

FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors

FS 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.
- Back 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
		FS
Operating temp. range		-55 to +105°C
Rated voltage range		2.5 to 25V-DC
Capacitance range		10 to 180 μ F
Capacitance tolerance		\pm 20% (M)
Endurance	Test condition	105°C, rated voltage 2000Hrs.
	Capacitance	Within \pm 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

Cap. [μ F]	R.V. (S.V.)	2.5	4.0	6.3	10	16	25
	[M]	(2.8)	(4.6)	(7.2)	(11.5)	(18.4)	(28.7)
10					4×5.2		
22						5×5.7	5×5.7
33						5×5.7	
39						5×5.7	
47				5×5.7			
68					5×5.7		
100			5×5.7	5×5.7			
120				5×5.7			
150			5×5.7				
180		5×5.7					

Large Capacitance

ϕ 4 , ϕ 5

Low ESR

SMD

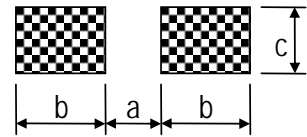
Lead-free

RoHS Compliance

UPGRADE



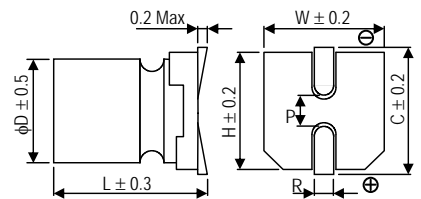
● Recommended land pattern



[Unit: mm]

ϕ D	a	b	c
4	1.0	2.6	1.6
5	1.4	3.0	1.6

● Dimensions



[Unit: mm]

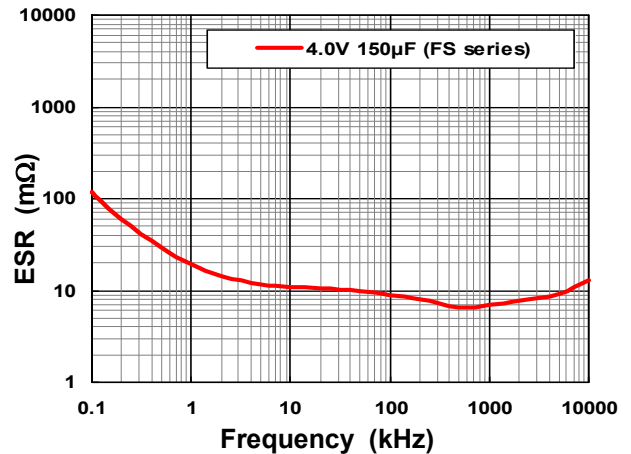
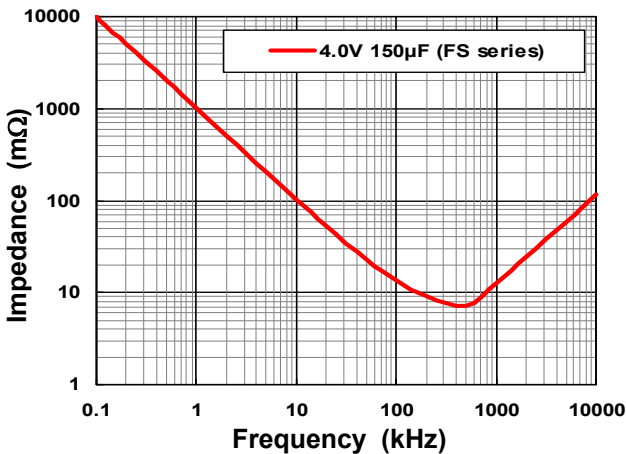
ϕ D×L	W	H	C	R	P
4×5.2	4.3	4.3	5.1	0.5 to 0.9	1.0
5×5.7	5.3	5.3	5.9	0.5 to 0.9	1.4

● 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	180	RFS0E181MCN1GS	FP-2R5ME181M-FSR	300	0.12	21	2670	5 × 5.7
4.0	100	RFS0G101MCN1GS	FP-4R0ME101M-FSR	300	0.12	22	2610	5 × 5.7
	150	RFS0G151MCN1GS	FP-4R0ME151M-FSR	300	0.12	22	2610	5 × 5.7
6.3	47	RFS0J470MCN1GS	FP-6R3ME470M-FSR	300	0.12	30	2000	5 × 5.7
	100	RFS0J101MCN1GS	FP-6R3ME101M-FSR	300	0.12	24	2500	5 × 5.7
	120	RFS0J121MCN1GS	FP-6R3ME121M-FSR	300	0.12	24	2500	5 × 5.7
10	10	RFS1A100MCN1GB	FP-010ME100M-FSR	100	0.12	220	700	4 × 5.2
	68	RFS1A680MCN1GS	FP-010ME680M-FSR	300	0.12	30	2000	5 × 5.7
16	22	RFS1C220MCN1GS	FP-016ME220M-FSR	100	0.12	45	1210	5 × 5.7
	33	RFS1C330MCN1GS	FP-016ME330M-FSR	105	0.12	35	2070	5 × 5.7
	39	RFS1C390MCN1GS	FP-016ME390M-FSR	125	0.12	35	2070	5 × 5.7
25	22	RFS1E220MCN1GS	FP-025ME220M-FSR	300	0.12	40	2200	5 × 5.7

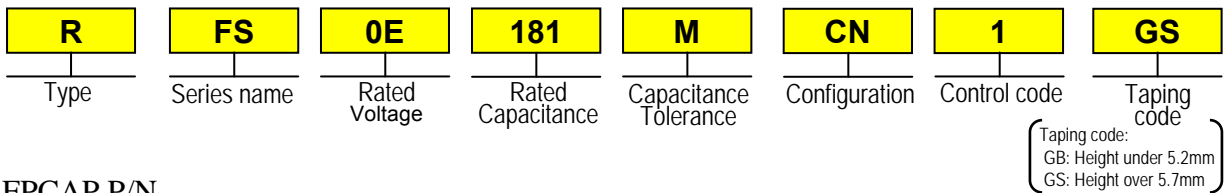
* In case of some doubt about measured values, measure after applying rated voltage for 120 minutes at 105°C.

● Frequency Characteristics



● Part Number (EX) 2.5V, 180μF, FS series

Nichicon P/N



FPCAP P/N

