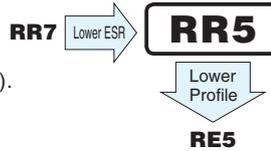


# RR5 Ultra-low ESR



- Ultra Low ESR, High ripple current.
- 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,(EU)2015/863).



## FPCAP



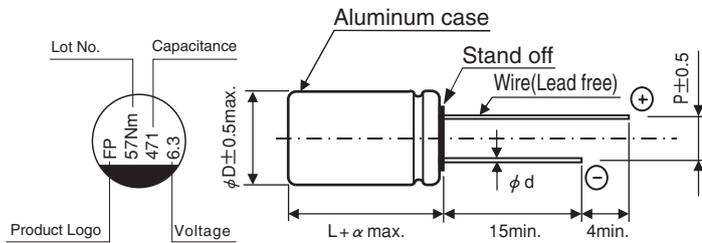
### Specifications

| Item                          | Performance Characteristics  |   |
|-------------------------------|--|---|
| Category Temperature Range    | -55 to +105°C  |   |
| Rated Voltage Range           | 2.5 to 6.3V  |   |
| Rated Capacitance Range       | 390 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 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

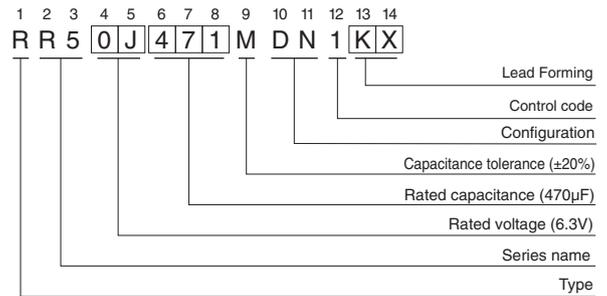


| (mm)    |     |     |     |
|---------|-----|-----|-----|
| φD×L    | φd  | P   | α   |
| 8×11.5  | 0.6 | 3.5 | 1.5 |
| 10×12.5 | 0.6 | 5.0 | 1.5 |

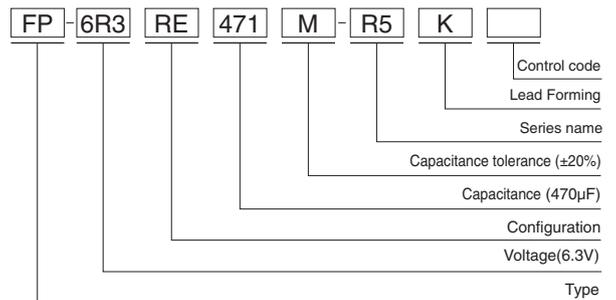
### Frequency coefficient of rated ripple current

| 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 : 6.3V 470μF) Nichicon part number



### FPCAP part number

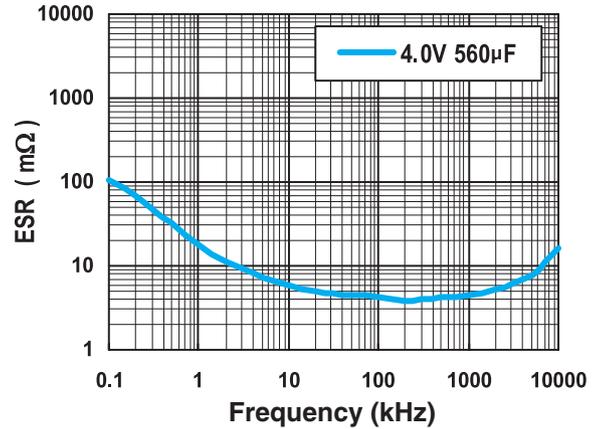
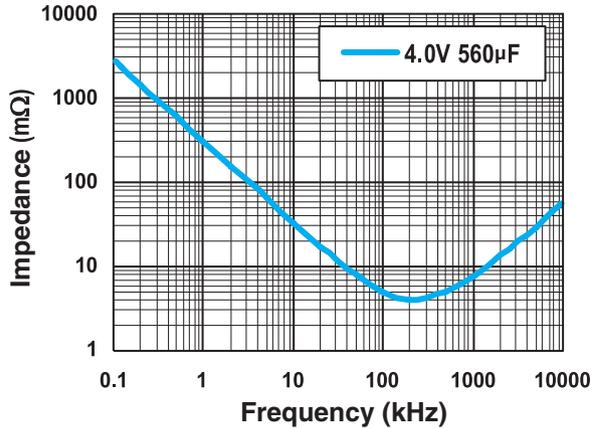


# RR5

## ■ Dimensions

| Rated Voltage (V) (code) | Surge Voltage (V) | Rated Capacitance (μF) | Case Size φD×L (mm) | tan δ | Leakage Current (μA) (at 20°C after 2 minutes) | ESR (mΩ) (20°C/100kHz) | Rated Ripple Current (mA <sub>rms</sub> ) (105°C/100kHz) | NICHICON       | FPCAP             |
|--------------------------|-------------------|------------------------|---------------------|-------|--|------------------------|--|----------------|-------------------|
| 2.5 (0E)                 | 2.8               | 560                    | 8×11.5              | 0.15  | 350  | 5                      | 6630   | RR50E561MDN1□□ | FP-2R5RE561M-R5□□ |
|                          |                   | 680                    | 8×11.5              | 0.15  | 425  | 5                      | 6630   | RR50E681MDN1□□ | FP-2R5RE681M-R5□□ |
|                          |                   | 820                    | 8×11.5              | 0.15  | 512  | 5                      | 6630   | RR50E821MDN1□□ | FP-2R5RE821M-R5□□ |
|                          |                   | 1000                   | 8×11.5              | 0.15  | 625  | 5                      | 6630   | RR50E102MDN1□□ | FP-2R5RE102M-R5□□ |
|                          |                   | 1500                   | 10×12.5             | 0.15  | 937  | 5                      | 7220   | RR50E152MDN1□□ | FP-2R5RE152M-R5□□ |
| 4.0 (0G)                 | 4.6               | 560                    | 8×11.5              | 0.15  | 560  | 5                      | 6630   | RR50G561MDN1□□ | FP-4R0RE561M-R5□□ |
|                          |                   | 820                    | 10×12.5             | 0.15  | 820  | 5                      | 7220   | RR50G821MDN1□□ | FP-4R0RE821M-R5□□ |
|                          |                   | 1200                   | 10×12.5             | 0.15  | 1200   | 5                      | 7220   | RR50G122MDN1□□ | FP-4R0RE122M-R5□□ |
| 6.3 (0J)                 | 7.2               | 390                    | 8×11.5              | 0.15  | 614  | 5                      | 6630   | RR50J391MDN1□□ | FP-6R3RE391M-R5□□ |
|                          |                   | 470                    | 8×11.5              | 0.15  | 592  | 5                      | 6630   | RR50J471MDN1□□ | FP-6R3RE471M-R5□□ |
|                          |                   | 680                    | 10×12.5             | 0.15  | 1071   | 5                      | 7220   | RR50J681MDN1□□ | FP-6R3RE681M-R5□□ |
|                          |                   | 820                    | 10×12.5             | 0.15  | 1291   | 5                      | 7220   | RR50J821MDN1□□ | FP-6R3RE821M-R5□□ |

## ■ Frequency Characteristics (The frequency characteristics are typical and not a guaranteed value.)



• For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.