

## PV series SMD type & Low height



### Features

- ◆ SMD type , Low height & Large capacitance
- ◆ Low ESR at high frequency range &.Large permissible ripple current.
- ◆ Long life and high reliability(reliability: 0.1% / 1000Hrs).

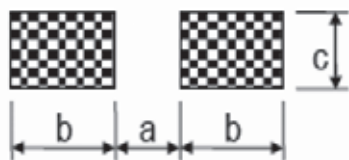
### Specifications

Item	Performance Characteristics	
Operating Temperature Range	-55°C~+105°C	
Rated Voltage Range	2.5~100V DC	
Capacitance Range	6.8 to 2500 μF	
Capacitance Tolerance	±20% ( 120Hz , +20°C )	
Leakage Current (+20°C,max.)	Not to exceed the values shown in Standard Ratings ( Rated voltage applied, after 2 minutes at 20°C )	
Dissipation Factor (tan δ , at 20°C , 120Hz)	Not to exceed the values shown in Standard Ratings	
ESR ( at 100KHz , 20°C )	Not to exceed the values shown in Standard Ratings	
Endurance 105°C , 2000h , at rated voltage	Capacitance Change	Within ±20% of the value before test
	Leakage current	Not to exceed the value specified
	ESR	Not to exceed 150% of the value specified
	Dissipation Factor	Not to exceed 150% of the value specified
Moisture Resistance Stored at 60°C , RH90~95% , 1000h	Capacitance Change	Within ±20% of the value before test
	Leakage current	Not to exceed the value specified
	ESR	Not to exceed 150% of the value specified
	Dissipation Factor	Not to exceed 150% of the value specified

### Frequency Coefficient for Ripple Current

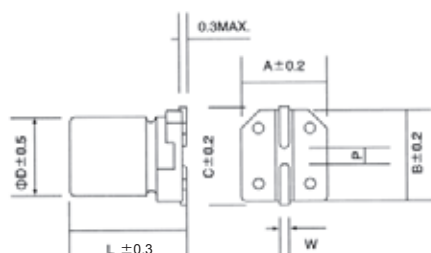
Frequency	120Hz ≤ freq. < 1KHz	1KHz ≤ freq. < 10KHz	10KHz ≤ freq. < 100KHz	100KHz ≤ freq. < 300KHz
Coefficient	0.05	0.3	0.7	1

### Recommended land pattern:(unit:mm)



φ DxL	a	b	c
8x7.7	2.8	4.2	1.9
8x8.7	2.8	4.2	1.9
8x10.5	2.8	4.2	1.9
10x8.7	4.3	4.4	1.9
10x10.5	4.3	4.4	1.9

### Diagram of Dimensions:(unit:mm)



φ DxL	A	B	C	W	P
8x7.7	8.3	8.3	9.0	0.7to1.1	3.1
8x8.7	8.3	8.3	9.0	0.7to1.1	3.1
8x10.5	8.3	8.3	9.0	0.7to1.1	3.1
10x8.7	10.3	10.3	11.0	0.7to1.1	4.5
10x10.5	10.3	10.3	11.0	0.7to1.1	4.5

## Standard Ratings

W.V. (V)	Cap(μF)	Size φ DxL(mm)	L.C. (μA,2min)	tg δ (120Hz,20°C)	ESR (mΩ),100KHz)	Maximum Permissible Ripple Current(mA,r.m.s)
2.5	560	8x7.7	280	0.08	20	3500
	680	8x7.7	340	0.08	20	3500
	820	8x7.7	410	0.08	20	3500
	1000	8x8.7	500	0.08	11	4800
	1200	10x8.7	600	0.08	20	3700
	1500	10x8.7	750	0.10	20	3700
	2200	10x10.5	1100	0.10	11	5500
2500	10x10.5	1250	0.10	11	5500	
4	330	8x7.7	264	0.08	20	3500
	390	8x8.7	312	0.08	15	4200
	470	8x8.7	376	0.08	15	4200
	560	8x7.7	448	0.08	20	3500
		8x8.7	448	0.08	11	4800
	680	8x7.7	544	0.08	20	3500
		8x8.7	544	0.08	11	4800
	820	8x8.7	656	0.08	11	4800
		10x10.5	656	0.08	11	5100
	1000	8x10.5	800	0.10	11	5100
	1200	10x10.5	960	0.10	11	5500
	1500	10x10.5	1200	0.10	11	5500
2000	10x10.5	1600	0.10	11	5500	
6.3	220	8x7.7	277.2	0.08	20	3500
	270	8x7.7	340.2	0.08	20	3500
	330	8x7.7	415.8	0.08	20	3500
	390	8x7.7	491	0.08	20	3500
	470	8x7.7	592.2	0.08	20	3500
		8x8.7	592	0.08	11	4800
	680	8x8.7	856	0.10	11	4800
	820	10x8.7	1033.2	0.10	20	3700
	1000	10x8.7	1260	0.10	20	3700
	1200	10x10.5	1512	0.10	11	5500
	1500	10x10.5	1890	0.10	11	5500
10	330	8x7.7	660	0.08	20	3500
	390	8x7.7	780	0.08	20	3500
	470	8x8.7	940	0.08	11	4800
	560	10x8.7	1120	0.08	20	3700
		10x10.5	1120	0.08	11	4800
	680	10x8.7	1360	0.10	20	3700
		10x10.5	1360	0.10	11	4800
820	10x10.5	1640	0.10	11	5100	
16	68	8x7.7	217.6	0.08	25	3300
	150	8x7.7	480	0.08	25	3300
	180	8x7.7	576	0.08	23	3500
		8x8.7	576	0.08	16	4800
	220	8x7.7	704	0.08	23	3500
		8x8.7	704	0.08	16	4800
	270	8x8.7	864	0.10	16	4800
		10x10.5	864	0.10	16	5100
	330	10x8.7	1056	0.10	23	3700
		10x10.5	1056	0.10	16	5100
	390	10x8.7	1248	0.10	23	3700
		10x10.5	1248	0.10	16	5100
	470	10x10.5	1504	0.10	16	5100

Ripple Current(mA,rms)at 105°C,100KHz

W.V. (V)	Cap(μF)	Size φ DxL(mm)	L.C. (μA,2min)	tg δ (120Hz,20°C )	ESR (mΩ),100KHz)	Maximum Permissible Ripple Current(mA,r.m.s)
20	27	8x8.7	400	0.10	25	3300
	68	8x8.7	272	0.10	22	3500
	82	8x8.7	328	0.10	22	3500
	100	8x8.7	400	0.10	22	3500
	120	10x8.7	480	0.10	30	2800
	150	8x8.7	600	0.10	22	3500
		10x8.7	600	0.10	27	3100
	180	10x8.7	720	0.10	27	3100
		10x10.5	720	0.10	22	3700
	220	10x8.7	880	0.10	27	3100
10x10.5		880	0.10	22	3700	
270	10x10.5	1080	0.10	22	3700	
330	10x10.5	1320	0.10	22	3700	
25	47	10x8.7	400	0.10	30	2800
	68	8x8.7	340	0.10	22	3500
	82	8x8.7	410	0.10	22	3500
		10x8.7	410	0.10	27	3100
	100	8x8.7	500	0.10	22	3500
		10x8.7	500	0.10	27	3100
	120	8x8.7	600	0.10	22	3500
	150	8x8.7	750	0.10	25	3300
180	10x10.5	900	0.10	22	3700	
270	10x10.5	1350	0.10	25	3500	
35	56	8x7.7	392	0.12	40	2200
	68	8x7.7	476	0.12	35	2400
	82	8x8.7	574	0.12	35	2600
	100	8x8.7	700	0.12	30	3000
		10x10.5	700	0.12	30	3200
	120	10x10.5	840	0.12	30	3200
50	10	8x8.7	100	0.12	45	1500
	33	8x8.7	330	0.12	40	1900
	47	8x10.5	470	0.12	35	2200
		10x10.5	470	0.12	35	2500
	68	10x10.5	680	0.12	35	2600
63	10	8x8.7	126	0.12	45	1500
	22	8x8.7	277	0.12	40	1700
	27	8x8.7	340	0.12	40	1900
	33	8x8.7	416	0.12	40	1900
		10x10.5	416	0.12	35	2200
	47	10x10.5	592	0.12	35	2200
80	10	8x8.7	160	0.12	45	1600
	15	10x10.5	240	0.12	40	1900
100	6.8	8x8.7	136	0.12	48	1500
	12	10x10.5	240	0.12	45	1900
	15	8x8.7	300	0.12	48	1500

Ripple Current(mA,rms)at 105°C,100KHz