

# RS8 Low ESR / ESL, Low Profile (φ6.3)



## FPCAP



- Low ESR/ESL, High ripple current.
- Low Profile(Height 8mm).
- 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,(EU)2015/863).



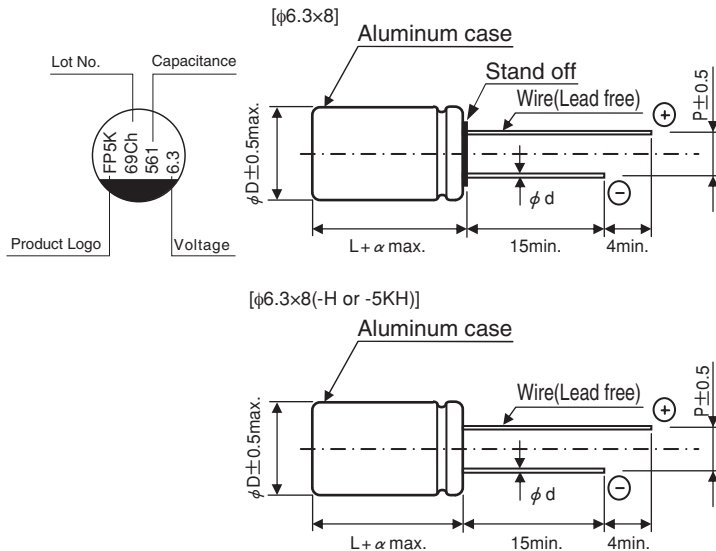
### Specifications

| Item                          | Performance Characteristics  |   |
|-------------------------------|--|---|
| Category Temperature Range    | -55 to +105°C  |   |
| Rated Voltage Range           | 2.5 to 25V   |   |
| Rated Capacitance Range       | 56 to 1200μF   |   |
| 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

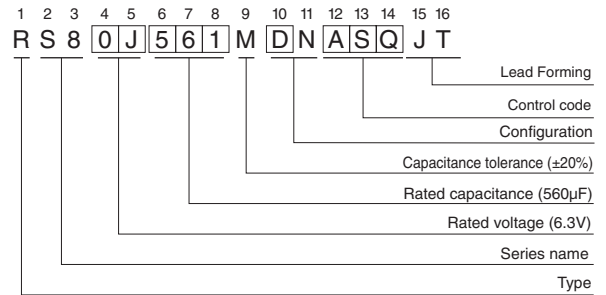


| φD×L  | φd  | P   | α   |
|-------|-----|-----|-----|
| 6.3×8 | 0.6 | 2.5 | 1.0 |

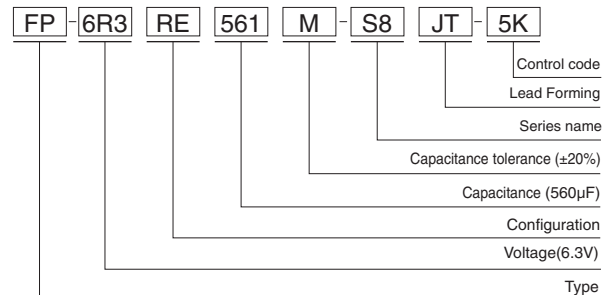
### Frequency coefficient of rated ripple current

| 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 560μF) Nichicon part number



### FPCAP part number



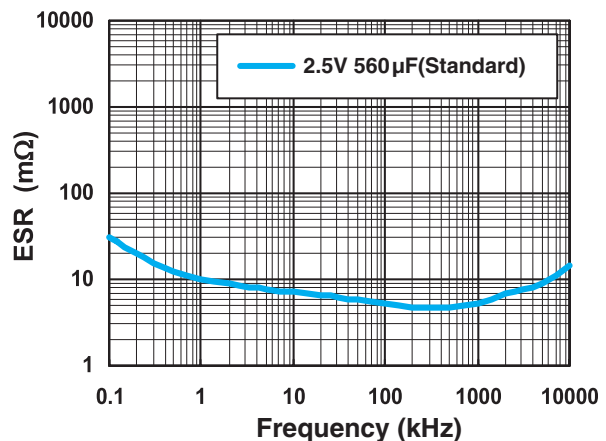
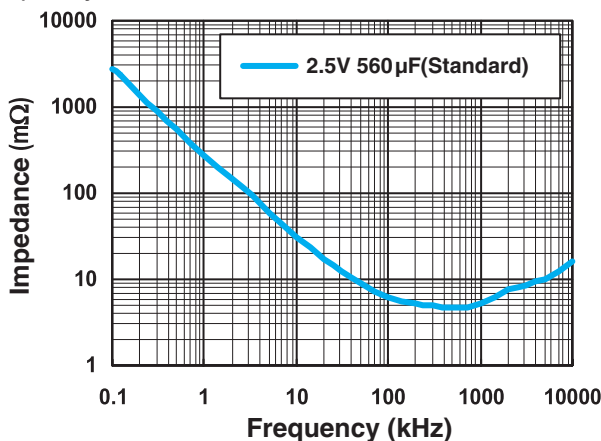
# RS8

## ■ 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) | ESL (Typ.) (nH, 40MHz) | Rated Ripple Current (mA rms) (105°C/100kHz) | NICHICON         | FPCAP                 |
|--------------------------|-------------------|------------------------|---------------------|-------|--|------------------------|------------------------|--|------------------|-----------------------|
| 2.5 (0E)                 | 2.8               | 330                    | 6.3×8               | 0.10  | 500  | 7                      | 2                      | 5600   | RS80E331MDN1□□   | FP-2R5RE331M-S8□□     |
|                          |                   | 330                    | 6.3×8               | 0.10  | 500  | 7                      | 2                      | 5600   | RS80E331MCN1□□   | FP-2R5RE331M-S8□□-H   |
|                          |                   | *330                   | 6.3×8               | 0.10  | 500  | 7                      | 2                      | 5600   | RS80E331MDNASQ□□ | FP-2R5RE331M-S8□□-5K  |
|                          |                   | *330                   | 6.3×8               | 0.10  | 500  | 7                      | 2                      | 5600   | RS80E331MCNASQ□□ | FP-2R5RE331M-S8□□-5KH |
|                          |                   | 470                    | 6.3×8               | 0.10  | 500  | 7                      | 2                      | 5600   | RS80E471MDN1□□   | FP-2R5RE471M-S8□□     |
|                          |                   | 470                    | 6.3×8               | 0.10  | 500  | 7                      | 2                      | 5600   | RS80E471MCN1□□   | FP-2R5RE471M-S8□□-H   |
|                          |                   | *470                   | 6.3×8               | 0.10  | 500  | 7                      | 2                      | 5600   | RS80E471MDNASQ□□ | FP-2R5RE471M-S8□□-5K  |
|                          |                   | *470                   | 6.3×8               | 0.10  | 500  | 7                      | 2                      | 5600   | RS80E471MCNASQ□□ | FP-2R5RE471M-S8□□-5KH |
|                          |                   | 560                    | 6.3×8               | 0.10  | 500  | 7                      | 2                      | 5600   | RS80E561MDN1□□   | FP-2R5RE561M-S8□□     |
|                          |                   | 560                    | 6.3×8               | 0.10  | 500  | 7                      | 2                      | 5600   | RS80E561MCN1□□   | FP-2R5RE561M-S8□□-H   |
|                          |                   | *560                   | 6.3×8               | 0.10  | 500  | 7                      | 2                      | 5600   | RS80E561MDNASQ□□ | FP-2R5RE561M-S8□□-5K  |
|                          |                   | *560                   | 6.3×8               | 0.10  | 500  | 7                      | 2                      | 5600   | RS80E561MCNASQ□□ | FP-2R5RE561M-S8□□-5KH |
|                          |                   | 820                    | 6.3×8               | 0.10  | 512  | 7                      | 2                      | 5600   | RS80E821MDN1□□   | FP-2R5RE821M-S8□□     |
|                          |                   | 820                    | 6.3×8               | 0.10  | 512  | 7                      | 2                      | 5600   | RS80E821MCN1□□   | FP-2R5RE821M-S8□□-H   |
|                          |                   | *820                   | 6.3×8               | 0.10  | 512  | 7                      | 2                      | 5600   | RS80E821MDNASQ□□ | FP-2R5RE821M-S8□□-5K  |
|                          |                   | *820                   | 6.3×8               | 0.10  | 512  | 7                      | 2                      | 5600   | RS80E821MCNASQ□□ | FP-2R5RE821M-S8□□-5KH |
| 1200                     | 6.3×8             | 0.10                   | 750                 | 7     | 2  | 5600                   | RS80E122MDN1□□         | FP-2R5RE122M-S8□□                            |                  |                       |
| 1200                     | 6.3×8             | 0.10                   | 750                 | 7     | 2  | 5600                   | RS80E122MCN1□□         | FP-2R5RE122M-S8□□-H                          |                  |                       |
| 4.0 (0G)                 | 4.6               | 560                    | 6.3×8               | 0.10  | 560  | 7                      | 2                      | 5000   | RS80G561MDN1□□   | FP-4R0RE561M-S8□□     |
|                          |                   | 560                    | 6.3×8               | 0.10  | 560  | 7                      | 2                      | 5000   | RS80G561MCN1□□   | FP-4R0RE561M-S8□□-H   |
|                          |                   | *560                   | 6.3×8               | 0.10  | 560  | 7                      | 2                      | 5000   | RS80G561MDNASQ□□ | FP-4R0RE561M-S8□□-5K  |
|                          |                   | *560                   | 6.3×8               | 0.10  | 560  | 7                      | 2                      | 5000   | RS80G561MCNASQ□□ | FP-4R0RE561M-S8□□-5KH |
| 6.3 (0J)                 | 7.2               | 330                    | 6.3×8               | 0.10  | 519  | 8                      | 2                      | 5000   | RS80J331MDN1□□   | FP-6R3RE331M-S8□□     |
|                          |                   | 330                    | 6.3×8               | 0.10  | 519  | 8                      | 2                      | 5000   | RS80J331MCN1□□   | FP-6R3RE331M-S8□□-H   |
|                          |                   | *330                   | 6.3×8               | 0.10  | 519  | 8                      | 2                      | 5000   | RS80J331MDNASQ□□ | FP-6R3RE331M-S8□□-5K  |
|                          |                   | *330                   | 6.3×8               | 0.10  | 519  | 8                      | 2                      | 5000   | RS80J331MCNASQ□□ | FP-6R3RE331M-S8□□-5KH |
|                          |                   | 470                    | 6.3×8               | 0.10  | 740  | 8                      | 2                      | 5000   | RS80J471MDN1□□   | FP-6R3RE471M-S8□□     |
|                          |                   | 470                    | 6.3×8               | 0.10  | 740  | 8                      | 2                      | 5000   | RS80J471MCN1□□   | FP-6R3RE471M-S8□□-H   |
|                          |                   | *470                   | 6.3×8               | 0.10  | 740  | 8                      | 2                      | 5000   | RS80J471MDNASQ□□ | FP-6R3RE471M-S8□□-5K  |
|                          |                   | *470                   | 6.3×8               | 0.10  | 740  | 8                      | 2                      | 5000   | RS80J471MCNASQ□□ | FP-6R3RE471M-S8□□-5KH |
|                          |                   | 560                    | 6.3×8               | 0.10  | 882  | 8                      | 2                      | 5000   | RS80J561MDN1□□   | FP-6R3RE561M-S8□□     |
|                          |                   | 560                    | 6.3×8               | 0.10  | 882  | 8                      | 2                      | 5000   | RS80J561MCN1□□   | FP-6R3RE561M-S8□□-H   |
|                          |                   | *560                   | 6.3×8               | 0.10  | 882  | 8                      | 2                      | 5000   | RS80J561MDNASQ□□ | FP-6R3RE561M-S8□□-5K  |
|                          |                   | *560                   | 6.3×8               | 0.10  | 882  | 8                      | 2                      | 5000   | RS80J561MCNASQ□□ | FP-6R3RE561M-S8□□-5KH |
|                          |                   | 680                    | 6.3×8               | 0.10  | 1071   | 8                      | 2                      | 4700   | RS80J681MDN1□□   | FP-6R3RE681M-S8□□     |
|                          |                   | 680                    | 6.3×8               | 0.10  | 1071   | 8                      | 2                      | 4700   | RS80J681MCN1□□   | FP-6R3RE681M-S8□□-H   |
|                          |                   | 820                    | 6.3×8               | 0.10  | 1291   | 8                      | 2                      | 4700   | RS80J821MDN1□□   | FP-6R3RE821M-S8□□     |
|                          |                   | 820                    | 6.3×8               | 0.10  | 1291   | 8                      | 2                      | 4700   | RS80J821MCN1□□   | FP-6R3RE821M-S8□□-H   |
| 16 (1C)                  | 18.4              | 100                    | 6.3×8               | 0.10  | 500  | 14                     | 2                      | 3800   | RS81C101MDN1□□   | FP-016RE101M-S8□□     |
|                          |                   | 100                    | 6.3×8               | 0.10  | 500  | 14                     | 2                      | 3800   | RS81C101MCN1□□   | FP-016RE101M-S8□□-H   |
|                          |                   | *100                   | 6.3×8               | 0.10  | 500  | 14                     | 2                      | 3800   | RS81C101MDNASQ□□ | FP-016RE101M-S8□□-5K  |
|                          |                   | *100                   | 6.3×8               | 0.10  | 500  | 14                     | 2                      | 3800   | RS81C101MCNASQ□□ | FP-016RE101M-S8□□-5KH |
|                          |                   | 270                    | 6.3×8               | 0.10  | 1296   | 15                     | 2                      | 3800   | RS81C271MDN1□□   | FP-016RE271M-S8□□     |
|                          |                   | 270                    | 6.3×8               | 0.10  | 1296   | 15                     | 2                      | 3800   | RS81C271MCN1□□   | FP-016RE271M-S8□□-H   |
|                          |                   | *270                   | 6.3×8               | 0.10  | 1296   | 15                     | 2                      | 3800   | RS81C271MDNASQ□□ | FP-016RE271M-S8□□-5K  |
|                          |                   | *270                   | 6.3×8               | 0.10  | 1296   | 15                     | 2                      | 3800   | RS81C271MCNASQ□□ | FP-016RE271M-S8□□-5KH |
|                          |                   | 330                    | 6.3×8               | 0.10  | 1584   | 12                     | 2                      | 4680   | RS81C331MDN1□□   | FP-016RE331M-S8□□     |
|                          |                   | 330                    | 6.3×8               | 0.10  | 1584   | 12                     | 2                      | 4680   | RS81C331MCN1□□   | FP-016RE331M-S8□□-H   |
|                          |                   | *330                   | 6.3×8               | 0.10  | 1584   | 12                     | 2                      | 4680   | RS81C331MDNASQ□□ | FP-016RE331M-S8□□-5K  |
|                          |                   | *330                   | 6.3×8               | 0.10  | 1584   | 12                     | 2                      | 4680   | RS81C331MCNASQ□□ | FP-016RE331M-S8□□-5KH |
| 25 (1E)                  | 28.7              | 56                     | 6.3×8               | 0.10  | 500  | 18                     | 2                      | 3500   | RS81E560MCN1□□   | FP-025RE560M-S8□□-H   |
|                          |                   | *56                    | 6.3×8               | 0.10  | 500  | 18                     | 2                      | 3500   | RS81E560MCNASQ□□ | FP-025RE560M-S8□□-5KH |
|                          |                   | 68                     | 6.3×8               | 0.10  | 510  | 18                     | 2                      | 3500   | RS81E680MCN1□□   | FP-025RE680M-S8□□-H   |
|                          |                   | *68                    | 6.3×8               | 0.10  | 510  | 18                     | 2                      | 3500   | RS81E680MCNASQ□□ | FP-025RE680M-S8□□-5KH |
|                          |                   | 82                     | 6.3×8               | 0.10  | 615  | 18                     | 2                      | 3500   | RS81E820MCN1□□   | FP-025RE820M-S8□□-H   |
|                          |                   | *82                    | 6.3×8               | 0.10  | 615  | 18                     | 2                      | 3500   | RS81E820MCNASQ□□ | FP-025RE820M-S8□□-5KH |
|                          |                   | 100                    | 6.3×8               | 0.10  | 750  | 18                     | 2                      | 3500   | RS81E101MCN1□□   | FP-025RE101M-S8□□-H   |
|                          |                   | *100                   | 6.3×8               | 0.10  | 750  | 18                     | 2                      | 3500   | RS81E101MCNASQ□□ | FP-025RE101M-S8□□-5KH |

\* : Load life 5000hours.



## ■ 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.

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View RS80J471MDNASQJT on WIN SOURCE](#)
-  [Nichicon Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management