

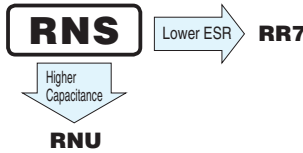
# RNS Standard



## FPCAP



- Low ESR, High ripple current.
- Load life of 2000 hours at 105°C.
- Radial lead type : Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2011/65/EU).

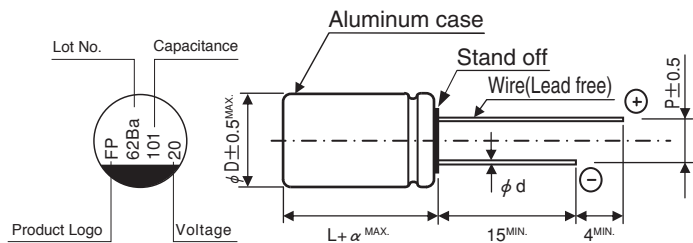


### Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	4.0 to 25V	
Rated Capacitance Range	10 to 1200μF	
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	
Endurance	Test condition	105°C, rated voltage 2000Hrs.
	Capacitance change	Within ±20% of initial value before test
	tan δ	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

※1 ESR should be measured at both of the terminal ends closest where the terminals protrude through the plastic platform.  
 ※2 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.

### Dimensions



(mm)			
φD×L	φd	P	α
6.3×7	0.45	2.5	1.0
6.3×10	0.5	2.5	1.0
8×11.5	0.6	3.5	1.5
10×12.5	0.6	5.0	1.5

#### ● 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

### Type numbering system (Example : 20V 100μF) Nichicon part number



### FPCAP part number



# RNS

■ Standard Ratings

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mA <sub>rms</sub> ) (105°C/100kHz)	NICHICON	FPCAP
4.0 (0G)	4.6	560	8×11.5	0.08	336	10	5230	RNS0G561MDN1□□	FP-4R0RE561M-NS□□
		820	10×12.5	0.08	492	10	5500	RNS0G821MDN1□□	FP-4R0RE821M-NS□□
		1200	10×12.5	0.15	720	10	5500	RNS0G122MDN1□□	FP-4R0RE122M-NS□□
6.3 (0J)	7.2	47	6.3×7	0.07	50	42	2050	RNS0J470MDS1□□	FP-6R3RE470M-NS□□
		150	8×11.5	0.07	142	21	3900	RNS0J151MDN1□□	FP-6R3RE151M-NS□□
		220	8×11.5	0.07	208	21	3900	RNS0J221MDN1□□	FP-6R3RE221M-NS□□
		330	10×12.5	0.07	312	10	5500	RNS0J331MDN1□□	FP-6R3RE331M-NS□□
		390	8×11.5	0.08	369	10	5230	RNS0J391MDN1□□	FP-6R3RE391M-NS□□
		680	10×12.5	0.08	643	10	5500	RNS0J681MDN1□□	FP-6R3RE681M-NS□□
		820	10×12.5	0.12	775	10	5500	RNS0J821MDN1□□	FP-6R3RE821M-NS□□
1000	10×12.5	0.12	945	10	5500	RNS0J102MDN1□□	FP-6R3RE102M-NS□□		
10 (1A)	11.5	33	6.3×7	0.07	50	49	1900	RNS1A330MDS1□□	FP-010RE330M-NS□□
		68	6.3×10	0.07	102	35	2650	RNS1A680MDS1□□	FP-010RE680M-NS□□
		100	8×11.5	0.07	150	21	3900	RNS1A101MDN1□□	FP-010RE101M-NS□□
		220	10×12.5	0.07	330	10	5500	RNS1A221MDN1□□	FP-010RE221M-NS□□
		470	10×12.5	0.08	705	10	5500	RNS1A471MDN1□□	FP-010RE471M-NS□□
16 (1C)	18.4	22	6.3×7	0.06	53	49	1900	RNS1C220MDS1□□	FP-016RE220M-NS□□
		33	6.3×7	0.06	79	49	1900	RNS1C330MDS1□□	FP-016RE330M-NS□□
		47	6.3×10	0.06	113	42	2400	RNS1C470MDS1□□	FP-016RE470M-NS□□
		68	8×11.5	0.06	163	25	3600	RNS1C680MDN1□□	FP-016RE680M-NS□□
		100	8×11.5	0.06	240	21	3900	RNS1C101MDN1□□	FP-016RE101M-NS□□
		150	10×12.5	0.06	360	10	5500	RNS1C151MDN1□□	FP-016RE151M-NS□□
		180	8×11.5	0.08	432	16	4700	RNS1C181MDN1□□	FP-016RE181M-NS□□
330	10×12.5	0.08	792	10	5500	RNS1C331MDN1□□	FP-016RE331M-NS□□		
20 (1D)	23.0	15	6.3×7	0.06	50	63	1700	RNS1D150MDS1□□	FP-020RE150M-NS□□
		22	6.3×7	0.06	66	49	1900	RNS1D220MDS1□□	FP-020RE220M-NS□□
		33	6.3×10	0.06	99	49	2200	RNS1D330MDS1□□	FP-020RE330M-NS□□
		47	8×11.5	0.06	141	28	3400	RNS1D470MDN1□□	FP-020RE470M-NS□□
		68	8×11.5	0.06	204	25	3600	RNS1D680MDN1□□	FP-020RE680M-NS□□
		100	10×12.5	0.06	300	15	4500	RNS1D101MDN1□□	FP-020RE101M-NS□□
25 (1E)	28.7	10	6.3×7	0.06	50	63	1700	RNS1E100MDS1□□	FP-025RE100M-NS□□
		15	6.3×10	0.06	75	49	2200	RNS1E150MDS1□□	FP-025RE150M-NS□□
		22	8×11.5	0.06	110	28	3400	RNS1E220MDN1□□	FP-025RE220M-NS□□
		33	10×12.5	0.06	165	20	3800	RNS1E330MDN1□□	FP-025RE330M-NS□□
		47	10×12.5	0.06	235	20	3800	RNS1E470MDN1□□	FP-025RE470M-NS□□
		100	10×12.5	0.08	500	15	4500	RNS1E101MDN1□□	FP-025RE101M-NS□□

• Taping specifications are given in page 26, 27.  
 • Please refer to page 3 for the minimum order quantity.