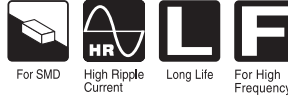
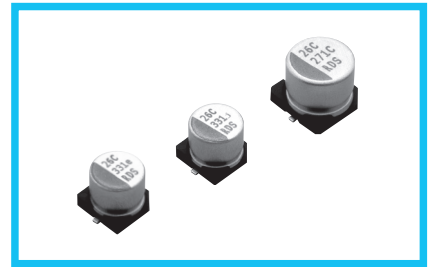


RDS High Capacitance,
Load life of 3000 hours at 125°C



FPCAP



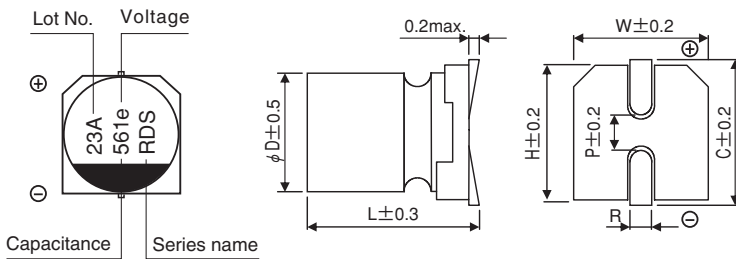
- High Capacitance, High ripple current.
- Load life of 3000 hours at 125°C.
- SMD type : Lead free reflow soldering condition at 260°C peak correspondence.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

■ Specifications

| Item | Performance Characteristics | |
|-------------------------------|---|---|
| Category Temperature Range | -55 to +125°C | |
| Rated Voltage Range | 2.5 to 16V | |
| Rated Capacitance Range | 33 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) | After 2 minutes' application of rated voltage, leakage current is not more than 0.3CV or 700(μA), whichever is greater. ※ | |
| Endurance | Test condition | 125°C, rated voltage, 3000Hrs |
| | 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 specified value |

※ 1 ESR should be measured at both of the terminal ends closest where the terminals protrude through the plastic platform. ※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)
 ※ 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.

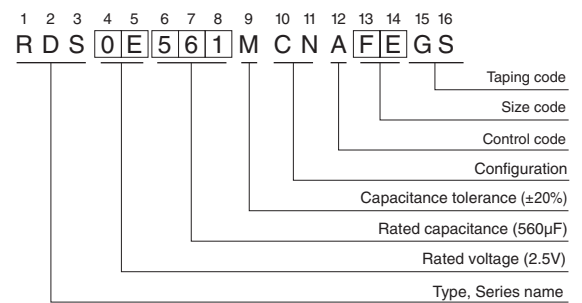
■ Dimensions



(mm)

| Size Code | φD×L | W | H | C | R | P |
|-----------|---------|-----|-----|-----|------------|-----|
| FE | 6.3×5.7 | 6.5 | 6.5 | 7.2 | 0.5 to 0.9 | 2.1 |
| HF | 8×6.7 | 8.3 | 8.3 | 9.0 | 0.8 to 1.1 | 3.2 |

Type numbering system (Example : 2.5V 560μF)



● 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 |

RDS

■ 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 (mArms/100kHz) | | Part Number |
|--------------------------|-------------------|------------------------|---------------------|-------|--|------------------------|-------------------------------------|--------------------|------------------|
| | | | | | | | ≤105°C (*3) | 105°C< ≤125°C (*3) | |
| 2.5 (0E) | 2.8 | 330 | 6.3×5.7 | 0.12 | 700 | 25 | 2450 | 1050 | RDS0E331MCNAFEFS |
| | | 390 | 6.3×5.7 | 0.12 | 700 | 25 | 2650 | 1250 | RDS0E391MCNAFEFS |
| | | 470 | 6.3×5.7 | 0.12 | 700 | 25 | 2450 | 1050 | RDS0E471MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 18 | 4700 | 2250 | RDS0E471MCNAHFGS |
| | | 500 | 6.3×5.7 | 0.12 | 700 | 25 | 2450 | 1050 | RDS0E501MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 18 | 4500 | 2050 | RDS0E501MCNAHFGS |
| | | 560 | 6.3×5.7 | 0.12 | 700 | 25 | 2450 | 1050 | RDS0E561MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 18 | 4500 | 2050 | RDS0E561MCNAHFGS |
| 680 | 8×6.7 | 0.12 | 700 | 18 | 4500 | 2050 | RDS0E681MCNAHFGS | | |
| 820 | 8×6.7 | 0.12 | 700 | 18 | 4500 | 2050 | RDS0E821MCNAHFGS | | |
| 4.0 (0G) | 4.6 | 220 | 8×6.7 | 0.12 | 700 | 18 | 2450 | 1050 | RDS0G221MCNAHFGS |
| | | 270 | 8×6.7 | 0.12 | 700 | 18 | 2450 | 1050 | RDS0G271MCNAHFGS |
| | | 330 | 6.3×5.7 | 0.12 | 700 | 25 | 2450 | 1050 | RDS0G331MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 18 | 2450 | 1050 | RDS0G331MCNAHFGS |
| | | 390 | 6.3×5.7 | 0.12 | 700 | 25 | 2450 | 1050 | RDS0G391MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 18 | 2450 | 1050 | RDS0G391MCNAHFGS |
| | | 470 | 8×6.7 | 0.12 | 700 | 18 | 2450 | 1050 | RDS0G471MCNAHFGS |
| | | 500 | 8×6.7 | 0.12 | 700 | 18 | 2450 | 1050 | RDS0G501MCNAHFGS |
| 560 | 8×6.7 | 0.12 | 700 | 18 | 2450 | 1050 | RDS0G561MCNAHFGS | | |
| 6.3 (0J) | 7.2 | 82 | 6.3×5.7 | 0.12 | 700 | 25 | 2500 | 1050 | RDS0J820MCNAFEFS |
| | | 100 | 6.3×5.7 | 0.12 | 700 | 25 | 2500 | 1050 | RDS0J101MCNAFEFS |
| | | 120 | 6.3×5.7 | 0.12 | 700 | 25 | 2500 | 1050 | RDS0J121MCNAFEFS |
| | | 150 | 6.3×5.7 | 0.12 | 700 | 25 | 2500 | 1050 | RDS0J151MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 18 | 4650 | 2350 | RDS0J151MCNAHFGS |
| | | 180 | 6.3×5.7 | 0.12 | 700 | 25 | 2500 | 1050 | RDS0J181MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 18 | 4300 | 2050 | RDS0J181MCNAHFGS |
| | | 220 | 6.3×5.7 | 0.12 | 700 | 25 | 2950 | 1450 | RDS0J221MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 18 | 4300 | 2050 | RDS0J221MCNAHFGS |
| | | 270 | 6.3×5.7 | 0.12 | 700 | 25 | 2550 | 1050 | RDS0J271MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 18 | 4300 | 2050 | RDS0J271MCNAHFGS |
| | | 330 | 6.3×5.7 | 0.12 | 700 | 25 | 3250 | 1800 | RDS0J331MCNAFEFS |
| 8×6.7 | 0.12 | | 700 | 18 | 4900 | 2400 | RDS0J331MCNAHFGS | | |
| 390 | 8×6.7 | 0.12 | 737 | 18 | 4300 | 2050 | RDS0J391MCNAHFGS | | |
| 470 | 8×6.7 | 0.12 | 888 | 18 | 4300 | 2150 | RDS0J471MCNAHFGS | | |
| 10 (1A) | 11.5 | 47 | 6.3×5.7 | 0.12 | 700 | 25 | 3700 | 1800 | RDS1A470MCNAFEFS |
| | | 56 | 6.3×5.7 | 0.12 | 700 | 25 | 3700 | 1800 | RDS1A560MCNAFEFS |
| | | 68 | 6.3×5.7 | 0.12 | 700 | 25 | 3700 | 1800 | RDS1A680MCNAFEFS |
| | | 82 | 6.3×5.7 | 0.12 | 700 | 25 | 3700 | 1800 | RDS1A820MCNAFEFS |
| | | 100 | 6.3×5.7 | 0.12 | 700 | 25 | 3700 | 1800 | RDS1A101MCNAFEFS |
| | | 120 | 6.3×5.7 | 0.12 | 700 | 25 | 3700 | 1800 | RDS1A121MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 18 | 4650 | 2450 | RDS1A121MCNAHFGS |
| | | 150 | 6.3×5.7 | 0.12 | 700 | 25 | 3700 | 1800 | RDS1A151MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 18 | 4550 | 2250 | RDS1A151MCNAHFGS |
| | | 180 | 6.3×5.7 | 0.12 | 700 | 25 | 3700 | 1800 | RDS1A181MCNAFEFS |
| 220 | 6.3×5.7 | 0.12 | 700 | 25 | 3700 | 1800 | RDS1A221MCNAFEFS | | |

(*3) Ambient temperature of a capacitor

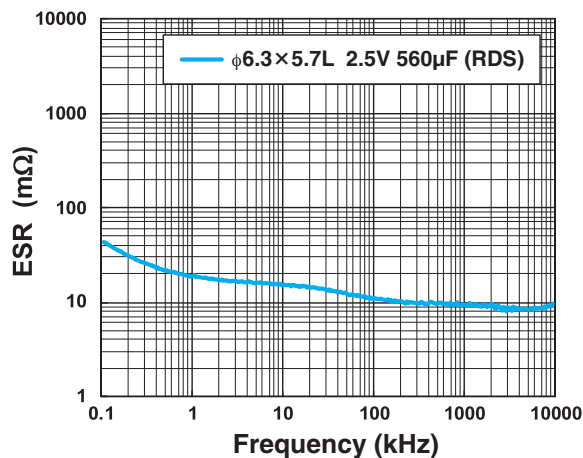
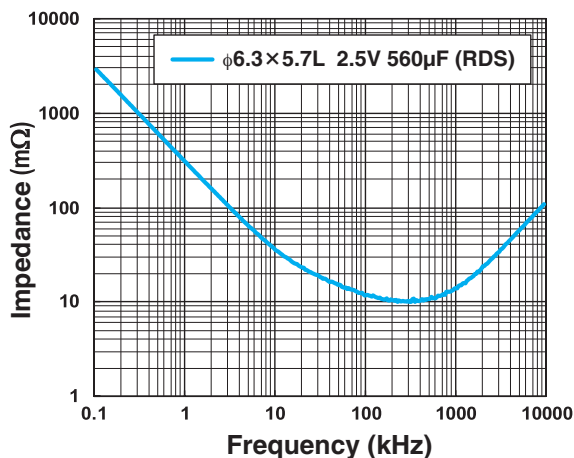
RDS

■ 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 (mArms/100kHz) | | Part Number |
|--------------------------|-------------------|------------------------|---------------------|-------|--|------------------------|-------------------------------------|---------------------|------------------|
| | | | | | | | ≤105°C (*3) | 105°C < ≤125°C (*3) | |
| 16 (1C) | 18.4 | 33 | 6.3×5.7 | 0.12 | 700 | 24 | 3850 | 2100 | RDS1C330MCNAFEFS |
| | | 39 | 6.3×5.7 | 0.12 | 700 | 24 | 3750 | 1800 | RDS1C390MCNAFEFS |
| | | 47 | 6.3×5.7 | 0.12 | 700 | 24 | 3750 | 1800 | RDS1C470MCNAFEFS |
| | | 56 | 6.3×5.7 | 0.12 | 700 | 24 | 3750 | 1800 | RDS1C560MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 23 | 4500 | 2450 | RDS1C560MCNAHFGS |
| | | 68 | 6.3×5.7 | 0.12 | 700 | 24 | 3750 | 1800 | RDS1C680MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 23 | 3600 | 1800 | RDS1C680MCNAHFGS |
| | | 82 | 6.3×5.7 | 0.12 | 700 | 24 | 3750 | 1800 | RDS1C820MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 23 | 3600 | 1800 | RDS1C820MCNAHFGS |
| | | 100 | 6.3×5.7 | 0.12 | 700 | 24 | 3700 | 1850 | RDS1C101MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 23 | 3600 | 1800 | RDS1C101MCNAHFGS |
| | | 120 | 6.3×5.7 | 0.12 | 700 | 24 | 3750 | 1800 | RDS1C121MCNAFEFS |
| | | | 8×6.7 | 0.12 | 700 | 23 | 3600 | 1800 | RDS1C121MCNAHFGS |
| | | 150 | 6.3×5.7 | 0.12 | 720 | 24 | 3750 | 1800 | RDS1C151MCNAFEFS |
| 8×6.7 | 0.12 | | 720 | 23 | 3600 | 1800 | RDS1C151MCNAHFGS | | |
| 180 | 8×6.7 | 0.12 | 864 | 23 | 3600 | 1800 | RDS1C181MCNAHFGS | | |
| 220 | 8×6.7 | 0.12 | 1056 | 23 | 3600 | 1800 | RDS1C221MCNAHFGS | | |
| 270 | 8×6.7 | 0.12 | 1296 | 23 | 3600 | 1800 | RDS1C271MCNAHFGS | | |

(*3) Ambient temperature of a capacitor

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



• For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.