

# RSS/RSA/RSB

High Capacitance  
(φ6.3)



# FPCAP



- Low ESR, High Capacitance, High ripple current.
- Load life of 2000 hours at 105°C.
- SMD type : Lead free reflow soldering condition at 260°C peak correspondence.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



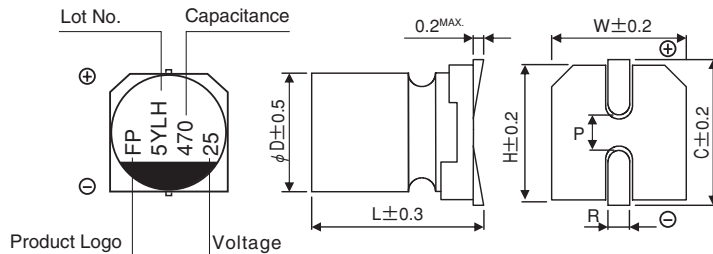
## Specifications

| Item                          | Performance Characteristics  |   |
|-------------------------------|--|---|
| Category Temperature Range    | -55 to +105°C  |   |
| Rated Voltage Range           | 2.5 to 35V   |   |
| Rated Capacitance Range       | 10 to 820μF  |   |
| 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 where the terminals protrude through the plastic platform.

※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.

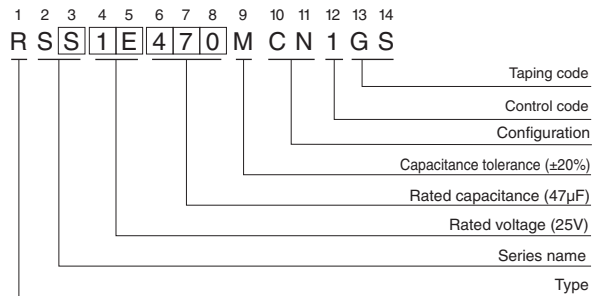
## Dimensions



| (mm)    |     |     |     |            |     |
|---------|-----|-----|-----|------------|-----|
| φD×L    | W   | H   | C   | R          | P   |
| 6.3×5.7 | 6.5 | 6.5 | 7.2 | 0.5 to 0.9 | 2.1 |
| 6.3×7.7 | 6.5 | 6.5 | 7.2 | 0.5 to 0.9 | 2.1 |

## Type numbering system (Example : 25V 47μF)

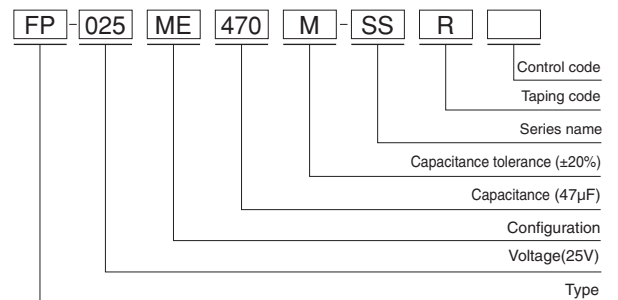
### Nichicon part number



## 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    |

## FPCAP part number

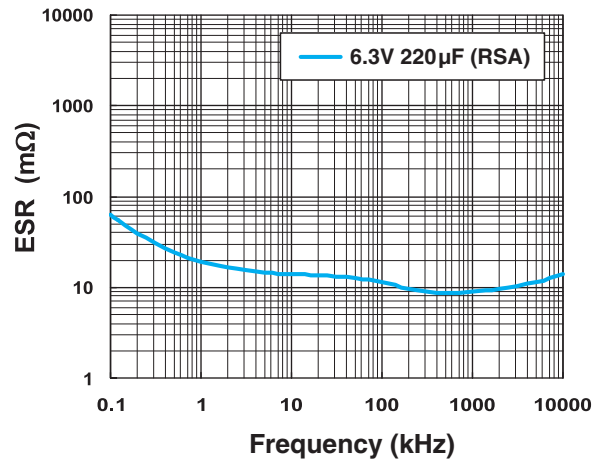
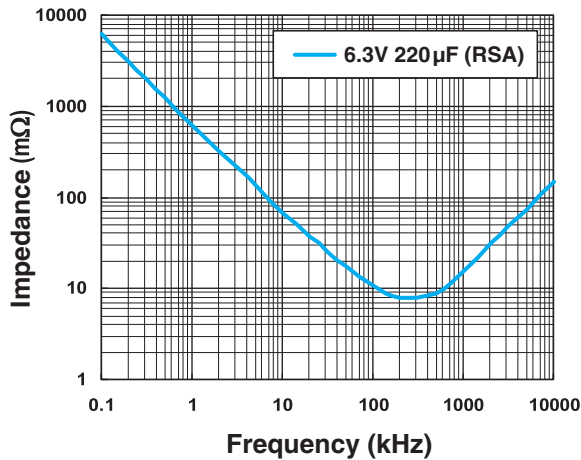


# RSS / RSA / RSB

■ 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 rms) (105°C/100kHz) | NICHICON       | FPCAP            |
|--------------------------|-------------------|------------------------|---------------------|-------|--|------------------------|--|----------------|------------------|
| 2.5 (0E)                 | 2.8               | 330                    | 6.3×5.7             | 0.12  | 700  | 14                     | 3160   | RSA0E331MCN1GS | FP-2R5ME331M-SAR |
|                          |                   | 390                    | 6.3×5.7             | 0.12  | 700  | 14                     | 3160   | RSA0E391MCN1GS | FP-2R5ME391M-SAR |
|                          |                   | 390                    | 6.3×5.7             | 0.12  | 700  | 10                     | 3650   | RSB0E391MCN1GS | FP-2R5ME391M-SBR |
|                          |                   | 470                    | 6.3×5.7             | 0.12  | 700  | 13                     | 3600   | RSA0E471MCN1GS | FP-2R5ME471M-SAR |
|                          |                   | 560                    | 6.3×5.7             | 0.12  | 700  | 25                     | 2500   | RSS0E561MCN1GS | FP-2R5ME561M-SSR |
|                          |                   | 560                    | 6.3×5.7             | 0.12  | 700  | 13                     | 3600   | RSA0E561MCN1GS | FP-2R5ME561M-SAR |
|                          |                   | 560                    | 6.3×5.7             | 0.12  | 700  | 10                     | 3800   | RSB0E561MCN1GS | FP-2R5ME561M-SBR |
|                          |                   | 820                    | 6.3×7.7             | 0.12  | 700  | 10                     | 4300   | RSA0E821MCN1GS | FP-2R5ME821M-SAR |
| 4.0 (0G)                 | 4.6               | 330                    | 6.3×5.7             | 0.12  | 700  | 14                     | 3160   | RSA0G331MCN1GS | FP-4R0ME331M-SAR |
|                          |                   | 330                    | 6.3×5.7             | 0.12  | 700  | 11                     | 3700   | RSB0G331MCN1GS | FP-4R0ME331M-SBR |
|                          |                   | 390                    | 6.3×5.7             | 0.12  | 700  | 14                     | 3160   | RSA0G391MCN1GS | FP-4R0ME391M-SAR |
| 6.3 (0J)                 | 7.2               | 100                    | 6.3×5.7             | 0.12  | 700  | 25                     | 2500   | RSS0J101MCN1GS | FP-6R3ME101M-SSR |
|                          |                   | 220                    | 6.3×5.7             | 0.12  | 700  | 25                     | 2500   | RSS0J221MCN1GS | FP-6R3ME221M-SSR |
|                          |                   | 220                    | 6.3×5.7             | 0.12  | 700  | 15                     | 3160   | RSA0J221MCN1GS | FP-6R3ME221M-SAR |
|                          |                   | 220                    | 6.3×5.7             | 0.12  | 700  | 12                     | 3500   | RSB0J221MCN1GS | FP-6R3ME221M-SBR |
|                          |                   | 270                    | 6.3×5.7             | 0.12  | 700  | 14                     | 3160   | RSA0J271MCN1GS | FP-6R3ME271M-SAR |
|                          |                   | 330                    | 6.3×5.7             | 0.12  | 700  | 25                     | 2500   | RSS0J331MCN1GS | FP-6R3ME331M-SSR |
|                          |                   | 330                    | 6.3×5.7             | 0.12  | 700  | 14                     | 3160   | RSA0J331MCN1GS | FP-6R3ME331M-SAR |
|                          |                   | 10                     | 6.3×5.7             | 0.12  | 700  | 18                     | 2900   | RSA1A121MCN1GS | FP-010ME121M-SAR |
| 10 (1A)                  | 11.5              | 220                    | 6.3×5.7             | 0.12  | 500  | 20                     | 3000   | RSA1A221MCN1GS | FP-010ME221M-SAR |
|                          |                   | 100                    | 6.3×5.7             | 0.12  | 700  | 24                     | 2490   | RSS1C101MCN1GS | FP-016ME101M-SSR |
| 16 (1C)                  | 18.4              | 100                    | 6.3×7.7             | 0.12  | 700  | 24                     | 2700   | RSA1C101MCN1GS | FP-016ME101M-SAR |
|                          |                   | 180                    | 6.3×5.7             | 0.12  | 576  | 22                     | 3300   | RSA1C181MCN1GS | FP-016ME181M-SAR |
|                          |                   | 220                    | 6.3×7.7             | 0.12  | 704  | 20                     | 3500   | RSA1C221MCN1GS | FP-016ME221M-SAR |
|                          |                   | 270                    | 6.3×7.7             | 0.12  | 864  | 15                     | 3800   | RSA1C271MCN1GS | FP-016ME271M-SAR |
|                          |                   | 20                     | 6.3×5.7             | 0.12  | 700  | 25                     | 3200   | RSA1D151MCN1GS | FP-020ME151M-SAR |
| 20 (1D)                  | 23.0              | 150                    | 6.3×7.7             | 0.12  | 600  | 25                     | 3200   | RSA1D151MCN1GS | FP-020ME151M-SAR |
| 25 (1E)                  | 28.7              | 10                     | 6.3×5.7             | 0.12  | 100  | 60                     | 1700   | RSS1E100MCN1GS | FP-025ME100M-SSR |
|                          |                   | 22                     | 6.3×5.7             | 0.12  | 110  | 40                     | 2100   | RSS1E220MCN1GS | FP-025ME220M-SSR |
|                          |                   | 27                     | 6.3×5.7             | 0.12  | 135  | 40                     | 2600   | RSS1E270MCN1GS | FP-025ME270M-SSR |
|                          |                   | 47                     | 6.3×5.7             | 0.12  | 235  | 30                     | 2800   | RSS1E470MCN1GS | FP-025ME470M-SSR |
|                          |                   | 56                     | 6.3×5.7             | 0.12  | 280  | 30                     | 2800   | RSS1E560MCN1GS | FP-025ME560M-SSR |
|                          |                   | 68                     | 6.3×5.7             | 0.12  | 340  | 30                     | 2800   | RSS1E680MCN1GS | FP-025ME680M-SSR |
|                          |                   | 100                    | 6.3×7.7             | 0.12  | 500  | 22                     | 3100   | RSA1E101MCN1GS | FP-025ME101M-SAR |
| 35 (1V)                  | 40.2              | 10                     | 6.3×5.7             | 0.12  | 100  | 60                     | 1700   | RSS1V100MCN1GS | FP-035ME100M-SSR |

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



- Taping specifications are given in page 25.
- Recommended land size, soldering by reflow are given in page 22.
- Please refer to page 3 for the minimum order quantity.