

# FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors

## SS & SA & SB 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	
	SS & SA & SB	
Operating temp. range	-55 to +105°C	
Rated voltage range	2.5 to 16V-DC	
Capacitance range	100 to 560μF	
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)	

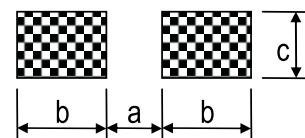
### Size (ESR) List

R.V. (S.V.) [M]	[φD×L (mΩ)]										
	2.5 (2.8)			4.0 (4.6)			6.3 (7.2)			10 (11.5)	
Cap. [μF]	SS	SA	SB	SA	SB	SS	SA	SB	SA	SA	
100						6.3x5.7 (25)				6.3x7.7 (24)	
120									6.3x5.7 (18)		
220						6.3x5.7 (25)	6.3x5.7 (15)	6.3x5.7 (12)			
270							6.3x5.7 (14)				
330		6.3x5.7 (14)		6.3x5.7 (14)	6.3x5.7 (11)	6.3x5.7 (25)	6.3x5.7 (14)				
390		6.3x5.7 (14)	6.3x5.7 (10)	6.3x5.7 (14)							
470		6.3x5.7 (13)									
560	6.3x5.7 (25)	6.3x5.7 (13)	6.3x5.7 (10)								

Large Capacitance	Low ESR	φ6.3
SMD	Lead-free	RoHS Compliance



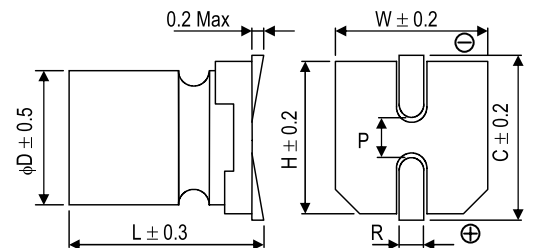
### Recommended land pattern



[Unit: mm]

φD	a	b	c
6.3	2.1	3.5	1.6

### Dimensions



[Unit: mm]

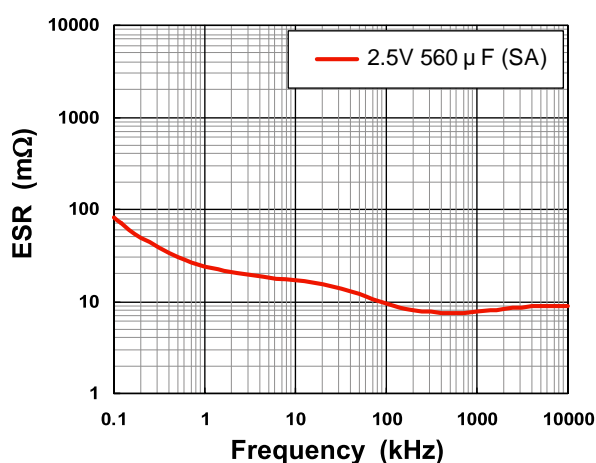
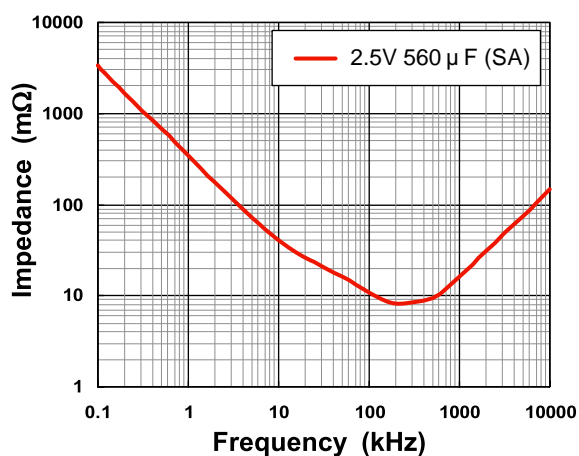
φD×L	W	H	C	R	P
6.3×5.7	6.5	6.5	7.2	0.5 to 0.9	2.1
6.3×7.7	6.5	6.5	7.2	0.5 to 0.9	2.1

## ● 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	330	RSA0E331MCN1GS	FP-2R5ME331M-SAR	700	0.12	14	3160	6.3 × 5.7
	390	RSA0E391MCN1GS	FP-2R5ME391M-SAR	700	0.12	14	3160	6.3 × 5.7
	390	RSB0E391MCN1GS	FP-2R5ME391M-SBR	700	0.12	10	3650	6.3 × 5.7
	470	RSA0E471MCN1GS	FP-2R5ME471M-SAR	700	0.12	13	3600	6.3 × 5.7
	560	RSS0E561MCN1GS	FP-2R5ME561M-SSR	700	0.12	25	2500	6.3 × 5.7
	560	RSA0E561MCN1GS	FP-2R5ME561M-SAR	700	0.12	13	3600	6.3 × 5.7
	560	RSB0E561MCN1GS	FP-2R5ME561M-SBR	700	0.12	10	3800	6.3 × 5.7
4.0	330	RSA0G331MCN1GS	FP-4R0ME331M-SAR	700	0.12	14	3160	6.3 × 5.7
	330	RSB0G331MCN1GS	FP-4R0ME331M-SBR	700	0.12	11	3700	6.3 × 5.7
	390	RSA0G391MCN1GS	FP-4R0ME391M-SAR	700	0.12	14	3160	6.3 × 5.7
6.3	100	RSS0J101MCN1GS	FP-6R3ME101M-SSR	700	0.12	25	2500	6.3 × 5.7
	220	RSS0J221MCN1GS	FP-6R3ME221M-SSR	700	0.12	25	2500	6.3 × 5.7
	220	RSA0J221MCN1GS	FP-6R3ME221M-SAR	700	0.12	15	3100	6.3 × 5.7
	220	RSB0J221MCN1GS	FP-6R3ME221M-SBR	700	0.12	12	3500	6.3 × 5.7
	270	RSA0J271MCN1GS	FP-6R3ME271M-SAR	700	0.12	14	3160	6.3 × 5.7
	330	RSS0J331MCN1GS	FP-6R3ME331M-SSR	700	0.12	25	2500	6.3 × 5.7
	330	RSA0J331MCN1GS	FP-6R3ME331M-SAR	700	0.12	14	3160	6.3 × 5.7
10	120	RSA1A121MCN1GS	FP-010ME121M-SAR	700	0.12	18	2900	6.3 × 5.7
16	100	RSA1C101MCN1GS	FP-016ME101M-SAR	700	0.12	24	2700	6.3 × 7.7

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

## ● Frequency Characteristics



## ● Part Number (EX) 2.5V, 560μF, SS series

<b>R</b>	<b>SS</b>	<b>0E</b>	<b>561</b>	<b>M</b>	<b>CN</b>	<b>1</b>	<b>GS</b>
Type	Series name	Rated Voltage	Rated Capacitance	Capacitance Tolerance	Configuration	Control code	Taping code