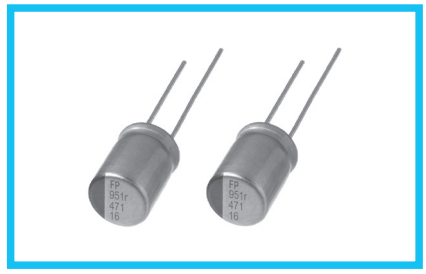
RNE High Capacitance

HR High Ripple Current | Z Low Impedance | F For High Frequency | L Long Life

- Low ESR, High Capacitance, High ripple current.
- Load life of 2000/5000 hours at 105°C.
- Radial lead type : Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

RNU
Higher Capacitance
RNE
Higher Capacitance
RS6 RNL

FPCAP



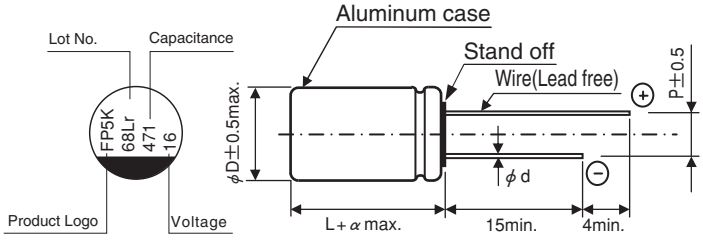
■ Specifications

Item	Performance Characteristics	
Category Temperature Range	–55 to +105°C	
Rated Voltage Range	2.5 to 25V	
Rated Capacitance Range	100 to 1500µF	
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 2000 / 5000Hrs.
	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

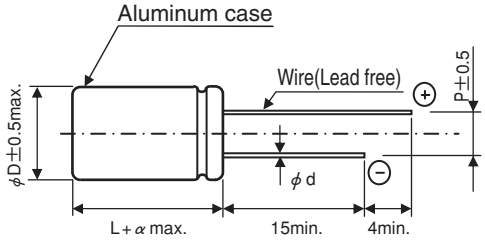
※1 ESR should be measured at both of the terminal ends closest to the capacitor body.
※2 Conditioning : If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

■ Dimensions

[φ5×8 / φ5×10 / φ6.3×10 / φ8×6 / φ8×9 / φ8×11.5 / φ10×12.5]



[φ8×11.5(-H or -5KH)]



(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

Type numbering system (Example : 16V 470µF)

Nichicon part number

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
R	N	E	1	C	4	7	1	M	D	N	A	S	Q	K	X

Lead Forming
Control code
Configuration
Capacitance tolerance (±20%)
Rated capacitance (470µF)
Rated voltage (16V)
Series name
Type

FPCAP part number

FP	016	RE	471	M	NE	K	5K

Control code
Lead Forming
Series name
Capacitance tolerance (±20%)
Capacitance (470µF)
Configuration
Voltage(16V)
Type

● 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

● Dimension table in next page.

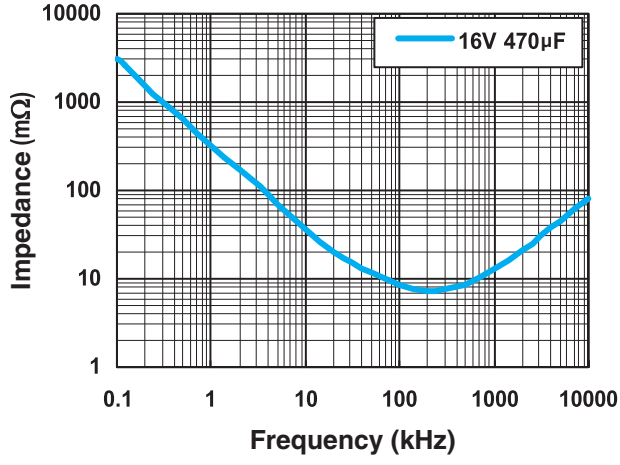
RNE

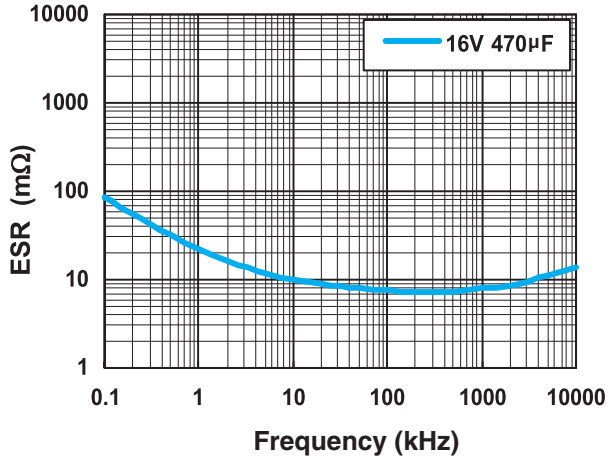
■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mArms) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	680	8×6	0.1	500	8	4900	RNE0E681MDN1 □□	FP-2R5RE681M-NE □□
		＊820	8×6	0.1	500	8	4900	RNE0E821MDNASQ □□	FP-2R5RE821M-NE □□ -5K
		＊820	8×6	0.1	500	8	4900	RNE0E821MCNASQ □□	FP-2R5RE821M-NE □□ -5KH
6.3 (0J)	7.2	270	5×8	0.1	500	12	3600	RNE0J271MDS1 □□	FP-6R3RE271M-NE □□
		330	5×8	0.1	500	10	3700	RNE0J331MDS1 □□	FP-6R3RE331M-NE □□
		330	5×8	0.1	500	10	3700	RNE0J331MCS1 □□	FP-6R3RE331M-NE □□ -H
		1200	8×9	0.08	1512	10	5700	RNE0J122MDN1 □□	FP-6R3RE122M-NE □□
		1500	8×11.5	0.12	1890	10	5400	RNE0J152MDN1 □□	FP-6R3RE152M-NE □□
		1500	8×11.5	0.12	1890	10	5400	RNE0J152MCN1 □□	FP-6R3RE152M-NE □□ -H
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 □□
		220	8×6	0.1	500	13	4150	RNE1C221MDN1 □□	FP-016RE221M-NE □□
		270	6.3×10	0.08	864	15	3500	RNE1C271MCS1 □□	FP-016RE271M-NE □□ -H
		＊270	6.3×10	0.08	864	15	3500	RNE1C271MCSASQ □□	FP-016RE271M-NE □□ -5KH
		330	6.3×10	0.08	1056	15	3500	RNE1C331MCS1 □□	FP-016RE331M-NE □□ -H
		＊330	6.3×10	0.08	1056	15	3500	RNE1C331MCSASQ □□	FP-016RE331M-NE □□ -5KH
		390	6.3×10	0.08	1248	15	3500	RNE1C391MCS1 □□	FP-016RE391M-NE □□ -H
		＊390	6.3×10	0.08	1248	15	3500	RNE1C391MCSASQ □□	FP-016RE391M-NE □□ -5KH
		470	6.3×10	0.08	1504	15	3500	RNE1C471MCS6 □□	FP-016RE471M-NE □□ -H-DS
		＊470	6.3×10	0.08	1504	15	3500	RNE1C471MCSBSQ □□	FP-016RE471M-NE □□ -5KH-DS
		470	8×11.5	0.08	1504	10	5400	RNE1C471MDN1 □□	FP-016RE471M-NE □□
		470	8×11.5	0.08	1504	10	5400	RNE1C471MCN1 □□	FP-016RE471M-NE □□ -H
		＊470	8×11.5	0.08	1504	10	5400	RNE1C471MDNASQ □□	FP-016RE471M-NE □□ -5K
		＊470	8×11.5	0.08	1504	10	5400	RNE1C471MCNASQ □□	FP-016RE471M-NE □□ -5KH
		560	8×11.5	0.08	1792	14	5000	RNE1C561MDN1 □□	FP-016RE561M-NE □□
		560	8×11.5	0.08	1792	14	5000	RNE1C561MCN1 □□	FP-016RE561M-NE □□ -H
		＊560	8×11.5	0.08	1792	14	5000	RNE1C561MDNASQ □□	FP-016RE561M-NE □□ -5K
		＊560	8×11.5	0.08	1792	14	5000	RNE1C561MCNASQ □□	FP-016RE561M-NE □□ -5KH
		680	8×11.5	0.08	2176	10	5230	RNE1C681MCN1 □□	FP-016RE681M-NE □□ -H
		＊680	8×11.5	0.08	2176	10	5230	RNE1C681MCNASQ □□	FP-016RE681M-NE □□ -5KH
		820	10×12.5	0.08	2624	11	5600	RNE1C821MDN1 □□	FP-016RE821M-NE □□
		＊820	10×12.5	0.08	2624	11	5600	RNE1C821MDNASQ □□	FP-016RE821M-NE □□ -5K
		1000	10×12.5	0.08	3200	10	6100	RNE1C102MDN1 □□	FP-016RE102M-NE □□
		＊1000	10×12.5	0.08	3200	10	6100	RNE1C102MDNASQ □□	FP-016RE102M-NE □□ -5K
25 (1E)	28.7	＊560	10×12.5	0.08	2800	20	3100	RNE1E561MDNASQ □□	FP-025RE561M-NE □□ -5K

＊: Load life 5000hours.

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





• For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

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