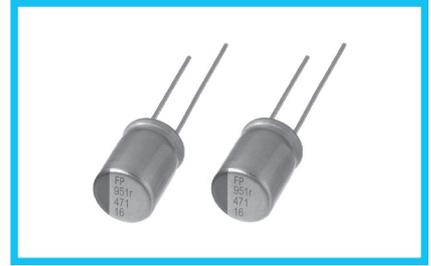


RNE High Capacitance



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).



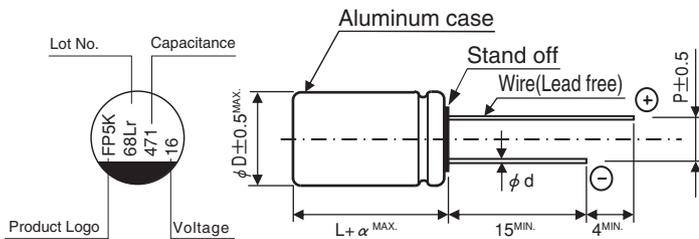
Specifications

| 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

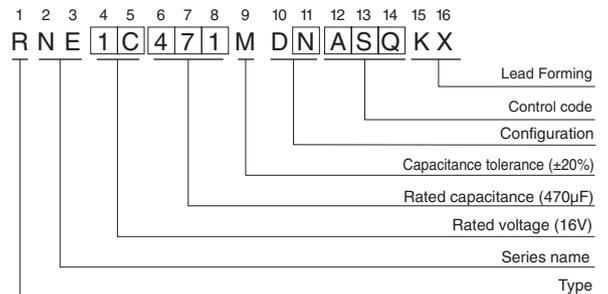


| φD×L | φd | P | α |
|---------|-----|-----|-----|
| 5×8 | 0.5 | 2.0 | 1.0 |
| 5×10 | 0.5 | 2.0 | 1.0 |
| 6.3×10 | 0.5 | 2.5 | 1.0 |
| 8×6 | 0.6 | 3.5 | 1.0 |
| 8×9 | 0.6 | 3.5 | 1.0 |
| 8×11.5 | 0.6 | 3.5 | 1.5 |
| 10×12.5 | 0.6 | 5.0 | 1.5 |

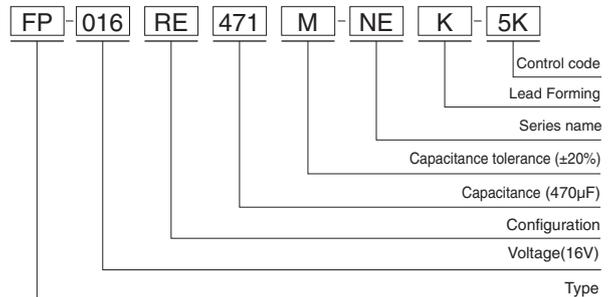
● Frequency coefficient of rated ripple current

| 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



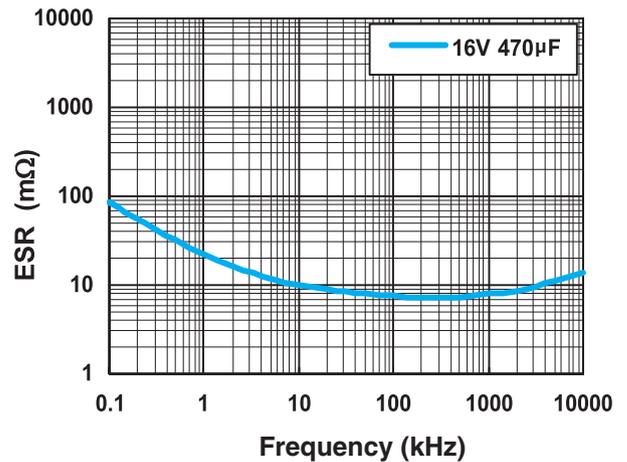
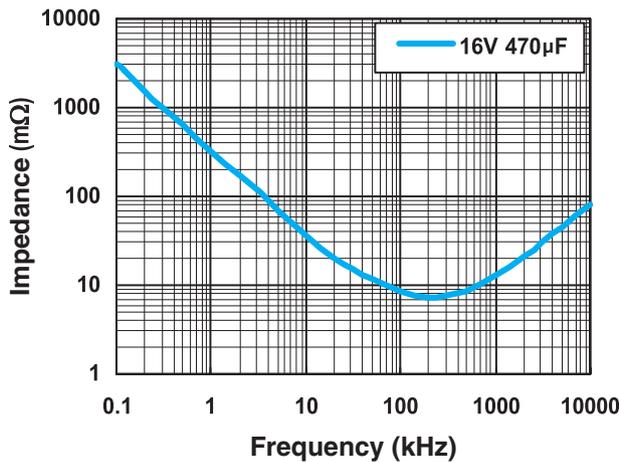
RNE

■ 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 _{rms}) (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.