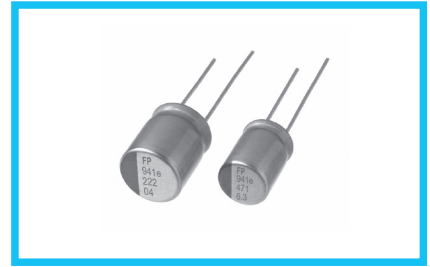
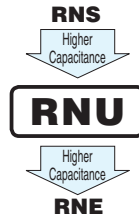


**RNU** High Capacitance



**FPCAP**

- 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).



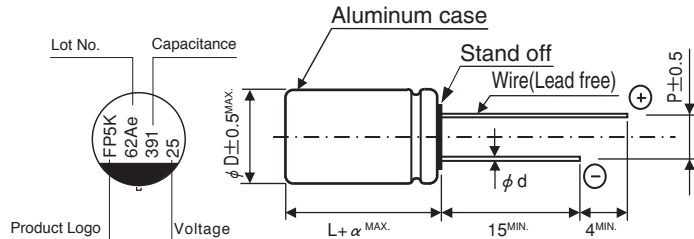
■ Specifications

| Item                          | Performance Characteristics  |   |
|-------------------------------|--|---|
| Category Temperature Range    | -55 to +105°C  |   |
| Rated Voltage Range           | 2.5 to 63V   |   |
| Rated Capacitance Range       | 10 to 2700μF   |   |
| 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



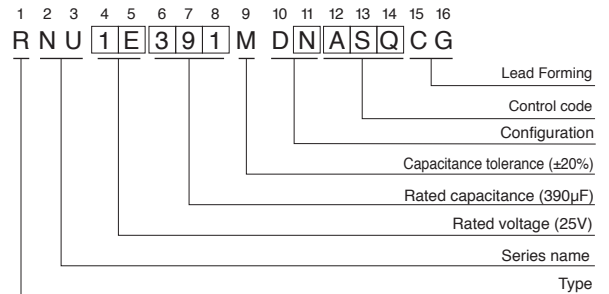
| φD×L    | φd   | P   | α   |
|---------|------|-----|-----|
| 4×5     | 0.45 | 1.5 | 1.0 |
| 6.3×10  | 0.5  | 2.5 | 1.0 |
| 8×11.5  | 0.6  | 3.5 | 1.5 |
| 10×12.5 | 0.6  | 5.0 | 1.5 |

(mm)

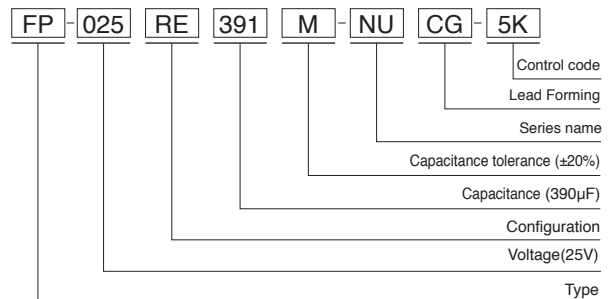
● Frequency coefficient of rated ripple current

| 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 : 25V 390μF)  
Nichicon part number



FPCAP part number



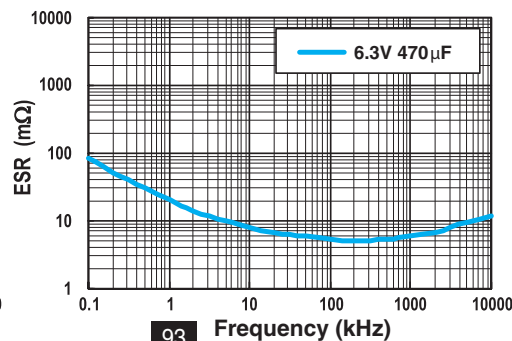
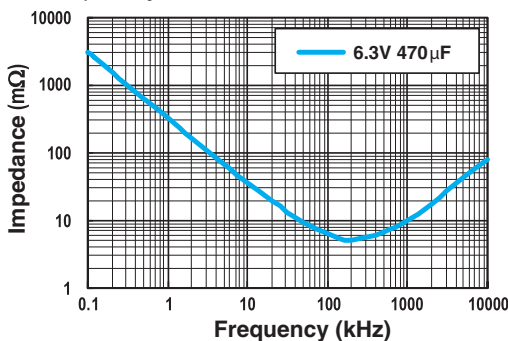
# RNU

## Standard Ratings

| 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               | 1500                   | 8×11.5              | 0.08  | 938                         | 7                      | 5700   | RNU0E152MDN1□□   | FP-2R5RE152M-NU□□    |                |                   |
|                          |                   | 2700                   | 10×12.5             | 0.08  | 1350                        | 7                      | 6100   | RNU0E272MDN1□□   | FP-2R5RE272M-NU□□    |                |                   |
| 4.0 (0G)                 | 4.6               | 820                    | 8×11.5              | 0.08  | 656                         | 7                      | 5700   | RNU0G821MDN1□□   | FP-4R0RE821M-NU□□    |                |                   |
|                          |                   | 1000                   | 8×11.5              | 0.08  | 800                         | 7                      | 5700   | RNU0G102MDN1□□   | FP-4R0RE102M-NU□□    |                |                   |
|                          |                   | 1200                   | 8×11.5              | 0.08  | 960                         | 7                      | 5700   | RNU0G122MDN1□□   | FP-4R0RE122M-NU□□    |                |                   |
|                          |                   | 1800                   | 10×12.5             | 0.08  | 1440                        | 7                      | 6100   | RNU0G182MDN1□□   | FP-4R0RE182M-NU□□    |                |                   |
|                          |                   | 2200                   | 10×12.5             | 0.08  | 1760                        | 7                      | 6100   | RNU0G222MDN1□□   | FP-4R0RE222M-NU□□    |                |                   |
|                          |                   | 220                    | 6.3×10              | 0.08  | 277                         | 20                     | 3200   | RNU0J221MDS1□□   | FP-6R3RE221M-NU□□    |                |                   |
| 6.3 (0J)                 | 7.2               | 470                    | 8×11.5              | 0.08  | 592                         | 7                      | 5700   | RNU0J471MDN1□□   | FP-6R3RE471M-NU□□    |                |                   |
|                          |                   | 680                    | 8×11.5              | 0.08  | 857                         | 7                      | 5700   | RNU0J681MDN1□□   | FP-6R3RE681M-NU□□    |                |                   |
|                          |                   | 820                    | 8×11.5              | 0.08  | 1033                        | 7                      | 5700   | RNU0J821MDN1□□   | FP-6R3RE821M-NU□□    |                |                   |
|                          |                   | 1000                   | 8×11.5              | 0.08  | 1260                        | 7                      | 5700   | RNU0J102MDN1□□   | FP-6R3RE102M-NU□□    |                |                   |
|                          |                   | 1200                   | 8×11.5              | 0.08  | 1512                        | 9                      | 6100   | RNU0J122MDN1□□   | FP-6R3RE122M-NU□□    |                |                   |
|                          |                   | 1500                   | 10×12.5             | 0.08  | 1890                        | 7                      | 6100   | RNU0J152MDN1□□   | FP-6R3RE152M-NU□□    |                |                   |
|                          |                   | 10                     | 4×5                 | 0.12  | 300                         | 220                    | 700  | RNU1A100MDS1□□   | FP-010RE100M-NU□□    |                |                   |
| 10 (1A)                  | 11.5              | ※10                    | 4×5                 | 0.12  | 300                         | 220                    | 700  | RNU1A100MDSASQ□□ | FP-010RE100M-NU□□-5K |                |                   |
|                          |                   | 820                    | 8×11.5              | 0.08  | 1640                        | 10                     | 5800   | RNU1A821MDN1□□   | FP-010RE821M-NU□□    |                |                   |
|                          |                   | 1200                   | 10×12.5             | 0.08  | 2400                        | 9                      | 6200   | RNU1A122MDN1□□   | FP-010RE122M-NU□□    |                |                   |
|                          |                   | 100                    | 6.3×10              | 0.08  | 320                         | 25                     | 2820   | RNU1C101MDS1□□   | FP-016RE101M-NU□□    |                |                   |
| 16 (1C)                  | 18.4              | ※100                   | 6.3×10              | 0.08  | 320                         | 25                     | 2820   | RNU1C101MDSASQ□□ | FP-016RE101M-NU□□-5K |                |                   |
|                          |                   | 180                    | 8×11.5              | 0.08  | 576                         | 8                      | 5700   | RNU1C181MDN1□□   | FP-016RE181M-NU□□    |                |                   |
|                          |                   | 270                    | 8×11.5              | 0.08  | 864                         | 8                      | 5000   | RNU1C271MDN1□□   | FP-016RE271M-NU□□    |                |                   |
|                          |                   | ※270                   | 8×11.5              | 0.08  | 864                         | 8                      | 5000   | RNU1C271MDNASQ□□ | FP-016RE271M-NU□□-5K |                |                   |
|                          |                   | 330                    | 8×11.5              | 0.08  | 1056                        | 8                      | 6100   | RNU1C331MDN1□□   | FP-016RE331M-NU□□    |                |                   |
|                          |                   | 470                    | 10×12.5             | 0.08  | 1504                        | 10                     | 6100   | RNU1C471MDN1□□   | FP-016RE471M-NU□□    |                |                   |
|                          |                   | ※470                   | 10×12.5             | 0.08  | 1504                        | 10                     | 6100   | RNU1C471MDNASQ□□ | FP-016RE471M-NU□□-5K |                |                   |
|                          |                   | 680                    | 10×12.5             | 0.08  | 2176                        | 10                     | 6100   | RNU1C681MDN1□□   | FP-016RE681M-NU□□    |                |                   |
|                          |                   | 20 (1D)                | 23.0                | 390   | 8×11.5                      | 0.12                   | 1560   | 14               | 4970                 | RNU1D391MDN1□□ | FP-020RE391M-NU□□ |
| 25 (1E)                  | 28.7              | 680                    | 10×12.5             | 0.12  | 2720                        | 12                     | 5400   | RNU1D681MDN1□□   | FP-020RE681M-NU□□    |                |                   |
|                          |                   | 33                     | 8×11.5              | 0.12  | 413                         | 24                     | 3600   | RNU1E330MDN1□□   | FP-025RE330M-NU□□    |                |                   |
|                          |                   | 47                     | 8×11.5              | 0.12  | 588                         | 24                     | 3600   | RNU1E470MDN1□□   | FP-025RE470M-NU□□    |                |                   |
|                          |                   | 68                     | 8×11.5              | 0.12  | 850                         | 24                     | 3600   | RNU1E680MDN1□□   | FP-025RE680M-NU□□    |                |                   |
|                          |                   | 180                    | 8×11.5              | 0.12  | 900                         | 16                     | 4650   | RNU1E181MDN1□□   | FP-025RE181M-NU□□    |                |                   |
|                          |                   | 220                    | 8×11.5              | 0.12  | 1100                        | 16                     | 4650   | RNU1E221MDN1□□   | FP-025RE221M-NU□□    |                |                   |
|                          |                   | ※220                   | 8×11.5              | 0.12  | 1100                        | 16                     | 4650   | RNU1E221MDNASQ□□ | FP-025RE221M-NU□□-5K |                |                   |
|                          |                   | 330                    | 10×12.5             | 0.12  | 1650                        | 14                     | 5000   | RNU1E331MDN1□□   | FP-025RE331M-NU□□    |                |                   |
|                          |                   | ※330                   | 10×12.5             | 0.12  | 1650                        | 14                     | 5000   | RNU1E331MDNASQ□□ | FP-025RE331M-NU□□-5K |                |                   |
|                          |                   | 390                    | 10×12.5             | 0.12  | 1950                        | 14                     | 5000   | RNU1E391MDN1□□   | FP-025RE391M-NU□□    |                |                   |
|                          |                   | ※390                   | 10×12.5             | 0.12  | 1950                        | 14                     | 5000   | RNU1E391MDNASQ□□ | FP-025RE391M-NU□□-5K |                |                   |
|                          |                   | 35 (1V)                | 40.2                | 47    | 8×11.5                      | 0.12                   | 329  | 24               | 3600                 | RNU1V470MDN1□□ | FP-035RE470M-NU□□ |
|                          |                   | 50 (1H)                | 57.5                | 150   | 10×12.5                     | 0.12                   | 1050   | 20               | 3800                 | RNU1V151MDN1□□ | FP-035RE151M-NU□□ |
|                          |                   |                        |                     | 39    | 8×11.5                      | 0.12                   | 390  | 25               | 2400                 | RNU1H390MDN1□□ | FP-050RE390M-NU□□ |
| 47                       | 10×12.5           |                        |                     | 0.12  | 470                         | 24                     | 2700   | RNU1H470MDN1□□   | FP-050RE470M-NU□□    |                |                   |
| 63 (1J)                  | 72.5              | 68                     | 10×12.5             | 0.12  | 680                         | 24                     | 2700   | RNU1H680MDN1□□   | FP-050RE680M-NU□□    |                |                   |
|                          |                   | 33                     | 8×11.5              | 0.12  | 416                         | 26                     | 2300   | RNU1J330MDN1□□   | FP-063RE330M-NU□□    |                |                   |
|                          |                   | 39                     | 10×12.5             | 0.12  | 492                         | 25                     | 2600   | RNU1J390MDN1□□   | FP-063RE390M-NU□□    |                |                   |
|                          |                   | 56                     | 10×12.5             | 0.12  | 706                         | 25                     | 2600   | RNU1J560MDN1□□   | FP-063RE560M-NU□□    |                |                   |

※ : 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.