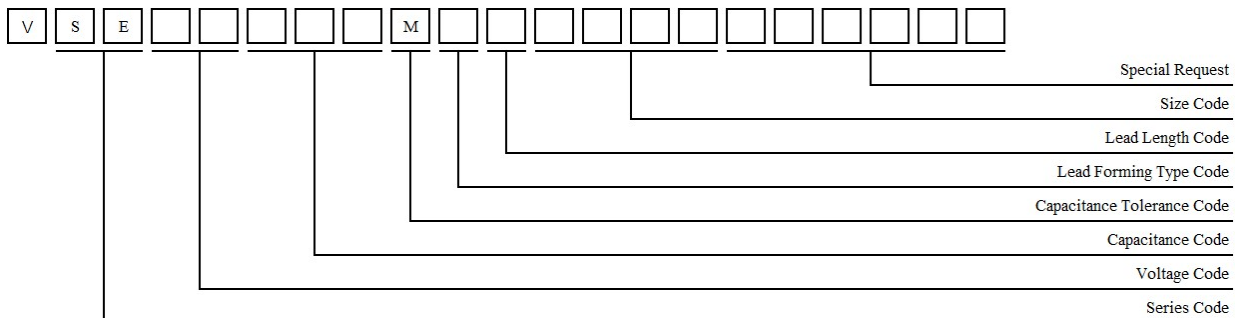


Code	Case Size	ΦD	L	α	A	B	C	W	P
6357	6.3×5.7	6.3	5.7	0.3	6.6	6.6	7.3	0.5~0.8	2.1
6309	6.3×9	6.3	9	0.5	6.6	6.6	7.3	0.7~1.1	2.1
0867	8×6.7	8	6.7	0.3	8.3	8.3	9	0.7~1.1	3.2
08C7	8×12.7	8	12.7	0.5	8.3	8.3	9	0.7~1.1	3.2
10C4	10×12.4	10	12.4	0.5	10.3	10.3	11	0.7~1.1	4.6

Marking



PART NUMBER SYSTEM





VSE Series

◆ **Standard Rating**

Rated Voltage (Vdc)	Rated Capacitance (μF)	Case Size ΦD×L (mm)	ESR 100~300KHz (mΩ max)	Rated Ripple Current 105°C,100KHz (mArms max)	Tan δ max	Leakage Current (μA max)	Part Number
2.5(0E)	560	6.3×5.7	16	3500	0.10	300	VSE0E561MCB6357
	560	6.3×5.7	10	3500	0.10	500	VSE0E561MCB6357E
4(0G)	560	8×6.7	22	3220	0.10	448	VSE0G561MCB0867
6.3(0J)	220	6.3×5.7	15	3160	0.10	300	VSE0J221MCB6357
	220	6.3×5.7	10	3900	0.10	500	VSE0J221MCB6357E
	330	6.3×5.7	15	3160	0.10	416	VSE0J331MCB6357
	390	8×6.7	22	3220	0.10	491	VSE0J391MCB0867
10(1A)	120	6.3×5.7	22	2600	0.10	300	VSE1A121MCB6357
	270	8×6.7	22	3220	0.10	540	VSE1A271MCB0867
16(1C)	68	6.3×5.7	40	2450	0.10	544	VSE1C680MCB6343
	100	6.3×5.7	24	2490	0.10	320	VSE1C101MCB6357
	270	6.3×9	9	5800	0.1	864	VSE1C271MCB6309ER
	270	8×9.7	16	4070	0.10	864	VSE1C271MCB0897
	270	8×12.7	11	4070	0.10	864	VSE1C271MCB08C7
	560	8×12.7	16	3800	0.10	1792	VSE1C561MCB08C7
	560	10×12.4	16	3800	0.10	1792	VSE1C561MCB10C4
25(1E)	47	6.3×5.7	30	2500	0.10	588	VSE1E470MCB6357
	100	8×9.7	24	3300	0.10	500	VSE1E101MCB0897
35(1V)	120	10×12.4	32	2400	0.10	840	VSE1V121MCB10C4

PART NUMBER SYSTEM

◆ RADIAL LEAD TYPE

Series	Rated Voltage	Capacitance	Tolerance	Lead Forming Type	Lead Length	Case Dimension	Special Request
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

(1) Series

Series	DIP	UPS	UPR	UUL	UPE	URP	URH	UGP	UGV	UGS	UPC
	SMD	VSG	VSP	VSU	VSE						

(2) Rated Voltage

Code	0E	0J	6K	7H	1A	1B	AG	1C	1D	1P	1E	1F	1V	1H	1J	2A
WV	2.5	6.3	6.8	7.5	10	12	14	16	20	22	25	30	35	50	63	100

(3) Capacitance

Code	6R8	100	180	560	101	181	561	102	182
μF	6.8	10	18	56	100	180	560	1000	1800

(4) Capacitance Tolerance

Code	J	Q	R	K	V	M	H
%	± 5	+30 / -10	+20 / -0	± 10	+20 / -10	± 20	+20 / -5

(5) Lead Type

Code	C	P
Description	Cutting	Taping
Drawing	Fig 1	Fig 2

(6) Lead Length (Cut / Formed lead)

Code	3	4	U	7	D	X	R	B	E	G	2	M	T	N
Length	3.5	4.5	5.5	7	4	2.3	2.5	2.8	3.1	3.3	2.5	3.5	3.8	+20mm min
Tolerance	±0.5			±0.2				±0.3			-15mm min			

Taping Code

Code	Z	2	3	7	5	S
Lead Pitch: +0.8/-0.2	2.0	2.5	3.5	3.5	5.0	5.0

(7) Case Dimension

DIP Code	0508	6305	6308	6311	0807	0808	0811	0816	0820	1012	1016	1020
Size	5×8	6.3×5	6.3×8	6.3×11	8×7	8×8	8×11	8×16	8×20	10×12	10×16	10×20
SMD Code	0557	6343	6357	6377	6309	0867	0897	08C7	1077	10C4		
Size	5×5.7	6.3×4.3	6.3×5.7	6.3×7.7	6.3×9	8×6.7	8×9.7	8×12.7	10×7.7	10×12.4		

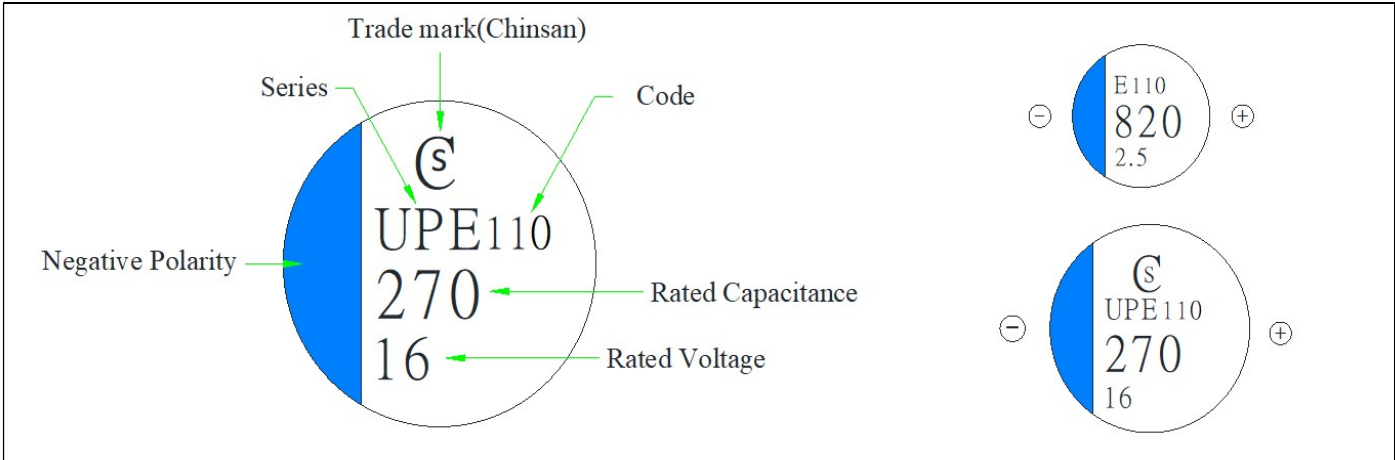
(8) Special Request

Code	R	F	L	D
Description	High Rated ripple current	Endurance	Low Leakage Current	Low Dissipation Factor
Code	U	E	---	---
Description	Convex Rubber	Low ESR	---	---

CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS

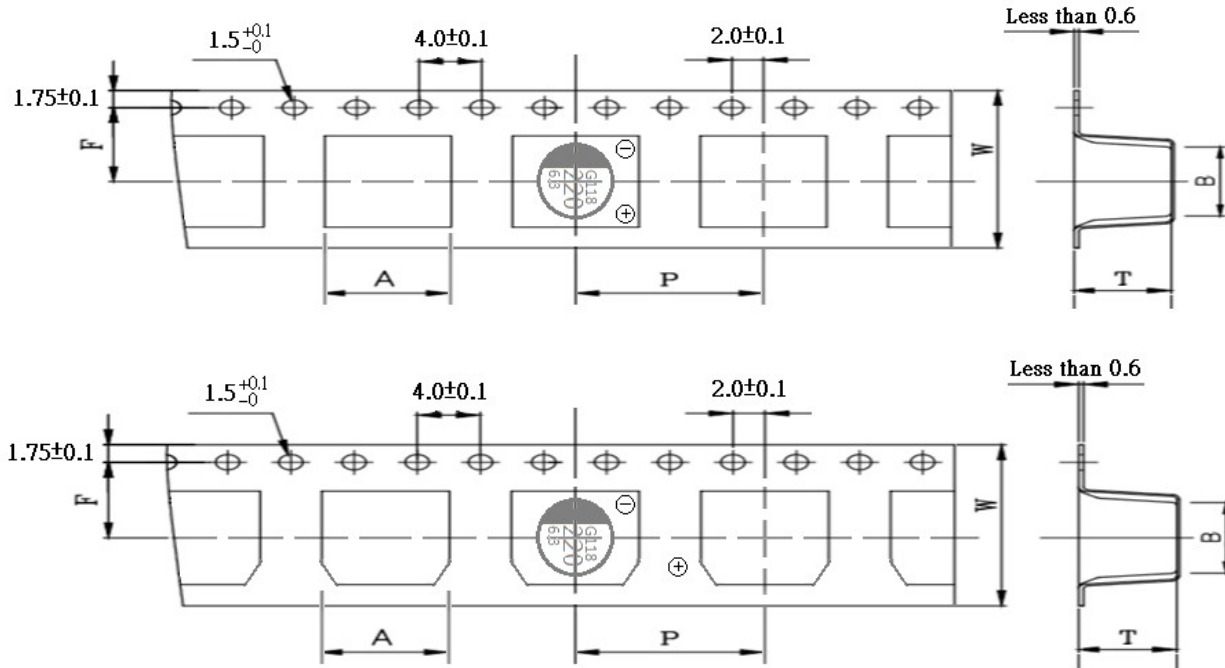


◆ MARKING AND DATE CODE



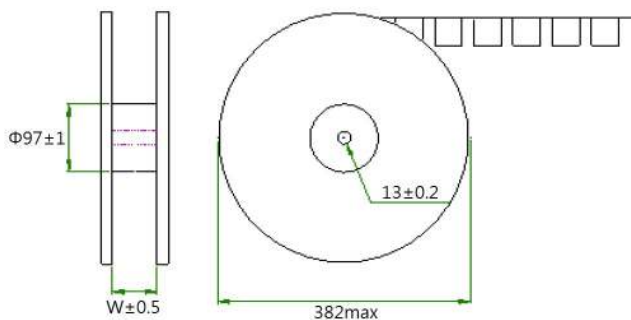
Trade Mark "CS"	Chinsan Solid Capacitor, Show on Dimension $\geq 8 \Phi$																																																									
Code (Date Code) (1) (2) (3) <table border="1" style="margin-left: 20px;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">1</td> <td style="width: 20px; height: 20px; text-align: center;">1</td> <td style="width: 20px; height: 20px; text-align: center;">0</td> </tr> </table>	1	1	0	(1)DAY <table border="1" style="width: 100%; text-align: center;"> <tr> <th>Code</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> </tr> <tr> <td>Week</td> <td>The first week</td> <td>The second week</td> <td>The third week</td> <td>The fourth week</td> <td>The fifth week</td> </tr> </table> (2)Month <table border="1" style="width: 100%; text-align: center;"> <tr> <th>Code</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> </tr> <tr> <td>Month</td> <td>Jan</td> <td>Feb</td> <td>Mar</td> <td>Apr</td> <td>May</td> <td>Jun</td> </tr> <tr> <th>Code</th> <th>7</th> <th>8</th> <th>9</th> <th>X</th> <th>Y</th> <th>Z</th> </tr> <tr> <td>Month</td> <td>July</td> <td>Aug</td> <td>Sep</td> <td>Oct</td> <td>Nov</td> <td>Dec</td> </tr> </table> (3)Year <table border="1" style="width: 100%; text-align: center;"> <tr> <th>Code</th> <th>9</th> <th>0</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> </tr> <tr> <td>Year</td> <td>2019</td> <td>2020</td> <td>2021</td> <td>2022</td> <td>2023</td> <td>2024</td> </tr> </table>	Code	1	2	3	4	5	Week	The first week	The second week	The third week	The fourth week	The fifth week	Code	1	2	3	4	5	6	Month	Jan	Feb	Mar	Apr	May	Jun	Code	7	8	9	X	Y	Z	Month	July	Aug	Sep	Oct	Nov	Dec	Code	9	0	1	2	3	4	Year	2019	2020	2021	2022	2023	2024
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SMD CARRIER TAPE DIMENSIONS



Dimension Code	Item	W	A	B	F	P	T
		±0.3	±0.2	±0.2	±0.1	±0.1	±0.2
5057 (5x5.7)		16	5.6	5.6	7.5	12	6.2
6343 (6.3x4.3)		16	7.0	7.0	7.5	12	4.7
6357 (6.3x5.7)		16	7.0	7.0	7.5	12	6.2
6377 (6.3x7.7)		16	7.0	7.0	7.5	12	8.2
6309 (6.3x9)		16	7.0	7.0	7.5	12	10.0
0867 (8x6.7)		24	8.7	8.7	11.5	12	7.2
0897 (8x9.7)		24	8.7	8.7	11.5	16	10.3
08C7 (8x12.7)		24	8.7	8.7	11.5	16	13.2
1077 (10x7.7)		24	10.7	10.7	11.5	16	8.3
10C4 (10x12.4)		24	10.7	10.7	11.5	16	13.0

◆ SMD REEL DIMENSIONS AND PACKING QUANTITY



Case Code	Quantity per reel	Quantity per Box※	W
5057	1200	12000	17.5
6343	1500	15000	
6357	1200	12000	
6377	1000	10000	
6309	800	8000	
0867	1000	7000	25.3
0897	500	3500	
08C7	400	2800	
1077	500	3500	
10C4	400	2800	

※ This may change according to a delivered quantity