PD series SMD type & Large capacitance

Features

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

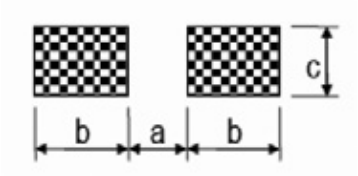
Specifications

Item	Performance Characteristics	
Operating Temperature Range	-55~+105℃	
Rated Voltage Range	2.5~25 VDC	
Capacitance Range	39 to 3300μF	
Capacitance Tolerance	±20%(120Hz,+20℃)	
Leakage Current (+20℃,max.)	Not to exceed the value specified (μA, after 2 minutes)	
Dissipation Factor (tanδ，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%，2000h	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

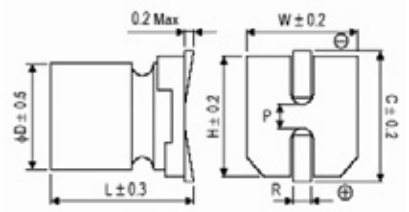
Frequency	120Hz≦freq.<1KHz	1KHz≦freq.<10KHz	10KHz≦freq.<100KHz	100KHz≦freq.<300KHz
Coefficient	0.05	0.3	0.7	1

Recommended land pattern:(unit:mm)



ϕD×L	a	b	c
8X11.7	2.8	4.2	1.9
10X12.4	4.3	4.4	1.9

Diagram of Dimensions:(unit:mm)



ϕD×L	W	H	C	R	P
8X11.7	8.3	8.3	9.0	0.8 to 1.1	3.2
10X12.4	10.3	10.3	11.0	0.8 to 1.1	4.6

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 ΦD×L(mm)
2.5	560	280	0.08	8	5200	8X11.7
	680	340	0.08	8	5200	8X11.7
	820	410	0.08	8	5200	8X11.7
	1000	500	0.08	8	5200	8X11.7
	1500	750	0.08	8	5200	8X11.7
	2000	1000	0.08	8	5500	10X12.4
	2500	1250	0.08	8	5500	10X12.4
	2700	1350	0.10	8	5500	10X12.4
	3000	1500	0.10	8	5500	10X12.4
	3300	1650	0.10	8	5500	10X12.4
4.0	560	448	0.08	8	5200	8X11.7
	680	544	0.08	8	5200	8X11.7
	820	656	0.08	8	5200	8X11.7
	1000	800	0.10	8	5200	8X11.7
	1200	960	0.10	8	5200	8X11.7
	1500	1200	0.10	8	5500	10X12.4
	2000	1600	0.10	8	5500	10X12.4
	2500	2000	0.10	8	5500	10X12.4
6.3	180	226.8	0.08	8	5200	8X11.7
	220	277.2	0.08	8	5200	8X11.7
	270	340.2	0.08	8	5200	8X11.7
	330	416	0.08	8	5200	8X11.7
	390	491	0.08	8	5200	8X11.7
	470	592	0.08	8	5200	8X11.7
	560	705.6	0.08	8	5200	8X11.7
	680	856	0.08	8	5200	8X11.7
	680	856	0.08	8	5500	10X12.4
	820	1033.2	0.10	8	5200	8X11.7
	820	1033.2	0.10	8	5500	10X12.4
	1000	1260	0.10	8	5200	8X11.7
	1000	1260	0.10	8	5500	10X12.4
	1200	1512	0.10	8	5500	10X12.4
	1500	1890	0.10	8	5500	10X12.4
	2000	2520	0.10	8	5500	10X12.4
10	180	360	0.08	8	5200	8X11.7
	220	440	0.08	8	5200	8X11.7
	270	540	0.08	8	5200	8X11.7
	330	660	0.08	8	5200	8X11.7
	390	780	0.08	8	5200	8X11.7
	470	940	0.08	8	5200	8X11.7
	560	1120	0.08	8	5200	8X11.7
	680	1360	0.10	8	5500	10X12.4
	820	1640	0.10	8	5500	10X12.4
	1000	2000	0.10	8	5500	10X12.4
	1200	2400	0.10	8	5500	10X12.4
16	180	576	0.08	10	4700	8X11.7
	220	704	0.08	10	4700	8X11.7
	270	864	0.08	10	4700	8X11.7
	330	1056	0.08	10	4700	8X11.7
	330	1056	0.08	10	5100	10X12.4
	470	1504	0.10	10	5100	10X12.4
	680	2176	0.10	10	5100	10X12.4
	820	2624	0.10	10	5100	10X12.4
20	39	156	0.08	15	4210	8X11.7
	47	188	0.08	15	4210	8X11.7
	68	272	0.08	15	4210	8X11.7
	82	328	0.08	15	4210	8X11.7
	100	400	0.08	15	4800	10X12.4

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

W.V. （V）	Capacitance （μF）	L.C. （μA,2min）	tgδ (120Hz,20℃)	ESR (mΩ,100kHz)	Maximum Permissible Ripple Current(mA,r.m.s)	Size ΦD×L(mm)
20	180	720	0.10	15	4800	10X12.4
	220	880	0.10	15	4800	10X12.4
25	39	195	0.08	15	4210	8X11.7
	47	235	0.08	15	4210	8X11.7
	68	340	0.08	15	4210	8X11.7
	82	410	0.08	15	4210	8X11.7
	100	500	0.10	15	4800	10X12.4
	150	750	0.10	15	4800	10X12.4
	180	900	0.10	15	4800	10X12.4

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

Size List

ϕDxL(mm)

WV (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						8X11.7	8X11.7
47						8X11.7	8X11.7
68						8X11.7	8X11.7
82						8X11.7	8X11.7
100						10X12.4	10X12.4
180			8X11.7	8X11.7	8X11.7	10X12.4	10X12.4
220			8X11.7	8X11.7	8X11.7	10X12.4	
270			8X11.7	8X11.7	8X11.7		
330			8X11.7	8X11.7	8X11.7 / 10X12.4		
390			8X11.7	8X11.7	10X12.4		
470			8X11.7	8X11.7	10X12.4		
560	8X11.7	8X11.7	8X11.7	8X11.7	10X12.4		
680	8X11.7	8X11.7	8X11.7 / 10X12.4	10X12.4	10X12.4		
820	8X11.7	8X11.7	8X11.7 / 10X12.4	10X12.4	10X12.4		
1000	8X11.7	8X11.7	10X12.4	10X12.4			
1200	8X11.7	8X11.7	10X12.4	10X12.4			
1500	8X11.7	10X12.4	10X12.4				
2000	10X12.4	10X12.4	10X12.4				
2500	10X12.4	10X12.4					
2700	10X12.4						
3000	10X12.4						
3300	10X12.4						

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