PS series Standard Products

Features

- ◆ Low ESR at high frequency range.
- ◆ Large permissible ripple current.

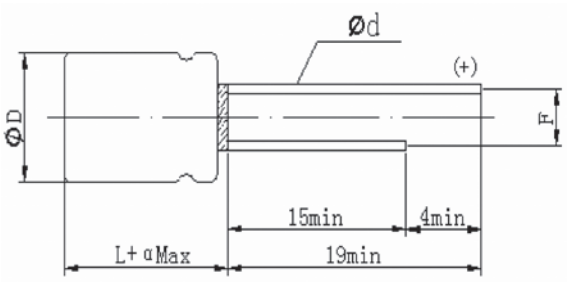
Specifications

Item	Performance Characteristics	
Operating Temperature Range	-55~+105℃	
Rated Voltage Range	2.5~25 VDC	
Capacitance Range	39 to 3500 μF	
Capacitance Tolerance	±20%(120Hz,+20℃)	
Leakage Current (+20℃,max.)	≦0.2CV (μA, after 2 minutes)	
Dissipation Factor (tan δ ，at 20℃，120Hz)	Not to exceed the value specified	
ESR（100K~300KHz）	Not to exceed the value specified	
Endurance 105℃，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℃，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

Diagram of Dimensions:(unit:mm)



ϕDxL	ϕD+0.5max.	α	F±0.5	ϕd±0.05
8x8	8.0	1.0	3.5	0.6
8x11.5	8.0	1.5	3.5	0.6
10x12.5	10.0	1.5	5.0	0.6

Dimensions & Characteristics

φDxL(mm)

W.V. (V)	Capacitance (μF)	L.C. (μA,2min)	tgδ (120Hz,20℃)	ESR (mΩ,100KHZ)	Maximum Permissible Ripple Current(mA,r.m.s)	Size ΦDxL(mm)
2.5	560	280	0.08	12	5100	8x8
						8x11.5
	680	340	0.08	12	5200	8x8
						8x11.5
	820	410	0.08	12	5200	8x8
						8x11.5
	1000	500	0.08	12	5500	8x8
						8x11.5
	1200	600	0.08	12	5500	8x8
						8x11.5
	1500	750	0.08	12	5500	8x8
						8x11.5
	2000	1000	0.08	12	5900	8x11.5
						10x12.5
	2200	1100	0.08	12	5900	10x12.5
	2500	1250	0.08	12	5900	10x12.5
	2700	1350	0.08	12	5900	10x12.5
	3000	1500	0.08	12	5900	10x12.5
	3300	1650	0.08	12	5900	10x12.5
	3500	1750	0.10	12	5900	10x12.5
4	560	448	0.08	12	5100	8x8
					5200	8x11.5
	680	544	0.08	12	5100	8x8
					5200	8x11.5
	820	656	0.08	12	5100	8x8
					5200	8x11.5
					5900	10x12.5
	1000	800	0.10	12	5100	8x8
					5500	8x11.5
					5900	10x12.5
	1200	960	0.10	12	5500	8x11.5
					5900	10x12.5
	1500	600	0.10	12	5500	8x11.5
					5900	10x12.5
	2000	800	0.10	12	5900	10x12.5
	2200	880	0.10	12	5900	10x12.5
	2500	1000	0.10	12	5900	10x12.5
6.3	180	226.8	0.07	21	5100	8x8
						8x11.5
	220	277	0.07	21	5100	8x8
						8x11.5
	270	340.2	0.07	21	5100	8x8
						8x11.5
	330	416	0.07	15	5100	8x8
					5500	8x11.5
	390	491.4	0.08	15	5100	8x8
					5500	8x11.5
	470	592	0.08	12	5100	8x8
					5500	8x11.5
	560	705.6	0.08	12	5100	8x8
					5500	8x11.5
	680	428	0.08	10	5100	8x8
				12	5500	8x11.5
					5900	10x12.5
	820	516.6	0.10	12	5100	8x8
					5500	8x11.5
					5900	10x12.5
	1000	630	0.10	12	5100	8x8
					5500	8x11.5
					5900	10x12.5
	1200	756	0.10	12	5500	8x11.5
					5900	10x12.5
	1500	945	0.10	12	5500	8x11.5
					5900	10x12.5
	2000	1260	0.10	12	5900	10x12.5
	2200	1386	0.10	12	5900	10x12.5
	2500	1575	0.10	12	5900	10x12.5

Ripple Current (mA, rms) at 105℃, 100KHz

Dimensions & Characteristics

φDxL(mm)

W.V. (V)	Capacitance (μF)	L.C. (μA,2min)	tgδ (120Hz,20℃)	ESR (mΩ,100KHZ)	Maximum Permissible Ripple Current(mA,r.m.s)	Size ΦDxL(mm)
10	180	180	0.08	15	5100	8x8
					5500	8x11.5
	220	220	0.08	15	5100	8x8
					5500	8x11.5
	270	270	0.08	15	5100	8x8
					5500	8x11.5
	330	330	0.08	12	5100	8x8
					5500	8x11.5
	390	390	0.08	12	5100	8x8
					5500	8x11.5
	470	470	0.08	12	5500	8x8
					5500	8x11.5
	560	560	0.08	12	5500	8x8
					5500	8x11.5
	680	680	0.10	12	5500	8x8
					5900	8x11.5
					5900	10x12.5
	820	820	0.10	12	5900	8x11.5
					5900	10x12.5
	1000	1000	0.10	12	5900	8x11.5
					5900	10x12.5
	1200	1200	0.10	12	5900	10x12.5
	1500	1500	0.10	12	5900	10x12.5
16	100	160	0.08	12	4800	8x11.5
	150	240	0.08	12	4500	8x8
	180	288	0.08	15	4500	8x8
					4800	8x11.5
	220	352	0.08	15	4500	8x8
					5000	8x11.5
	270	432	0.08	12	4500	8x8
				15	5000	8x11.5
				12	5500	10x12.5
	330	528	0.08	12	4500	8x8
					5000	8x11.5
					5500	10x12.5
	390	624	0.08	12	4500	8x8
					5000	8x11.5
					5500	10x12.5
	470	752	0.10	12	5000	8x11.5
					5500	10x12.5
	560	896	0.10	12	5000	8x11.5
					5500	10x12.5
	680	1000	0.10	12	5500	10x12.5
	820	1000	0.10	12	5500	10x12.5
	1000	1000	0.10	12	5500	10x12.5

Ripple Current (mA, rms) at 105℃, 100KHz

ϕDxL(mm)

W.V. (V)	Capacitance (μF)	L.C. (μA,2min)	tgδ (120Hz,20℃)	ESR (mΩ,100KHZ)	Maximum Permissible Ripple Current(mA,r.m.s)	Size ΦDxL(mm)
20	39	156	0.08	25	3500	8x8
				20	3800	8x11.5
	47	188	0.08	25	3500	8x8
				20	3800	8x11.5
	68	272	0.08	25	3500	8x8
				20	4100	8x11.5
	82	328	0.08	20	3800	8x8
					4100	8x11.5
	100	400	0.08	18	3900	8x8
					4200	8x11.5
					4500	10x12.5
	150	600	0.08	18	3900	8x8
					4200	8x11.5
					4500	10x12.5
	180	720	0.08	18	3900	8x8
					4200	8x11.5
					4500	10x12.5
	220	880	0.08	18	3900	8x8
					4200	8x11.5
					4500	10x12.5
	270	1080	0.08	15	4500	8x11.5
					4900	10x12.5
	330	1320	0.08	15	4500	8x11.5
					4900	10x12.5
	390	1560	0.08	15	4500	8x11.5
					4900	10x12.5
	470	1880	0.08	15	4900	10x12.5
	560	2240	0.10	20	4500	10x12.5
	680	2720	0.10	20	4500	10x12.5
25	39	156	0.08	25	3500	8x8
				20	3800	8x11.5
	47	188	0.08	25	3500	8x8
				20	3800	8x11.5
	68	272	0.08	25	3500	8x8
				20	4100	8x11.5
	82	328	0.08	20	3800	8x8
					4100	8x11.5
	100	400	0.08	20	3900	8x8
					4200	8x11.5
					4500	10x12.5
	150	600	0.08	20	3900	8x8
					4200	8x11.5
					4500	10x12.5
	180	720	0.08	20	3900	8x8
					4200	8x11.5
					4500	10x12.5
	220	880	0.08	20	3900	8x8
					4200	8x11.5
					4500	10x12.5
	270	1080	0.08	18	4400	8x11.5
					4800	10x12.5
	330	1320	0.08	18	4400	8x11.5
					4800	10x12.5
	390	1950	0.08	20	4500	10x12.5
	470	1880	0.08	20	4500	10x12.5
	560	2240	0.10	20	4500	10x12.5

Ripple Current (mA, rms) at 105℃, 100KHz

Size List

ϕ DxL(mm)

RV (SV) / Cap(μF)	2.5 (2.8)	4 (4.6)	6.3 (7.2)	10 (11.5)	16 (18.4)	20 (23)	25 (27.5)
39						8x8/8x11.5	8x8/8x11.5
47						8x8/8x11.5	8x8/8x11.5
68						8x8/8x11.5	8x8/8x11.5
82						8x8/8x11.5	8x8/8x11.5
100					8x8	8x8/8x11.5 10x12.5	8x8/8x11.5 10x12.5
150					8x8	8x8/8x11.5 10x12.5	8x8/8x11.5 10x12.5
180			8x8/8x11.5	8x8/8x11.5	8x8/8x11.5	8x8/8x11.5 10x12.5	8x8/8x11.5 10x12.5
220			8x8/8x11.5	8x8/8x11.5	8x8/8x11.5	8x8/8x11.5 10x12.5	8x8/8x11.5 10x12.5
270			8x8/8x11.5	8x8/8x11.5	8x8/8x11.5 10x12.5	8x11.5/ 10x12.5	8x11.5/ 10x12.5
330			8x8/8x11.5	8x8/8x11.5	8x8/8x11.5 10x12.5	8x11.5/ 10x12.5	8x11.5/ 10x12.5
390			8x8/8x11.5	8x8/8x11.5	8x8/8x11.5 10x12.5	10x12.5	10x12.5
470			8x8/8x11.5	8x8/8x11.5	8x11.5/10x12.5	10x12.5	10x12.5
560	8x8/8x11.5	8x8/8x11.5	8x8/8x11.5	8x8/8x11.5	10x12.5		
680	8x8/8x11.5	8x8/8x11.5	8x8/8x11.5 10x12.5	8x11.5/10x12.5	10x12.5		
820	8x8/8x11.5	8x8/8x11.5 10x12.5	8x8/8x11.5 10x12.5	8x11.5/10x12.5	10x12.5		
1000	8x8/8x11.5	8x8/8x11.5 10x12.5	8x8/8x11.5 10x12.5	8x11.5/10x12.5	10x12.5		
1200	8x8/8x11.5	8x11.5/10x12.5	8x11.5/10x12.5	10x12.5			
1500	8x8/8x11.5	10x12.5	8x11.5/10x12.5	10x12.5			
2000	8x11.5/10x12.5	8x11.5/10x12.5	10x12.5				
2200	10x12.5	10x12.5	10x12.5				
2500	10x12.5	10x12.5	10x12.5				
2700	10x12.5						
3000	10x12.5						
3300	10x12.5						
3500	10x12.5						

Ripple Current (mA, rms) at 105℃ 100KHz