

# FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors

## NE series

Ultra Low ESR

Ultra Large Capacitance

Lead free

RoHS Compliance

### 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		Characteristics
		NE
Operating Temp. Range		-55 to +105°C
Rated Voltage Range		2.5 to 16V-DC
Capacitance Range		100 to 1200μF
Capacitance Tolerance		± 20% (M)
Endurance	Condition	105°C 2000Hrs at rated voltage
	Capacitance	Within ± 20% of the value before test
	Leakage Current	Not to exceed the value specified
	tan δ	Not to exceed 150% of the value specified
Failure Rate		0.1% / 1000Hrs. Max (60%CL)

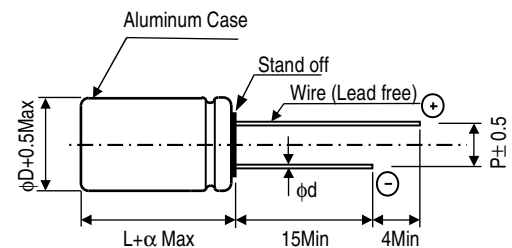


UPGRADE

### Size List

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

### Dimensions



[Unit : mm]

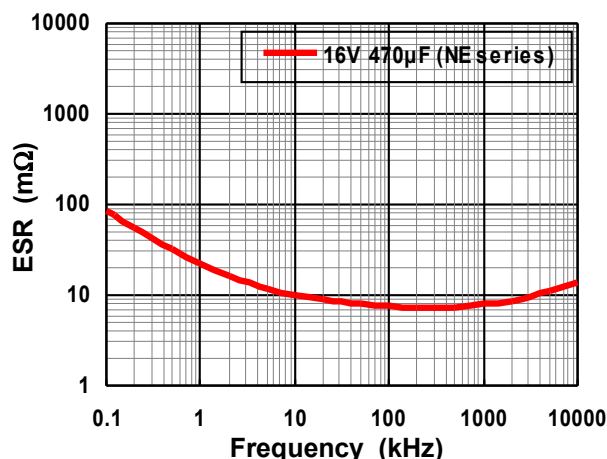
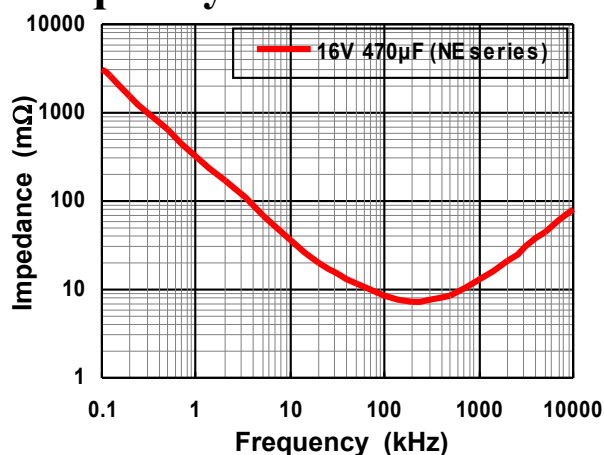
φD×L	φd	P	α
5×10	0.5	2.0	1.0
6.3×10	0.5	2.5	1.0
8×6	0.6	3.5	1.0
8×9	0.6	3.5	1.0
8×11.5	0.6	3.5	1.5
10×12.5	0.6	5.0	1.5

## ● 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	680	RNE0E681MDN1□□	FP-2R5RE681M-NE□□	500	0.10	8	4900	8 × 6
6.3	1200	RNE0J122MDN1□□	FP-6R3RE122M-NE□□	1512	0.08	10	5700	8 × 9
10	220	RNE1A221MDS1□□	FP-010RE221M-NE□□	440	0.08	30	2500	6.3 × 10
16	100	RNE1C101MDS1□□	FP-016RE101M-NE□□	320	0.08	35	2300	5 × 10
	470	RNE1C471MDN1□□	FP-016RE471M-NE□□	1504	0.08	12	5000	8 × 11.5
	820	RNE1C821MDN1□□	FP-016RE821M-NE□□	2624	0.08	11	5600	10 × 12.5

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

## ● Frequency Characteristics



## ● Part Number (EX) 16V, 470μF Nichicon P/N

<b>R</b>	<b>NE</b>	<b>1C</b>	<b>471</b>	<b>M</b>	<b>DN</b>	<b>1</b>	
Type	Series name	Rated Voltage	Rated Capacitance	Capacitance Tolerance	Configuration	Control code	Lead Forming

(CG: Cut lead (Bulk)  
JX: φ5x10, φ6.3x10, 2.5mm pitch taping  
KX: φ8, 3.5mm pitch taping  
PX: φ5&φ6.3&φ8, 5.0mm pitch taping  
PH: φ10, 5.0mm pitch taping)

### FPCAP P/N

<b>FP</b>	<b>016</b>	<b>RE</b>	<b>471</b>	<b>M</b>	<b>NE</b>	<b>R</b>	
Commodity Mark	Rated Voltage	Classification	Rated Capacitance	Capacitance Tolerance	Series name	Lead Forming	Control code

(R: Long lead (Bulk)  
CG: Cut lead (Bulk)  
J : φ5x10, φ6.3x10, 2.5mm pitch taping  
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P : φ5&φ6.3&φ8, 5.0mm pitch taping  
PH: φ10, 5.0mm pitch taping)