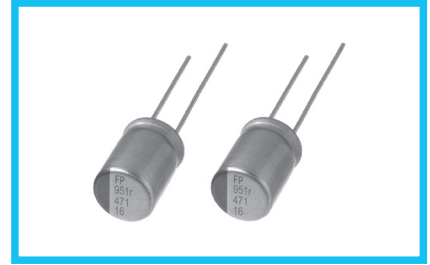
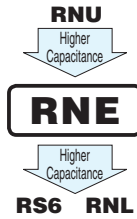


# RNE High Capacitance



FPCAP Expanded

- 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).



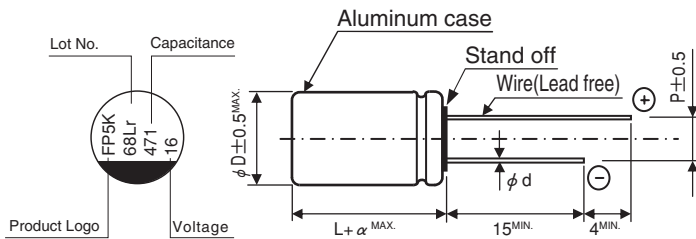
## Specifications

| Item                          | Performance Characteristics  |   |
|-------------------------------|--|---|
| Category Temperature Range    | -55 to +105°C  |   |
| Rated Voltage Range           | 2.5 to 16V   |   |
| 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

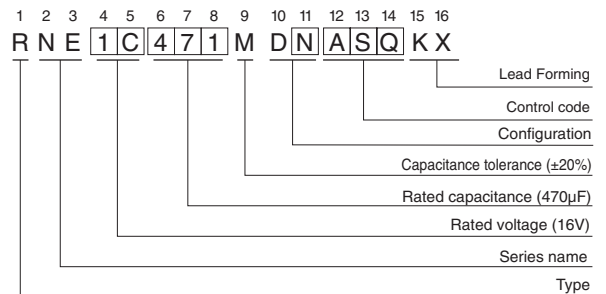


| φD×L    | φd  | P   | α   |
|---------|-----|-----|-----|
| 5×8     | 0.5 | 2.0 | 1.0 |
| 5×10    | 0.5 | 2.0 | 1.0 |
| 6.3×10  | 0.5 | 2.5 | 1.0 |
| 8×6     | 0.6 | 3.5 | 1.0 |
| 8×9     | 0.6 | 3.5 | 1.0 |
| 8×11.5  | 0.6 | 3.5 | 1.5 |
| 10×12.5 | 0.6 | 5.0 | 1.5 |

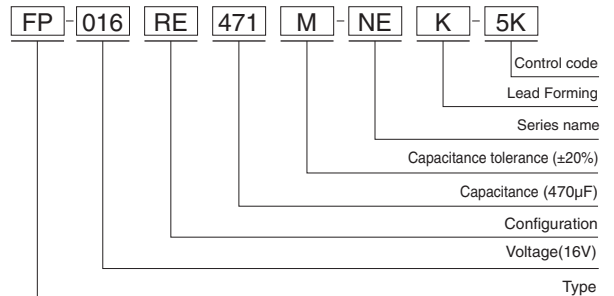
### ● Frequency coefficient of rated ripple current

| 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 470μF) Nichicon part number



## FPCAP part number



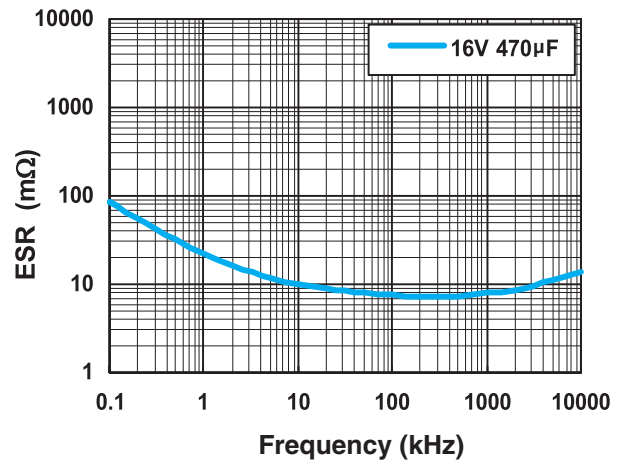
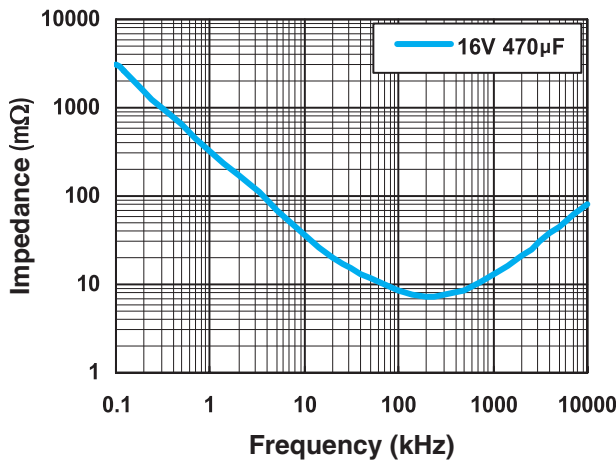
# RNE

## ■ Dimensions

| Rated Voltage (V) (code) | 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                 |
|--------------------------|-------------------|------------------------|---------------------|-------|-----------------------------|------------------------|--|------------------|-----------------------|
| 2.5 (0E)                 | 2.8               | 680                    | 8×6                 | 0.10  | 500                         | 8                      | 4900   | RNE0E681MDN1□□   | FP-2R5RE681M-NE□□     |
|                          |                   | *820                   | 8×6                 | 0.10  | 500                         | 8                      | 4900   | RNE0E821MCNASQ□□ | FP-2R5RE821M-NE□□-5KH |
| 6.3 (0J)                 | 7.2               | 270                    | 5×8                 | 0.10  | 500                         | 12                     | 3600   | RNE0J271MDS1□□   | FP-6R3RE271M-NE□□     |
|                          |                   | 330                    | 5×8                 | 0.10  | 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□□     |
| 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□□     |
|                          |                   | 470                    | 8×11.5              | 0.08  | 1504                        | 10                     | 5400   | RNE1C471MDN1□□   | FP-016RE471M-NE□□     |
|                          |                   | *470                   | 8×11.5              | 0.08  | 1504                        | 10                     | 5400   | RNE1C471MDNASQ□□ | FP-016RE471M-NE□□-5K  |
|                          |                   | 560                    | 8×11.5              | 0.08  | 1792                        | 14                     | 5000   | RNE1C560MDN1□□   | FP-016RE561M-NE□□     |
|                          |                   | *560                   | 8×11.5              | 0.08  | 1792                        | 14                     | 5000   | RNE1C561MDNASQ□□ | FP-016RE561M-NE□□-5K  |
|                          |                   | 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  |

\* : Load life 5000hours.

## ■ 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.

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[RNE1C101MDS1PX](#) [RNE1C471MDN1](#) [RNE1C471MDN1PX](#) [RNE0J271MDS1](#) [RNE1C821MDN1](#) [RNE1A221MDS1](#)  
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