

FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors

NU series

Ultra Low ESR

Large Capacitance

Endurance 2000/5000hrs

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.
- Buck 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	
	NU	
Operating Temp. Range	- 55 to + 105°C	
Rated Voltage Range	2.5 to 25V _{DC}	
Capacitance Range	10 to 2700 μ F	
Capacitance Tolerance	\pm 20% (M)	
Endurance	Condition	105°C 2000/5000Hrs at rated voltage
	Capacitance	Within \pm 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)	

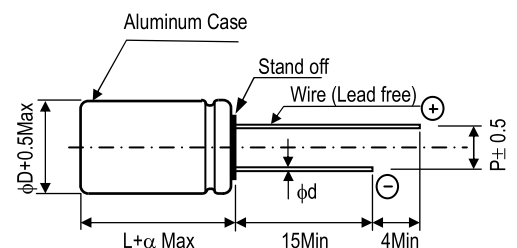
UPGRADE



Size List

Cap. [μ F]	R.V.(S.V.) [M]	[ϕ D \times L]					
		2.5 (2.8)	4.0 (4.6)	6.3 (7.2)	10 (11.5)	16 (18.4)	25 (28.7)
10					4 \times 5		
33							8 \times 11.5
47							8 \times 11.5
100						6.3 \times 10	
180						8 \times 11.5	
270						8 \times 11.5	
330						8 \times 11.5	
470				8 \times 11.5		10 \times 12.5	
680				8 \times 11.5			
820			8 \times 11.5	8 \times 11.5			
1000			8 \times 11.5	8 \times 11.5			
1200			8 \times 11.5				
1500	8 \times 11.5			10 \times 12.5			
1800			10 \times 12.5				
2200			10 \times 12.5				
2700	10 \times 12.5						

Dimensions



[Unit : mm]

ϕ D \times L	ϕ d	P	α
4 \times 5	0.45	1.5	1.0
6.3 \times 10	0.5	2.5	1.0
8 \times 11.5	0.6	3.5	1.5
10 \times 12.5	0.6	5.0	1.5

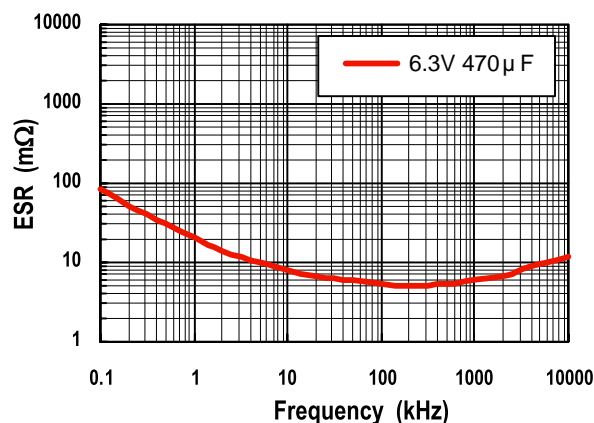
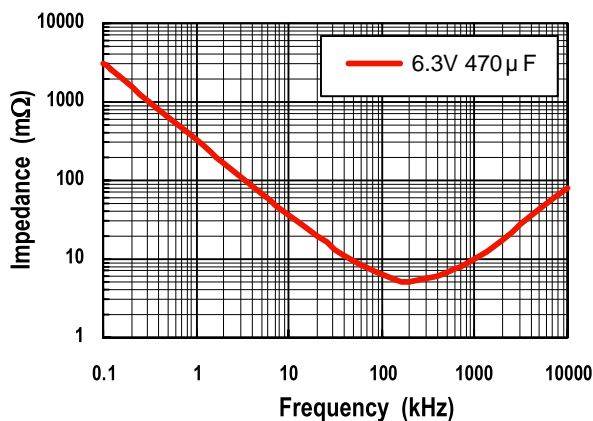
● Part number & Specifications

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	1500	RNU0E152MDN1□□	FP-2R5RE152M-NU□□	938	0.08	7	5700	8 x 11.5
	2700	RNU0E272MDN1□□	FP-2R5RE272M-NU□□	1350	0.08	7	6100	10 x 12.5
4.0	820	RNU0G821MDN1□□	FP-4R0RE821M-NU□□	656	0.08	7	5700	8 x 11.5
	1000	RNU0G102MDN1□□	FP-4R0RE102M-NU□□	800	0.08	7	5700	8 x 11.5
	1200	RNU0G122MDN1□□	FP-4R0RE122M-NU□□	960	0.08	7	5700	8 x 11.5
	1800	RNU0G182MDN1□□	FP-4R0RE182M-NU□□	1440	0.08	7	6100	10 x 12.5
	2200	RNU0G222MDN1□□	FP-4R0RE222M-NU□□	1760	0.08	7	6100	10 x 12.5
6.3	470	RNU0J471MDN1□□	FP-6R3RE471M-NU□□	592	0.08	7	5700	8 x 11.5
	680	RNU0J681MDN1□□	FP-6R3RE681M-NU□□	857	0.08	7	5700	8 x 11.5
	820	RNU0J821MDN1□□	FP-6R3RE821M-NU□□	1033	0.08	7	5700	8 x 11.5
	1000	RNU0J102MDN1□□	FP-6R3RE102M-NU□□	1260	0.08	7	5700	8 x 11.5
	1500	RNU0J152MDN1□□	FP-6R3RE152M-NU□□	1890	0.08	7	6100	10 x 12.5
10.0	10	RNU1A100MDS1□□	FP-010RE100M-NU□□	300	0.12	220	700	4 x 5
	** 10	RNU1A100MDSASQ□□	FP-010RE100M-NU□□-5K	300	0.12	220	700	4 x 5
16.0	100	RNU1C101MDS1□□	FP-016RE101M-NU□□	320	0.08	25	2820	6.3 x 10
	** 100	RNU1C101MDSASQ□□	FP-016RE101M-NU□□-5K	320	0.08	25	2820	6.3 x 10
	180	RNU1C181MDN1□□	FP-016RE181M-NU□□	576	0.08	8	5700	8 x 11.5
	270	RNU1C271MDN1□□	FP-016RE271M-NU□□	864	0.08	8	5000	8 x 11.5
	** 270	RNU1C271MDNASQ□□	FP-016RE271M-NU□□-5K	864	0.08	8	5000	8 x 11.5
	330	RNU1C331MDN1□□	FP-016RE331M-NU□□	1056	0.08	8	6100	8 x 11.5
	470	RNU1C471MDN1□□	FP-016RE471M-NU□□	1504	0.08	10	6100	10 x 12.5
25.0	33	RNU1E330MDN1□□	FP-025RE330M-NU□□	413	0.12	24	3600	8 x 11.5
	47	RNU1E470MDN1□□	FP-025RE470M-NU□□	588	0.12	24	3600	8 x 11.5

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

** Endurance 5000hrs product.

● Frequency Characteristics



● Part Number (EX) 16V, 270μF, 5000hrs (Endurance)

R	NU	1C	271	M	DN	ASQ	
Type	Series name	Rated Voltage	Rated Capacitance	Capacitance Tolerance	Configuration	Control code	Lead Forming

ASQ : 5000hrs
1 : 2000hrs

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