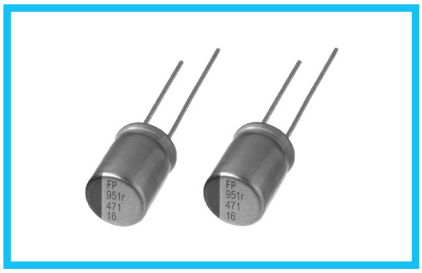
NE Higher Capacitance series

HR High Ripple Current | Z Low Impedance | F For High Frequency | Anti-Solvent Feature

FPCAP



- 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〉
Compliant to the RoHS directive (2011/65/EU).
The Lead-free of terminal plating(Sn).

■ Specifications

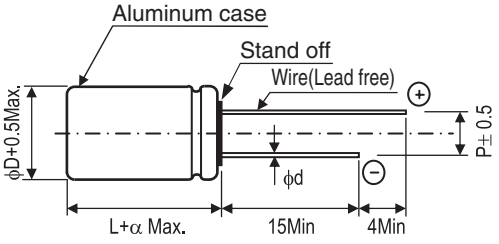
Item	Performance Characteristics	
Category Temperature Range	–55 to +105°C	
Rated Voltage Range	2.5 to 16V	
Rated Capacitance Range	100 to 1200μF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Tangent of loss angle (tan δ)	Less than or equal to the specified value at 120Hz, 20°C	
ESR (※1)	Less than or equal 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
Failure Rate	0.1% / 1000Hrs. Max (60%CL)	

※1 ESR should be measured at both of the terminal ends closest to the capacitor body.
※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.

■ Size List (ESR)

[φD×L(mm)]

R.V.(V) / S.V.(V) / Cap [μF]	2.5 / 2.8	6.3 / 7.2	10 / 11.5	16 / 18.4
100				5×10
220			6.3×10	
270		5×8		
470				8×11.5
680	8×6			
820				10×12.5
1000				10×12.5
1200		8×9		



(mm)

φD×L	φd	P	α
5×8	0.5	2.0	1.0
5×10	0.5	2.0	1.0
6.3×10	0.5	2.5	1.0
8×6	0.6	3.5	1.0
8×9	0.6	3.5	1.0
8×11.5	0.6	3.5	1.5
10×12.5	0.6	5.0	1.5

● Dimension table in next page.

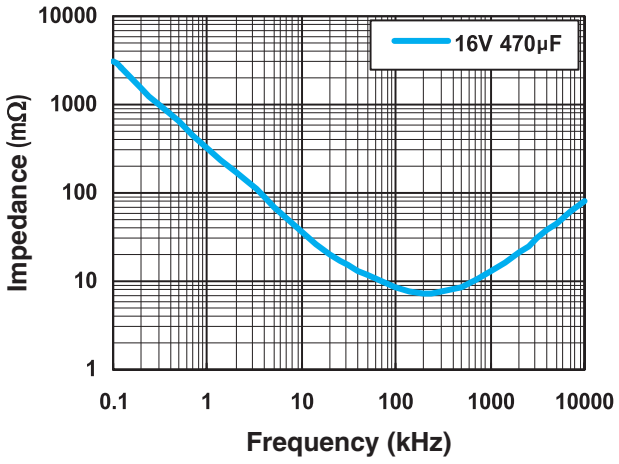
NE series

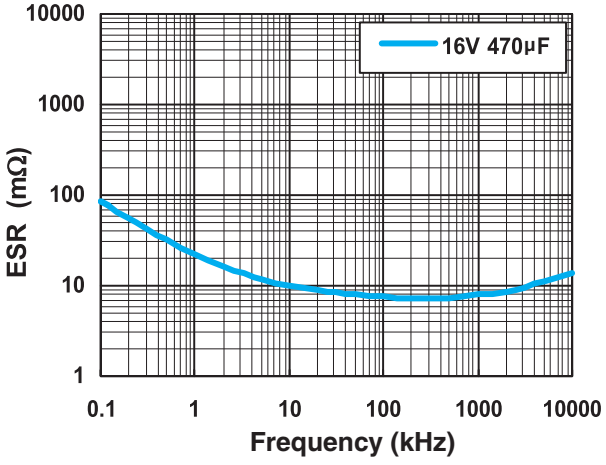
■ Standard Ratings

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ, 100kHz)	Rated Ripple Current (mArms)	NICHICON	FPCAP
2.5 (0E)	2.8	680	8×6	0.10	500	8	4900	RNE0E681MDN1□□	FP-2R5RE681M-NE□□
6.3 (0J)	7.2	270	5×8	0.10	500	12	3600	RNE0J271MDS1□□	FP-6R3RE271M-NE□□
		1200	8×9	0.08	1512	10	5700	RNE0J122MDN1□□	FP-6R3RE122M-NE□□
10 (1A)	11.5	220	6.3×10	0.08	440	30	2500	RNE1A221MDS1□□	FP-010RE221M-NE□□
16 (1C)	18.4	100	5×10	0.08	320	35	2300	RNE1C101MDS1□□	FP-016RE101M-NE□□
		470	8×11.5	0.08	1504	10	5400	RNE1C471MDN1□□	FP-016RE471M-NE□□
		820	10×12.5	0.08	2624	11	5600	RNE1C821MDN1□□	FP-016RE821M-NE□□
		1000	10×12.5	0.08	3200	10	6100	RNE1C102MDN1□□	FP-016RE102M-NE□□

※ 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.

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





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