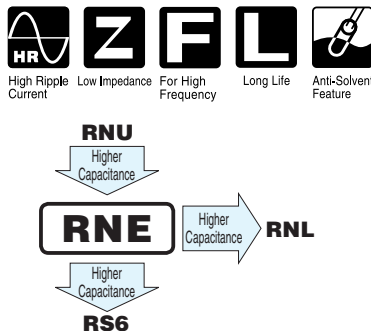


## RNE High Capacitance

- 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).



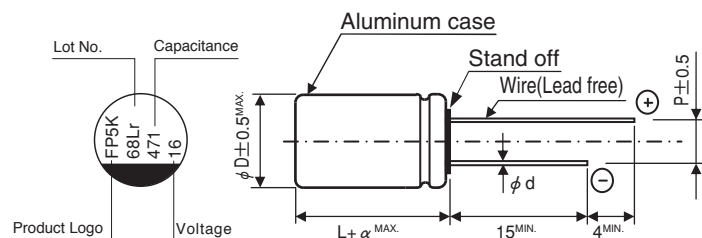
### Specifications

| Item                          | Performance Characteristics                                                                      |
|-------------------------------|--------------------------------------------------------------------------------------------------|
| Category Temperature Range    | -55 to +105°C                                                                                    |
| Rated Voltage Range           | 2.5 to 16V                                                                                       |
| Rated Capacitance Range       | 100 to 1200μF                                                                                    |
| 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



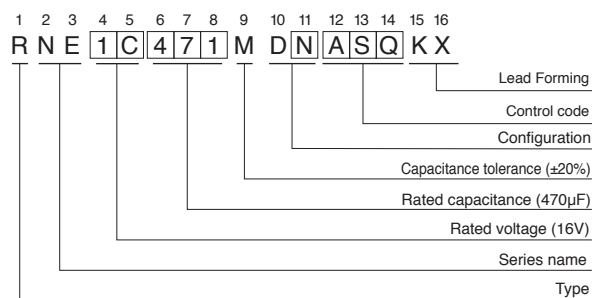
| φD×L    | φd  | P   | α   |
|---------|-----|-----|-----|
| 5×8     | 0.5 | 2.0 | 1.0 |
| 5×10    | 0.5 | 2.0 | 1.0 |
| 6.3×10  | 0.5 | 2.5 | 1.0 |
| 8×6     | 0.6 | 3.5 | 1.0 |
| 8×9     | 0.6 | 3.5 | 1.0 |
| 8×11.5  | 0.6 | 3.5 | 1.5 |
| 10×12.5 | 0.6 | 5.0 | 1.5 |

### Frequency coefficient of rated ripple current

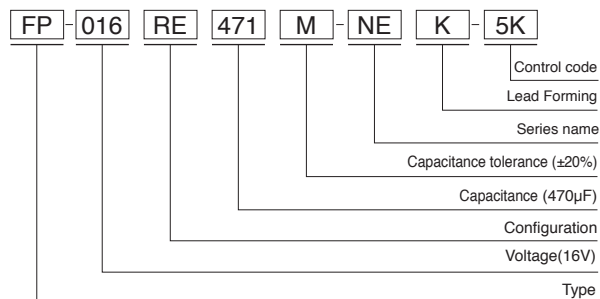
| Frequency   | 120 Hz | 1 kHz | 10 kHz | 100 kHz | 300 kHz |
|-------------|--------|-------|--------|---------|---------|
| Coefficient | 0.10   | 0.45  | 0.50   | 1.00    | 1.00    |

### Type numbering system (Example : 16V 470μF)

#### Nichicon part number



#### FPCAP part number



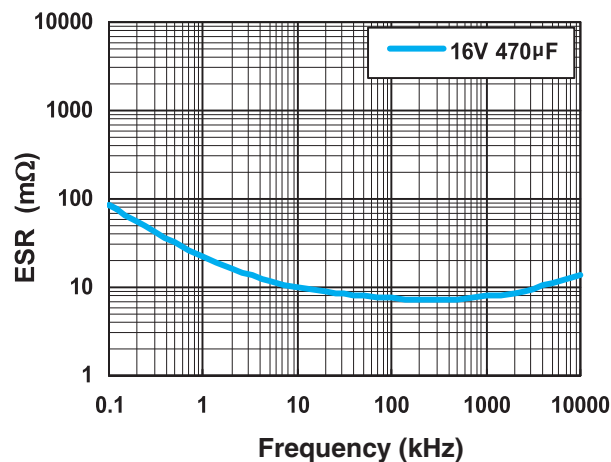
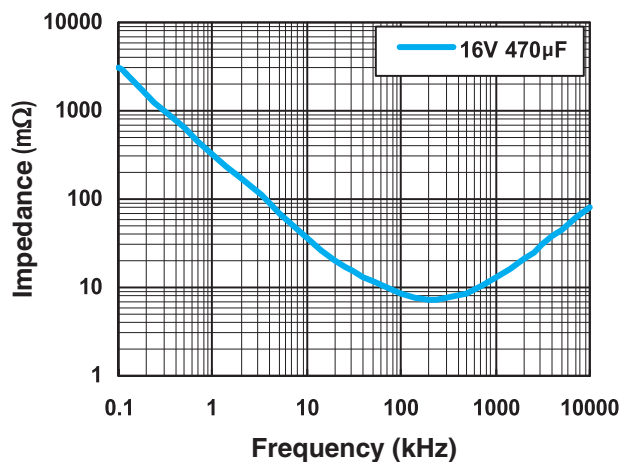
## RNE

## ■ Standard Ratings

| Rated Voltage<br>(V)<br>(code) | Surge<br>Voltage<br>(V) | Rated<br>Capacitance<br>( $\mu$ F) | Case Size<br>$\phi$ D×L (mm) | $\tan \delta$ | Leakage<br>Current<br>( $\mu$ A, 2min.) | ESR<br>(m $\Omega$ , 100kHz) | Rated Ripple<br>Current<br>(mA <sub>rms</sub> ) | NICHICON         | FPCAP                |
|--------------------------------|-------------------------|------------------------------------|------------------------------|---------------|-----------------------------------------|------------------------------|-------------------------------------------------|------------------|----------------------|
| 2.5<br>(0E)                    | 2.8                     | 680                                | 8×6                          | 0.10          | 500                                     | 8                            | 4900                                            | RNE0E681MDN1□□   | FP-2R5RE681M-NE□□    |
| 6.3<br>(0J)                    | 7.2                     | 270                                | 5×8                          | 0.10          | 500                                     | 12                           | 3600                                            | RNE0J271MDS1□□   | FP-6R3RE271M-NE□□    |
|                                |                         | 1200                               | 8×9                          | 0.08          | 1512                                    | 10                           | 5700                                            | RNE0J122MDN1□□   | FP-6R3RE122M-NE□□    |
| 10<br>(1A)                     | 11.5                    | 220                                | 6.3×10                       | 0.08          | 440                                     | 30                           | 2500                                            | RNE1A221MDS1□□   | FP-010RE221M-NE□□    |
| 16<br>(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                                            | RNE1C561MDNASQ□□ | FP-016RE561M-NE□□-5K |
|                                |                         | 820                                | 10×12.5                      | 0.08          | 2624                                    | 11                           | 5600                                            | RNE1C821MDN1□□   | FP-016RE821M-NE□□    |
|                                |                         | 1000                               | 10×12.5                      | 0.08          | 3200                                    | 10                           | 6100                                            | RNE1C102MDN1□□   | FP-016RE102M-NE□□    |

※ : 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.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Nichicon:

[RNE0E681MDN](#) [RNE0E681MDN1PX](#) [RNE0J122MND1](#) [RNE0J122MDN1PX](#) [RNE1A221MDS](#) [RNE1A221MDS1PX](#)  
[RNE1C101MDS1PX](#) [RNE1C471MDN1](#) [RNE1C471MDN1PX](#) [RNE0J271MDS1](#) [RNE1C821MDN1](#) [RNE1A221MDS1](#)  
[RNE1C101MDS1](#) [RNE0J122MDN1](#) [RNE1C102MDN1PH](#) [RNE1C821MDN1PH](#)