# High Capacitance













- •Low ESR, High Capacitance, High ripple current.
- ●Load life of 2000 hours at 105°C.
- •SMD type: Lead free reflow soldering condition at 260°C peak correspondence.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



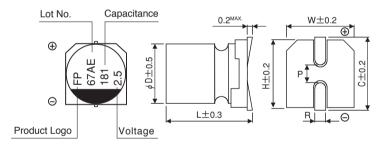


#### ■ Specifications

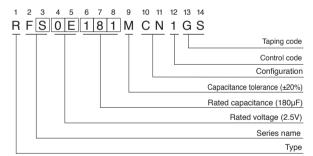
Item	Performance Characteristics					
Category Temperature Range	−55 to +105°C					
Rated Voltage Range	2.5 to 25V					
Rated Capacitance Range	10 to 330μF	10 to 330μF				
Capacitance Tolerance	±20% at 120Hz, 20°C					
Tangent of loss angle (tan δ)	Less than or equal to the specified value at 120Hz, 20°C					
ESR (*1)	Less than or equal to the specified value at 100kHz, 20°C					
Leakage Current (%2)	Less than or equal to the specified value. After 2 minutes' application of rated voltage at 20°C					
	Test condition	105°C, rated voltage 2000Hrs.				
	Capacitance change	Within ±20% of initial value before test				
Endurance	tan $\delta$	150% or less than the initial specified value				
	ESR(*1)	150% or less than the initial specified value				
	Leakage current (*2)	Less than or equal to the initial specified value				

<sup>\*1</sup> ESR should be measured at both of the terminal ends closest where the terminals protrude through the plastic platform.

#### Dimensions



#### Type numbering system (Example: 2.5V 180µF) Nichicon part number

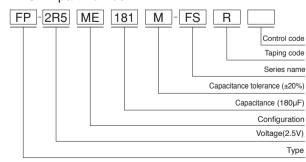


					(mm
φD×L	W	Н	С	R	Р
4×5.2	4.3	4.3	5.1	0.5 to 0.9	1.0
5×5.7	5.3	5.3	5.9	0.5 to 0.9	1.4

#### Frequency coefficient of rated ripple current

Frequency	120 Hz	1 kHz	10 kHz	100 kHz	300 kHz
Coefficient	0.10	0.45	0.50	1.00	1.00

#### FPCAP part number



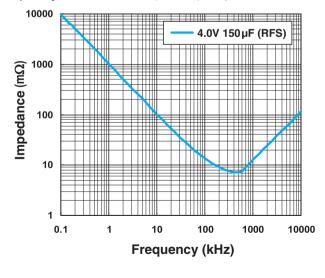
<sup>\*2</sup> Conditioning: If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

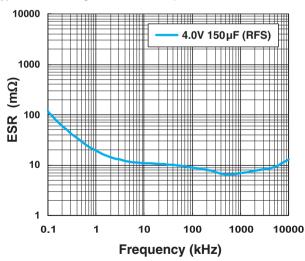
## **RFS / RFA**

#### ■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (µF)	Case Size φDxL (mm)	tan δ	Leakage Current (µA, 2min.)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mArms) (105°C/100kHz)	NICHICON	FPCAP
2.5		180	5×5.7	0.12	300	21	2670	RFS0E181MCN1GS	FP-2R5ME181M-FSR
(0E)	2.8	330	5×5.7	0.12	500	10	3300	RFA0E331MCN1GS	FP-2R5ME331M-FAR
4.0	4.6	100	5×5.7	0.12	300	22	2610	RFS0G101MCN1GS	FP-4R0ME101M-FSR
(0G)		150	5×5.7	0.12	300	22	2610	RFS0G151MCN1GS	FP-4R0ME151M-FSR
	7.2	47	5×5.7	0.12	300	30	2000	RFS0J470MCN1GS	FP-6R3ME470M-FSR
6.3		100	5×5.7	0.12	300	24	2500	RFS0J101MCN1GS	FP-6R3ME101M-FSR
(OJ)		120	5×5.7	0.12	300	24	2500	RFS0J121MCN1GS	FP-6R3ME121M-FSR
		180	5×5.7	0.12	567	17	3390	RFA0J181MCN1GS	FP-6R3ME181M-FAR
10	11.5	10	4×5.2	0.12	100	220	700	RFS1A100MCN1GB	FP-010ME100M-FSR
(1A)		68	5×5.7	0.12	300	30	2000	RFS1A680MCN1GS	FP-010ME680M-FSR
	18.4	22	5×5.7	0.12	100	45	1210	RFS1C220MCN1GS	FP-016ME220M-FSR
16 (1C)		33	5×5.7	0.12	105	35	2070	RFS1C330MCN1GS	FP-016ME330M-FSR
		39	5×5.7	0.12	125	35	2070	RFS1C390MCN1GS	FP-016ME390M-FSR
25	28.7	22	5×5.7	0.12	300	40	2200	RFS1E220MCN1GS	FP-025ME220M-FSR
(1E)		27	5×5.7	0.12	135	40	2450	RFS1E270MCN1GS	FP-025ME270M-FSR

■ Frequency Characteristics (The frequency characteristics are typical and not a guaranteed value.)





<sup>•</sup> Taping specifications are given in page 28.

<sup>•</sup> Recommended land size, soldering by reflow are given in page 25.

<sup>•</sup> Please refer to page 3 for the minimum order quantity.

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### Nichicon:

RFS0E181MCN1GS RFS0G101MCN1GS RFS0G151MCN1GS RFS0J101MCN1GS RFS0J121MCN1GS RFS0J470MCN1GS RFS1A100MCN1GB RFS1A680MCN1GS RFS1C220MCN1GS RFS1C330MCN1GS RFS1C390MCN1GS RFS1E220MCN1GS RFS1E270MCN1GS