

PM series SMD type & Low Profile



Features

- ◆ SMD type & Low profile
- ◆ Low ESR at high frequency range & Large permissible ripple current.

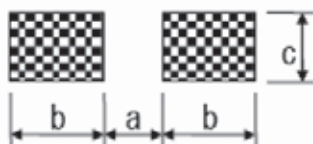
Specifications

Item	Performance Characteristics	
Operating Temperature Range	-55°C~+105°C	
Rated Voltage Range	2.5~100V DC	
Capacitance Range	4.7 to 560 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

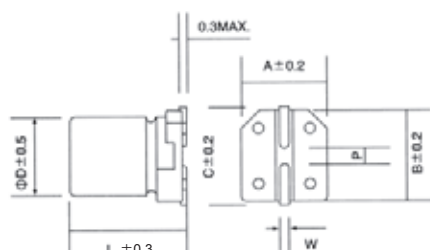
Frequency	120Hz ≤ freq. < 1KHz	1KHz ≤ freq. < 10KHz	10KHz ≤ freq. < 100KHz	100KHz ≤ freq. < 300KHz
Coefficient	0.05	0.3	0.7	1

Recommended land pattern:(unit:mm)



φ DxL	a	b	c
4x5.5	1.0	2.6	1.6
5x5.5	1.4	3.0	1.6
5x5.8	1.4	3.0	1.6
6.3x5.8	2.1	3.5	1.6
6.3x7.7	2.1	3.5	1.6

Diagram of Dimensions:(unit:mm)



φ DxL	A	B	C	W	P
4x5.5	4.3	4.3	5.1	0.5 to 0.8	1.0
5x5.5	5.3	5.3	5.9	0.5 to 0.8	1.4
5x5.8	5.3	5.3	5.9	0.5 to 0.8	1.4
6.3x5.8	6.5	6.5	7.2	0.5 to 0.8	2.2
6.3x7.7	6.5	6.5	7.2	0.5 to 0.8	2.2

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	82	5x5.8	300	0.08	30	2100
	100	6.3x5.8	300	0.08	22	2500
	150	6.3x5.8	300	0.08	22	2500
	180	5x5.8	300	0.08	25	2310
		6.3x5.8	300	0.08	22	2500
	220	5x5.8	300	0.08	25	2310
		6.3x5.8	300	0.08	22	2800
	270	5x5.8	300	0.08	22	2610
		6.3x5.8	300	0.08	22	2800
	330	6.3x5.8	300	0.08	15	3100
	390	6.3x5.8	300	0.08	25	2610
		6.3x5.8	300	0.08	15	3100
	470	6.3x5.8	300	0.08	20	2800
		6.3x7.7	300	0.08	15	3600
560	6.3x5.8	300	0.08	15	3100	
	6.3x7.7	300	0.08	15	3600	
4	47	5x5.8	300	0.08	25	2310
	56	5x5.8	300	0.08	25	2310
	68	5x5.8	300	0.08	25	2310
	100	5x5.8	300	0.08	25	2310
		6.3x5.8	300	0.08	22	2500
	120	5x5.8	300	0.08	22	2500
		6.3x5.8	300	0.08	22	2500
	150	5x5.8	300	0.08	22	2500
		6.3x5.8	300	0.08	22	2500
		6.3x7.7	300	0.08	20	3100
	180	6.3x5.8	300	0.08	22	2500
	220	5x5.8	300	0.08	22	2610
		6.3x5.8	300	0.08	22	2800
		6.3x7.7	300	0.08	20	3100
		6.3x5.8	300	0.08	22	2800
	270	6.3x5.8	300	0.08	22	2800
6.3x7.7		300	0.08	20	3100	
6.3x5.8		300	0.08	20	2800	
330	6.3x5.8	300	0.08	15	3100	
	6.3x7.7	300	0.08	15	3600	
	6.3x5.8	300	0.08	20	2800	
390	6.3x5.8	300	0.08	15	3600	
	6.3x7.7	300	0.08	15	3600	
470	6.3x7.7	300	0.08	15	3600	
6.3	47	5x5.5	300	0.08	30	2000
	56	5x5.5	300	0.08	30	2000
	68	5x5.5	300	0.08	30	2000
		6.3x5.8	300	0.08	22	2690
	82	5x5.5	300	0.08	30	2000
		6.3x5.8	300	0.08	22	2690
	100	5x5.5	300	0.08	30	2000
		5x5.8	300	0.08	25	2310
		6.3x5.8	300	0.08	22	2800
	120	5x5.8	300	0.08	25	2310
		6.3x5.8	300	0.08	22	2800
	150	5x5.8	300	0.08	22	2610
		6.3x5.8	300	0.08	22	2800
		6.3x7.7	300	0.08	20	3100
	180	5x5.8	300	0.08	22	2610
		6.3x5.8	300	0.08	22	2800
		6.3x7.7	300	0.08	20	3100

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)
6.3	220	6.3x5.8	300	0.08	20	3000
		6.3x5.8	300	0.08	15	3100
		6.3x7.7	300	0.08	15	3600
	270	6.3x5.8	300	0.08	20	3000
		6.3x7.7	300	0.08	15	3600
	330	6.3x5.8	300	0.08	20	3100
		6.3x7.7	300	0.08	15	3600
		6.3x7.7	300	0.08	10	4200
	390	6.3x7.7	300	0.08	15	3600
10	4.7	4x5.5	300	0.08	120	980
	6.8	4x5.5	300	0.08	120	980
	10	4x5.5	300	0.08	80	1200
	15	4x5.5	300	0.08	80	1200
	22	4x5.5	300	0.08	80	1200
	33	5x5.5	300	0.08	30	2000
		6.3x5.8	300	0.08	30	2200
	39	5x5.5	300	0.08	30	2000
		6.3x5.8	300	0.08	30	2200
	47	5x5.5	300	0.08	30	2000
		6.3x5.8	300	0.08	30	2200
		6.3x7.7	300	0.08	20	2800
	56	5x5.5	300	0.08	30	2000
		6.3x5.8	300	0.08	30	2200
		6.3x7.7	300	0.08	20	2800
	68	5x5.5	300	0.08	30	2000
		6.3x5.8	300	0.08	30	2200
		6.3x7.7	300	0.08	20	2800
	82	5x5.5	300	0.08	30	2000
		6.3x5.8	300	0.08	30	2200
		6.3x7.7	300	0.08	20	2800
	100	5x5.5	300	0.08	30	2000
		6.3x5.8	300	0.08	30	2200
		6.3x7.7	300	0.08	20	2800
	120	6.3x5.8	300	0.08	25	2610
		6.3x7.7	300	0.08	20	3100
	150	6.3x5.8	300	0.08	25	2610
		6.3x7.7	300	0.08	20	3100
	180	6.3x5.8	300	0.08	25	2610
		6.3x7.7	300	0.08	20	3100
	220	6.3x5.8	300	0.08	25	2610
		6.3x7.7	300	0.08	20	3100
	270	6.3x7.7	300	0.08	20	3100
330	6.3x7.7	300	0.08	20	3100	
16	10	5x5.8	400	0.08	40	2000
		6.3x5.8	400	0.08	35	2200
		6.3x7.7	400	0.08	30	2610
	15	5x5.8	400	0.08	40	2000
		6.3x5.8	400	0.08	35	2200
		6.3x7.7	400	0.08	30	2610
	22	5x5.8	400	0.08	40	2000
		6.3x5.8	400	0.08	35	2200
		6.3x7.7	400	0.08	30	2610
	33	5x5.8	400	0.08	40	2000
		6.3x5.8	400	0.08	35	2200
		6.3x7.7	400	0.08	30	2610

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)
16	39	5x5.8	400	0.08	40	2000
		6.3x5.8	400	0.08	35	2200
		6.3x7.7	400	0.08	30	2610
	47	5x5.8	400	0.08	40	2000
		6.3x5.8	400	0.08	35	2200
		6.3x7.7	400	0.08	30	2610
	56	5x5.8	400	0.08	40	2000
		6.3x5.8	400	0.08	35	2200
		6.3x7.7	400	0.08	30	2610
	68	6.3x5.8	400	0.08	35	2200
		6.3x7.7	400	0.08	25	2690
	82	6.3x5.8	400	0.08	35	2200
6.3x7.7		400	0.08	25	2690	
100	6.3x5.8	400	0.08	30	2490	
	6.3x7.7	400	0.08	25	2690	
150	6.3x7.7	400	0.08	25	2690	
180	6.3x5.8	400	0.12	25	3200	
20	10	5x5.8	600	0.08	40	2000
		6.3x5.8	600	0.08	40	2200
	15	6.3x5.8	600	0.08	35	2200
	22	6.3x5.8	600	0.08	35	2200
		6.3x7.7	600	0.08	30	2670
	27	6.3x5.8	600	0.08	35	2200
	33	6.3x5.8	600	0.08	35	2200
		6.3x7.7	600	0.08	30	2670
	39	6.3x7.7	600	0.08	30	2670
	47	6.3x5.8	600	0.08	35	2200
		6.3x7.7	600	0.08	30	2670
	56	6.3x5.8	600	0.08	35	2200
6.3x7.7		600	0.08	30	2670	
120	6.3x5.8	600	0.12	25	3200	
25	6.8	6.3x5.8	600	0.08	40	2000
	10	6.3x5.8	600	0.08	35	2200
		6.3x7.7	600	0.08	35	2670
	15	6.3x5.8	600	0.08	35	2200
		6.3x7.7	600	0.08	30	2670
	22	6.3x5.8	600	0.08	35	2200
		6.3x7.7	600	0.08	30	2670
	33	6.3x5.8	600	0.08	35	2200
		6.3x7.7	600	0.08	30	2670
	39	6.3x7.7	600	0.08	30	2670
	47	6.3x5.8	600	0.08	35	2200
	35	18	6.3x5.8	600	0.12	64
22		6.3x5.8	600	0.12	50	1300
27		6.3x5.8	600	0.12	50	1530
47		6.3x7.7	600	0.12	50	1600
56		6.3x7.7	600	0.12	35	2100
50	8.2	6.3x5.8	600	0.12	80	800
	12	6.3x5.8	600	0.12	80	800
	15	6.3x5.8	600	0.12	80	800
63	5.6	6.3x5.8	600	0.12	100	700
	8.2	6.3x5.8	600	0.12	100	700
100	4.7	6.3x7.7	600	0.12	100	1060

Ripple Current(mA,rms)at 105°C,100KHz