

## FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors



#### 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		Characteristics		
		R7		
Operating Temp, Range		- 55 to + 105°C		
Rated Voltage Range		2.5 to 16V⋅pc		
Capacitance Range		68 to 1500μF		
Capacitance Tolerance		± 20% (M)		
Endurance	Condition	105°C 2000Hrs at rated voltage		
	Capacitance	Within ± 20% of the value before test		
	Leakage Current	Not to exceed the value specified		
	tan δ	Not to exceed 150% of the value specified		
Failure Rate		0.1% / 1000Hrs. Max (60%CL)		

### Size List

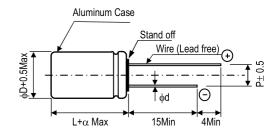
					[φD×L]
R.V (S.V.) [V] Cap. [µF]		4.0 (4.6)	6.3 (7.2)	10 (11.5)	16 (18.4)
68					8×11.5
100				8×11.5	8×11.5
150			8×11.5		10×12.5
220			8×11.5	10×12.5	
330			10×12.5		10×12.5
390			8×11.5		
470				10×12.5	
560		8×11.5			
680	8×11.5		10×12.5	10×12.5	
820	8×11.5	10×12.5	10×12.5		
1000			10×12.5		
1200		10×12.5			
1500	10×12.5				

# Ultra Low ESR RoHS Compliance





## Dimensions



[Unit :				
φD×L	ф	Р	α	
8×11.5	0.6	3.5	1.5	
10×12.5	0.6	5.0	1.5	

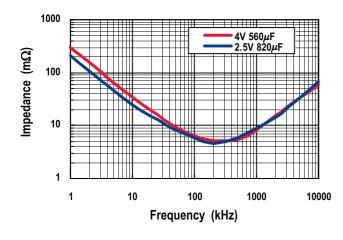


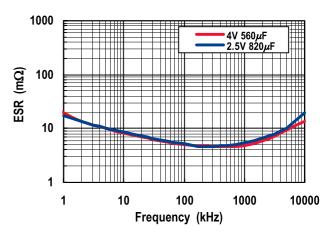
## Part number & Specifications

Rated Voltage	Rated Capacitance	Part Number		Leakage Current *	tanδ	ESR	Rated Ripple Current	Case Size
(V)	(µF, 120Hz)	NICHICON	FPCAP	(µA, 2 min)	(120Hz)	(mΩ, 100kHz)	(mA, r.m.s.)	<sub>φ</sub> D×L(mm)
2.5	680	RR70E681MDN1□□	FP-2R5RE681M-R7□□	425	0.08	7	5600	8 × 11.5
	820	RR70E821MDN1□□	FP-2R5RE821M-R7□□	513	0.08	7	5600	8 × 11.5
	1500	RR70E152MDN1□□	FP-2R5RE152M-R7□□	938	0.08	7	6100	10 × 12.5
4.0	560	RR70G561MDN1□□	FP-4R0RE561M-R7□□	224	0.08	7	5600	8 × 11.5
	820	RR70G821MDN1□□	FP-4R0RE821M-R7□□	328	0.08	7	6100	10 × 12.5
	1200	RR70G122MDN1□□	FP-4R0RE122M-R7	960	0.15	7	6100	10 × 12.5
6.3	150	RR70J151MDN1□□	FP-6R3RE151M-R7□□	47	0.07	7	5600	8 × 11.5
	220	RR70J221MDN1	FP-6R3RE221M-R7□□	69	0.07	7	5600	8 × 11.5
	330	RR70J331MDN1□□	FP-6R3RE331M-R7□□	104	0.07	7	6100	10 × 12.5
	390	RR70J391MDN1	FP-6R3RE391M-R7□□	246	0.08	7	5600	8 × 11.5
	680	RR70J681MDN1□□	FP-6R3RE681M-R7□□	428	0.08	7	6100	10 × 12.5
	820	RR70J821MDN1	FP-6R3RE821M-R7□□	517	0.12	7	6100	10 × 12.5
	1000	RR70J102MDN1□□	FP-6R3RE102M-R7□□	630	0.12	7	6100	10 × 12.5
10	100	RR71A101MDN1□□	FP-010RE101M-R7	50	0.07	7	5600	8 × 11.5
	220	RR71A221MDN1□□	FP-010RE221M-R7□□	110	0.07	7	6100	10 × 12.5
	470	RR71A471MDN1	FP-010RE471M-R7	470	0.08	7	6100	10 × 12.5
	680	RR71A681MDN1□□	FP-010RE681M-R7□□	1360	0.10	7	6100	10 × 12.5
16	68	RR71C680MDN1□□	FP-016RE680M-R7□□	54	0.06	7	5600	8 × 11.5
	100	RR71C101MDN1□□	FP-016RE101M-R7□□	80	0.06	7	5600	8 × 11.5
	150	RR71C151MDN1□□	FP-016RE151M-R7□□	120	0.06	7	6100	10 × 12.5
	330	RR71C331MDN1□□	FP-016RE331M-R7□□	792	0.08	7	6100	10 × 12.5

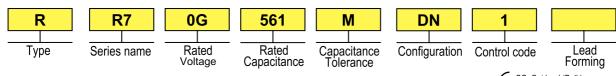
<sup>\*</sup> In case of some doubt about measured values, measure after applying rated voltage for 120 minutes at 105°C.

## Frequency Characteristics





## •Part Number (EX) 4V, 560μF



CG: Cut lead (Bulk) KX:  $\phi$ 8, 3.5mm pitch taping PX:  $\phi$ 8, 5.0mm pitch taping PH:  $\phi$ 10, 5.0mm pitch taping