



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

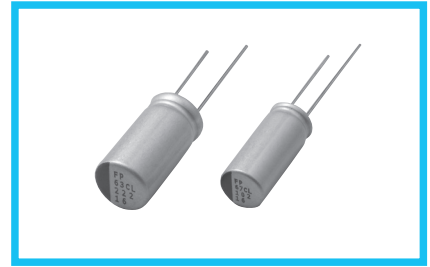


**RNL** Large Sized, High Capacitance



**FPCAP** Expanded

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



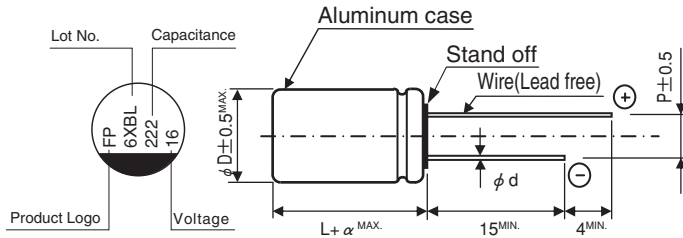
■ Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	16V	
Rated Capacitance Range	680 to 2200μF	
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

※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

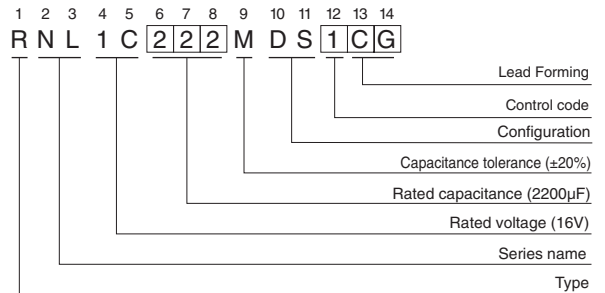


(mm)			
φD×L	φd	P	α
φ8×16L	0.6	3.5	1.5
φ8×20L	0.6	3.5	1.5
φ10×20L	0.6	5.0	1.5

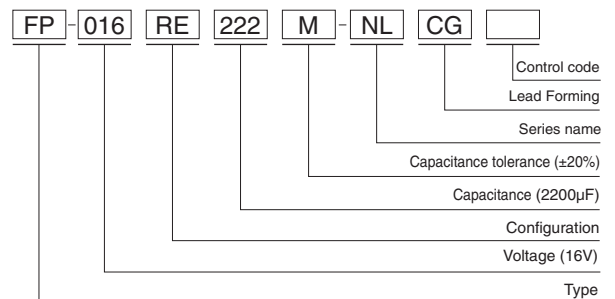
● Frequency coefficient of rated ripple current

Frequency	120 Hz	1 kHz	10 kHz	100 kHz	300 kHz
Coefficient	0.10	0.45	0.50	1.00	1.00

Type numbering system (Example : 16V 2200μF)  
Nichicon part number



FPCAP part number



● Dimension table in next page.

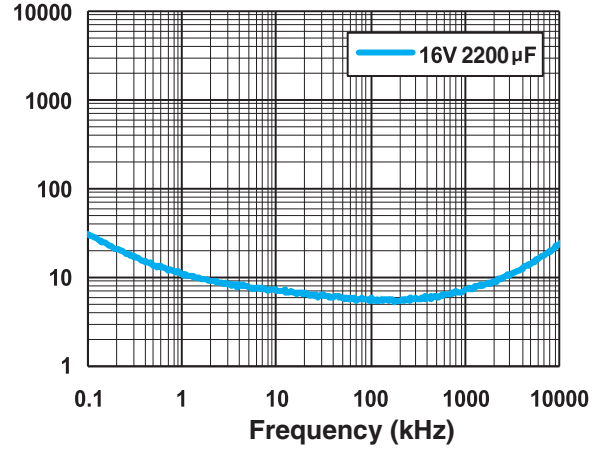
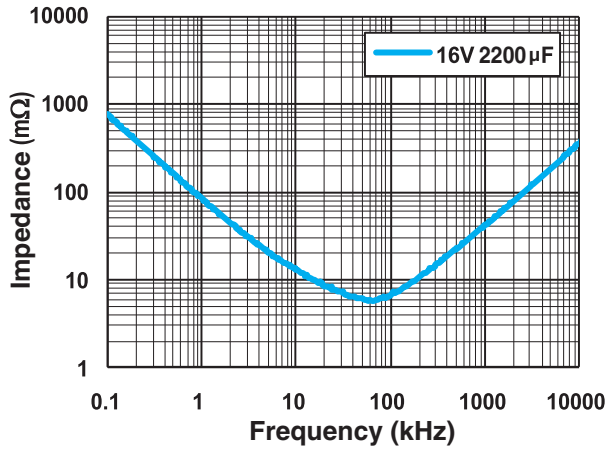
# RNL

## Standard Ratings

Rated Voltage (V)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mA <sub>rms</sub> ) (105°C/100kHz)	NICHICON	FPCAP
16 (1C)	18.4	680	8 × 16	0.12	1088	8	7000	RNL1C681MDS1□□	FP-016RE681M-NL□□
		820	▲8 × 16	0.12	1312	8	7000	RNL1C821MDS6□□	FP-016RE821M-NL□□-DS
		820	8 × 20	0.12	1312	8	7500	RNL1C821MDS1□□	FP-016RE821M-NL□□
		1000	8 × 20	0.12	1600	8	7500	RNL1C102MDS1□□	FP-016RE102M-NL□□
		1200	8 × 20	0.12	1920	8	7500	RNL1C122MDS1□□	FP-016RE122M-NL□□
		1500	10 × 20	0.12	2400	8	8100	RNL1C152MDS1□□	FP-016RE152M-NL□□
		1800	10 × 20	0.12	2880	8	8100	RNL1C182MDS1□□	FP-016RE182M-NL□□
		2200	10 × 20	0.12	3520	8	8100	RNL1C222MDS1□□	FP-016RE222M-NL□□

"▲" In this case, [6] will be put at 12th digit of type numbering system.

## 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.