

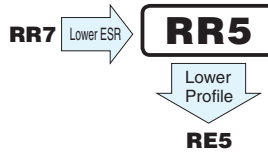
RR5 Ultra-low ESR



FPCAP



- 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).



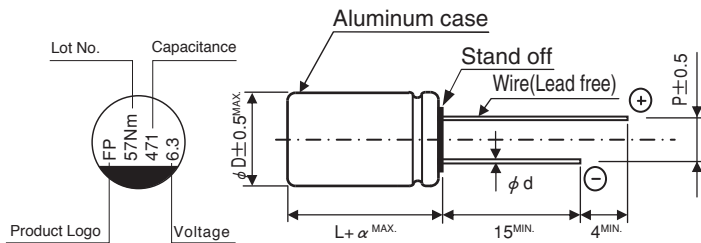
Specifications

| 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

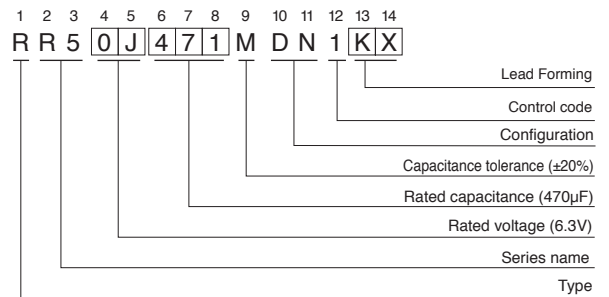


| (mm) | | | |
|---------|-----|-----|-----|
| φD×L | φd | P | α |
| 8×11.5 | 0.6 | 3.5 | 1.5 |
| 10×12.5 | 0.6 | 5.0 | 1.5 |

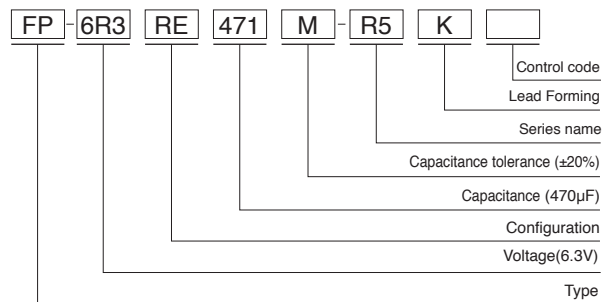
Frequency coefficient of rated ripple current

| 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

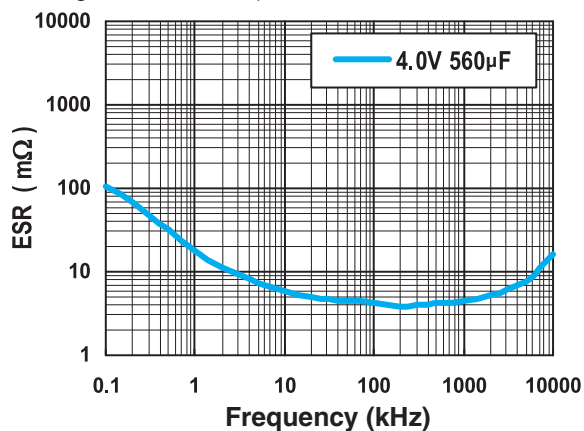
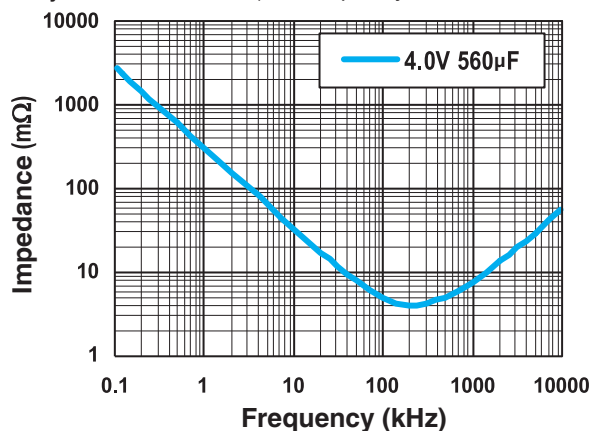


RR5

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, 100kHz) | Rated Ripple Current (mA _{RMS}) | 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 | 513 | 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 | 938 | 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 | 1292 | 5 | 7220 | RR50J821MDN1□□ | FP-6R3RE821M-R5□□ |

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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