

FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors

PS & PA series

Features

By using Functional Polymer cathode, Frequency & Temp. characteristics are greatly improved.

- Low ESR at a high frequency range.
- High ripple current capability.
- Long life and high reliability.

Applications

- Switching Power Supply and DC/DC Converter.
- Buck up Power Supplies of CPU (VRM etc.).
- Miniature high Power Supply.

Environmental Correspondence

- Any environmental hazardous substances are not used.
- The lead free of terminal plating (Sn 100%)

Specifications

Items		Characteristic
		PS & PA
Operating temp. range		-55 to +105°C
Rated voltage range		2.5 to 16V-dc
Capacitance range		39 to 1500μF
Capacitance tolerance		±20% (M)
Endurance	Test condition	105°C, rated voltage 2000Hrs.
	Capacitance	Within ±20% of initial value before test
	Leakage current	Not to exceed the initial specified value
	ESR	Not to exceed 150% of initial specified value
	tan δ	Not to exceed 150% of initial specified value
Failure Rate		0.5% / 1000Hrs. Max (60%CL)

Size List () : PA series

R.V. (S.V.) Cap. [μF]	2.5 (2.8)	4.0 (4.6)	6.3 (7.2)	10 (11.5)	16 (18.4)
39					6.3×5.7 (6.3×5.7)
47				6.3×5.7	
56				6.3×5.7	8×6.7
68					
82			6.3×5.7		8×6.7
100		6.3×5.7			10×7.7
120				8×6.7	
150			8×6.7		10×7.7
180			8×6.7		8×11.7
220		8×6.7			8×11.7
270				10×7.7	
330		8×6.7	10×7.7	8×11.7	10×12.4
470		10×7.7	8×11.7		
560		8×11.7 (8×11.7)	8×11.7	10×12.4	
680	8×11.7		10×12.4		
820			10×12.4		
1000			10×12.4		
1200		10×12.4			
1500	10×12.4				

Low ESR

SMD

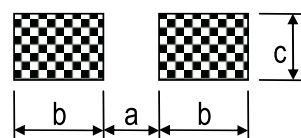
Lead-free

RoHS
Compliance

Standard



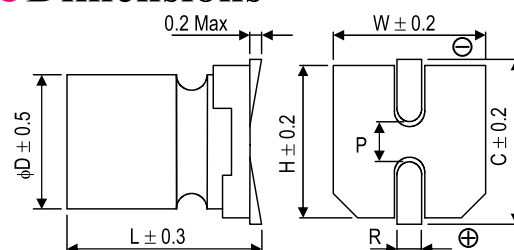
Recommended land pattern



[Unit: mm]

φD	a	b	c
6.3	2.1	3.5	1.6
8	2.8	4.2	1.9
10	4.3	4.4	1.9

Dimensions



[Unit: mm]

φD×L	W	H	C	R	P
6.3×5.7	6.5	6.5	7.2	0.5 to 0.9	2.1
8×6.7	8.3	8.3	9.0	0.8 to 1.1	3.2
8×11.7	8.3	8.3	9.0	0.8 to 1.1	3.2
10×7.7	10.3	10.3	11.0	0.8 to 1.1	4.6
10×12.4	10.3	10.3	11.0	0.8 to 1.1	4.6

● Part number & Specifications

Rated Voltage (V)	Rated Capacitance (μF, 120Hz)	Part Number		Leakage Current * (μA, 2 min)	tanδ (120Hz)	ESR (mΩ, 100kHz)	Rated Ripple Current (mA, r.m.s.)	Case Size φD×L(mm)
		NICHICON	FPCAP					
2.5	680	RPS0E681MCN1GS	FP-2R5ME681M-PSR	425	0.12	13	4500	8 × 11.7
	1500	RPS0E152MCN1GS	FP-2R5ME152M-PSR	938	0.12	10	5500	10 × 12.4
4.0	100	RPS0G101MCN1GS	FP-4R0ME101M-PSR	80	0.12	35	2200	6.3 × 5.7
	220	RPS0G221MCN1GS	FP-4R0ME221M-PSR	176	0.12	30	2700	8 × 6.7
	330	RPS0G331MCN1GS	FP-4R0ME331M-PSR	264	0.12	30	2700	8 × 6.7
	470	RPS0G471MCN1GS	FP-4R0ME471M-PSR	376	0.12	22	3800	10 × 7.7
	560	RPS0G561MCN1GS	FP-4R0ME561M-PSR	448	0.12	13	4500	8 × 11.7
	560	RPA0G561MCN1GS	FP-4R0ME561M-PAR	448	0.12	9	5400	8 × 11.7
	1200	RPS0G122MCN1GS	FP-4R0ME122M-PSR	960	0.12	12	5500	10 × 12.4
6.3	82	RPS0J820MCN1GS	FP-6R3ME820M-PSR	103	0.12	35	2200	6.3 × 5.7
	150	RPS0J151MCN1GS	FP-6R3ME151M-PSR	189	0.12	30	2600	8 × 6.7
	180	RPS0J181MCN1GS	FP-6R3ME181M-PSR	227	0.12	30	2600	8 × 6.7
	330	RPS0J331MCN1GS	FP-6R3ME331M-PSR	416	0.12	22	3600	10 × 7.7
	470	RPS0J471MCN1GS	FP-6R3ME471M-PSR	592	0.15	15	4300	8 × 11.7
	560	RPS0J561MCN1GS	FP-6R3ME561M-PSR	706	0.15	14	4400	8 × 11.7
	680	RPS0J681MCN1GS	FP-6R3ME681M-PSR	643	0.15	13	5200	10 × 12.4
	820	RPS0J821MCN1GS	FP-6R3ME821M-PSR	775	0.15	12	5500	10 × 12.4
10	1000	RPS0J102MCN1GS	FP-6R3ME102M-PSR	945	0.15	12	5500	10 × 12.4
	47	RPS1A470MCN1GS	FP-010ME470M-PSR	94	0.12	40	2100	6.3 × 5.7
	56	RPS1A560MCN1GS	FP-010ME560M-PSR	112	0.12	40	2100	6.3 × 5.7
	120	RPS1A121MCN1GS	FP-010ME121M-PSR	240	0.12	30	2600	8 × 6.7
	270	RPS1A271MCN1GS	FP-010ME271M-PSR	540	0.12	25	3500	10 × 7.7
	330	RPS1A331MCN1GS	FP-010ME331M-PSR	660	0.15	17	4000	8 × 11.7
16	560	RPS1A561MCN1GS	FP-010ME561M-PSR	840	0.15	13	5300	10 × 12.4
	39	RPS1C390MCN1GS	FP-016ME390M-PSR	125	0.10	45	2000	6.3 × 5.7
	39	RPA1C390MCN1GS	FP-016ME390M-PAR	125	0.10	24	2500	6.3 × 5.7
	56	RPS1C560MCN1GS	FP-016ME560M-PSR	179	0.10	40	2300	8 × 6.7
	82	RPS1C820MCN1GS	FP-016ME820M-PSR	262	0.10	40	2300	8 × 6.7
	100	RPS1C101MCN1GS	FP-016ME101M-PSR	320	0.10	30	3200	10 × 7.7
	150	RPS1C151MCN1GS	FP-016ME151M-PSR	480	0.10	30	3200	10 × 7.7
	180	RPS1C181MCN1GS	FP-016ME181M-PSR	576	0.12	20	3700	8 × 11.7
	220	RPS1C221MCN1GS	FP-016ME221M-PSR	704	0.12	20	3700	8 × 11.7
	330	RPS1C331MCN1GS	FP-016ME331M-PSR	792	0.12	16	4800	10 × 12.4

* In case of some doubt about measured values, measure after applying rated voltage for 120 minutes at 105°C.

● Part Number (EX) 4V, 1200μF, PS series

R	PS	0G	122	M	CN	1	GS
Type	Series name	Rated Voltage	Rated Capacitance	Capacitance Tolerance	Configuration	Control code	Taping code