

## 特点 Features

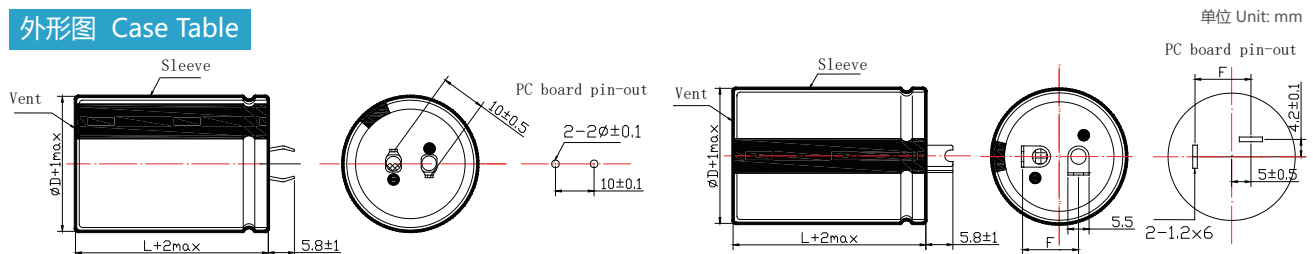
- 耐高温, 125°C 2000小时。  
High ripple current, Load life of 2000 hours at 125°C.
- 适用于开关电源, 变频器。Best for switching power supplies, Inverter.
- RoHS指令已对应完毕。Adapted to the RoHS directive.



## 主要技术性能 Specifications

项目 Items	特性 Performance Characteristics					
使用温度范围 Operating Temperature Range	-40~+125°C					
额定电压范围 Rated Voltage Range	16~80V					
标称电容范围 Rated Voltage Range	330~10000uF					
标称电容允许偏差 Capacitance Tolerance	±20% (120Hz, +20°C)					
漏电流 Leakage Current	I ≤ 0.01CV(μA)或1.5mA 取较小值 (Whichever is smaller) 5分钟 (at 20°C, after 5 minutes)					
损耗角正切值(tgδ) Dissipation Factor (+20°C, 120Hz)	Rated voltage(V)	16	25	35	50	63~80
	tgδ	0.50	0.40	0.35	0.30	0.20
温度特性 Temperature Characteristics (Impedance ratio at 120Hz)	U <sub>R</sub> (V)	16~25	35	50	63~80	
	Z-25°C/Z+20°C	6	6	4	3	
	Z-40°C/Z+20°C	15	10	8	6	
耐久性 Load Life	+125°C, 施加含额定纹波电流的额定电压2000小时, 恢复16小时后: After applying rated voltage with specified ripple current for 2000 hours at +125°C and then resumed for 16 hours: 电容变化率 Capacitance change : ±20%初始测量值以内 ±20% of the initial measured value 漏电流 Leakage current : ≤初始规定值 ≤Initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值 ≤2 times of the initial specified value					
高温贮存 Shelf Life	+125°C, 1000小时贮存后, 加额定工作电压处理30分钟, 恢复16小时后: After storage for 1000 hours at +125°C, U <sub>R</sub> to be applied for 30 minutes and then resumed for 16 hours: 电容变化率 Capacitance change : ±20%初始测量值以内 ±20% of the initial measured value 漏电流 Leakage current : ≤初始规定值 ≤Initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值 ≤2 times of the initial specified value					

## 外形图 Case Table



## 频率修正系数 Frequency Coefficient

Freq.(Hz)	50	120	300Hz	1KHz	≤10KHz
U <sub>R</sub> (V)					
16~80	0.85	1.00	1.06	1.15	1.20

## 尺寸 Dimensions

WV Size CAP(μF)		16(1C)								25(1E)							
		Φ22		Φ25		Φ30		Φ35		Φ22		Φ25		Φ30		Φ35	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1500	152									22×30	0.95						
2200	222	22×30	1.00	25×35	1.41					22×40	1.28	25×30	1.26				
3300	332	22×40	1.36	25×40	1.77					22×50	1.72	25×40	1.72	30×30	1.68		
4700	472	22×50	1.78			30×30	1.74					25×50	2.23	30×40	2.22	35×30	2.17
6800	682					30×40	2.31	35×30	2.26					30×50	2.90	35×40	2.87
10000	103							35×45	3.14								

WV Size CAP(μF)		35(1V)								50(1H)							
		Φ22		Φ25		Φ30		Φ35		Φ22		Φ25		Φ30		Φ35	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
680	681									22×30	0.78						
1000	102	22×30	0.85							22×40	1.06	25×30	1.04				
1500	152	22×40	1.16	25×30	1.14					22×50	1.42	25×40	1.42	30×30	1.39		
2200	222	22×50	1.54	25×40	1.54	30×30	1.50							30×40	1.86	35×35	1.91
3300	332					30×40	2.04	35×35	2.09							35×40	2.45
4700	472							35×40	2.61								

WV Size CAP(μF)		63(1J)								80(1K)							
		Φ22		Φ25		Φ30		Φ35		Φ22		Φ25		Φ30		Φ35	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
330	331									22×30	0.59						
470	471	22×35	0.69	25×30	0.71					22×40	0.79	25×35	0.82	30×35	1.07		
680	681	22×40	0.87	25×35	0.91	30×30	0.93					25×40	1.04	30×45	1.42	35×35	1.40
1000	102			25×45	1.21	30×35	1.19	35×30	1.22							35×45	1.86
1500	152					30×45	1.60	35×40	1.65								
2200	222							35×50	2.16								

Size φD×L(mm)  
Maximum Allowable Ripple Current (A rms) at 125°C 120Hz

## Product symbol system for Aluminum Electrolytic Capacitors



### ① Series

Series is represented by a two-letter code. For example "SGR" .

### ② Voltage

Voltage in volts(V) is represented by a one-digit and one-letter code.  
Example:

Voltage(V)	2.5	4	6.3	10	16	25	35	50	63	80	100
Code	0E	0G	0J	1A	1C	1E	1V	1H	1J	1K	2A

Voltage(V)	160	200	250	315	350	400	420	450	500	550
Code	2C	2D	2E	2F	2V	2G	2M	2W	2H	2L

### ③ Capacitance

Capacitance in  $\mu\text{F}$  is represented by a three-digit code.the first two digis are significant and the third digit indicates the number of zeros following the significant figure "R" represents the decimal point for capacitance under  $10\mu\text{F}$ .  
Example:

Capacitance( $\mu\text{F}$ )	0.1	0.47	1	4.7	10	47	100	470	1000	4700	10000
Code	0R1	R47	010	4R7	100	470	101	471	102	472	103

### ④ Tolerance

Tolerance is represented by a one-letter code.  
Example:

Tolerance(%)	-5~+5	-10~+10	-15~+15	-20~+20	-0~+20	-5~+20	-10~+20	-0~+30	+10~+30	-10~+30	-15~+20
Code	J	K	Y	M	R	H	V	F	G	Q	E

### ⑤ Size code

Size code is represented by a one-letter and three-digit code. The first one-letter indicate case diameter in mm .The last three digits indicate case length in mm .When the height of a product exceeds 100mm, if the last digit is 0,it is represented by A, otherwise, it is represented by B .  
Example:

$\Phi\text{D}$	4	5	6.3	8	10	12	12.5	13	16	18	20	22	25	30	35	40	50	63.5	89
Code	B	C	E	F	G	H	I	J	L	M	O	P	Q	R	S	T	U	W	Y

L	5	5.4	9	10	11	11.5	12	14	16	20	25	50	100	105	110	115	120	200	205
Code	050	054	090	100	110	115	120	140	160	200	250	500	10A	10B	11A	11B	12A	20A	20B

Note:When a case size is required and not shown in the table ,please contact with us for further discussion.

### ⑥ Terminal Code

Terminal Code is represented by a combination of letters or numbers  
SMD Type terminal code (please refer to page11)  
Radial type terminal code (please refer to page 12~15)  
Snap-in Type and ScrewType terminal code(please refer to page 16~17)  
Note:When a terminal code is required and not shown in the table ,please contact with us for further discussion.

### ⑦ Brand

The Surge trademark is represented by the letter "S" .

### ⑧ Sleeve

The sleeve material is represented by the letter E for PET and V for PVC.

### ⑨ Other

It is represented by a letter or number for rubber shape or other information.

### ⑩ Supplement Code

For special control purposes.

For example: SGR 16V 2200 $\mu\text{F}$  20% 12.5×25 taping F=5.0 Brand: Surge PVC Sleeve

S	G	R	1	C	2	2	2	M	I	2	5	0	B	5	0	S	V	0
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010