

FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors

NE 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

- Corresponding to Lead-free, RoHS compliance and Halogen-free.
- The Lead-free of terminal plating (Sn)

Specifications

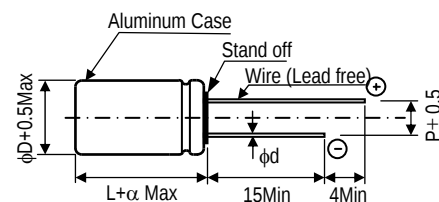
Items		Characteristics
		NE
Operating Temp. Range		-55 to +105°C
Rated Voltage Range		2.5 to 16V-DC
Capacitance Range		100 to 1200μF
Capacitance Tolerance		± 20% (M)
Endurance	Condition	105°C 2000Hrs at rated voltage
	Capacitance	Within ± 20% of the value before test
	Leakage Current	Not to exceed the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

Size List

[φD×L]

R.V (S.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		

Dimensions



[Unit : 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

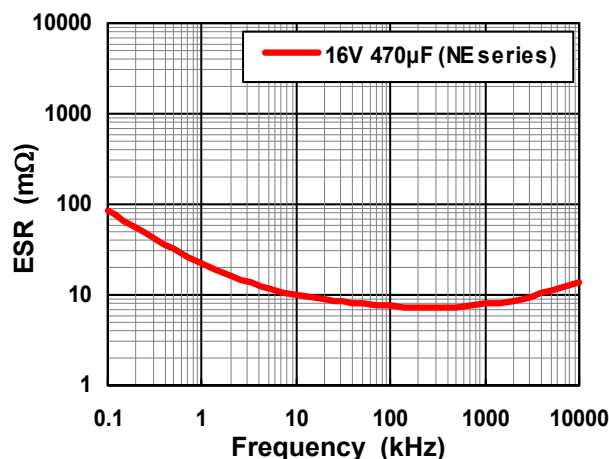
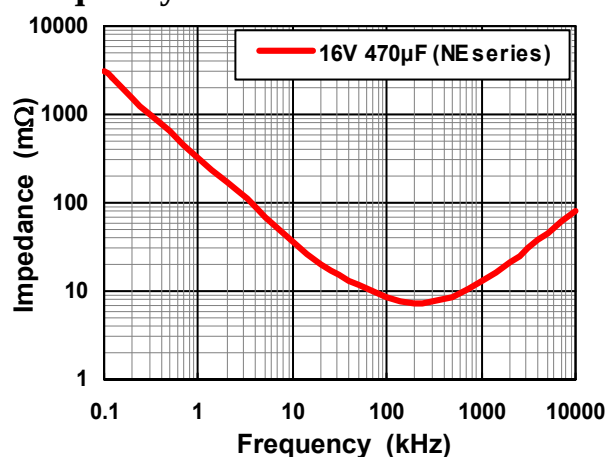


Part number & Specifications

Rated Voltage (V)	Rated Capacitance (μ F, 120Hz)	Part Number		Leakage Current * (μ A, 2 min)	$\tan\delta$ (120Hz)	ESR (m Ω , 100kHz)	Rated Ripple Current (mA, r.m.s.)	Case Size ϕ D $\times$ L(mm)
		NICHICON	FPCAP					
2.5	680	RNE0E681MDN1□□	FP-2R5RE681M-NE□□	500	0.10	8	4900	8 $\times$ 6
6.3	270	RNE0J271MDS1□□	FP-6R3RE271M-NE□□	500	0.10	12	3600	5 $\times$ 8
	1200	RNE0J122MDN1□□	FP-6R3RE122M-NE□□	1512	0.08	10	5700	8 $\times$ 9
10	220	RNE1A221MDS1□□	FP-010RE221M-NE□□	440	0.08	30	2500	6.3 $\times$ 10
16	100	RNE1C101MDS1□□	FP-016RE101M-NE□□	320	0.08	35	2300	5 $\times$ 10
	470	RNE1C471MDN1□□	FP-016RE471M-NE□□	1504	0.08	10	5400	8 $\times$ 11.5
	820	RNE1C821MDN1□□	FP-016RE821M-NE□□	2624	0.08	11	5600	10 $\times$ 12.5
	1000	RNE1C102MDN1□□	FP-016RE102M-NE□□	3200	0.08	10	6100	10 $\times$ 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, 470 μ F (Endurance)

Nichicon P/N

R	NE	1C	471	M	DN	1	
Type	Series Name	Rated Voltage	Rated Capacitance	Capacitance Tolerance	Configuration	Control Code	Lead Forming

CG: Cut lead (Bulk)
JT: ϕ 5x8, 2.5mm pitch tapping
JX: ϕ 5x10, ϕ 6.3x10, 2.5mm pitch tapping
KX: ϕ 8, 3.5mm pitch tapping
PX: ϕ 5& ϕ 6.3& ϕ 8, 5.0mm pitch tapping
PH: ϕ 10, 5.0mm pitch tapping

FPCAP P/N

FP	016	RE	471	M	NE	R	
Commodity Mark	Rated Voltage	Classification	Rated Capacitance	Capacitance Tolerance	Series Name	Lead Forming	Control Code

R: Long lead (Bulk)
CG: Cut lead (Bulk)
JT: ϕ 5x8, 2.5mm pitch tapping
J : ϕ 5x10, ϕ 6.3x10, 2.5mm pitch tapping
K : ϕ 8, 3.5mm pitch tapping
P : ϕ 5& ϕ 6.3& ϕ 8, 5.0mm pitch tapping
PH: ϕ 10, 5.0mm pitch tapping