

RDS

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



For SMD



High Ripple Current

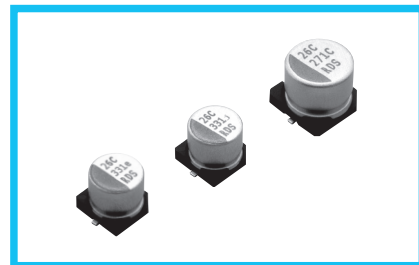


Long Life



For High Frequency

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

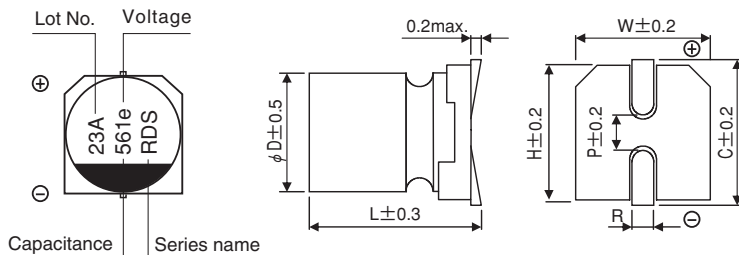
Item	Performance Characteristics	
Category Temperature Range	-55 to +125°C	
Rated Voltage Range	2.5 to 16V	
Rated Capacitance Range	33 to 820μF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Tangent of loss angle (tan δ)	Less than or equal to the specified value at 120Hz, 20°C	
ESR (※ 1)	Less than or equal 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.

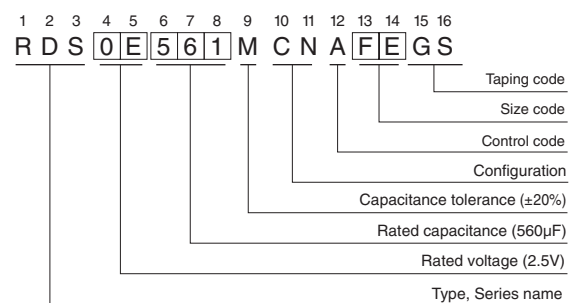
Dimensions



(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 (mA _{rms} /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	RDS0E331MCNAFECS
		390	6.3×5.7	0.12	700	25	2650	1250	RDS0E391MCNAFECS
		470	6.3×5.7	0.12	700	25	2450	1050	RDS0E471MCNAFECS
			8×6.7	0.12	700	18	4700	2250	RDS0E471MCNAHFGS
		500	6.3×5.7	0.12	700	25	2450	1050	RDS0E501MCNAFECS
			8×6.7	0.12	700	18	4500	2050	RDS0E501MCNAHFGS
		560	6.3×5.7	0.12	700	25	2450	1050	RDS0E561MCNAFECS
			8×6.7	0.12	700	18	4500	2050	RDS0E561MCNAHFGS
4.0 (0G)	4.6	680	8×6.7	0.12	700	18	4500	2050	RDS0E681MCNAHFGS
		820	8×6.7	0.12	700	18	4500	2050	RDS0E821MCNAHFGS
		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	RDS0G331MCNAFECS
			8×6.7	0.12	700	18	2450	1050	RDS0G331MCNAHFGS
		390	6.3×5.7	0.12	700	25	2450	1050	RDS0G391MCNAFECS
			8×6.7	0.12	700	18	2450	1050	RDS0G391MCNAHFGS
6.3 (0J)	7.2	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
		82	6.3×5.7	0.12	700	25	2500	1050	RDS0J820MCNAFECS
		100	6.3×5.7	0.12	700	25	2500	1050	RDS0J101MCNAFECS
		120	6.3×5.7	0.12	700	25	2500	1050	RDS0J121MCNAFECS
		150	6.3×5.7	0.12	700	25	2500	1050	RDS0J151MCNAFECS
			8×6.7	0.12	700	18	4650	2350	RDS0J151MCNAHFGS
		180	6.3×5.7	0.12	700	25	2500	1050	RDS0J181MCNAFECS
			8×6.7	0.12	700	18	4300	2050	RDS0J181MCNAHFGS
		220	6.3×5.7	0.12	700	25	2950	1450	RDS0J221MCNAFECS
			8×6.7	0.12	700	18	4300	2050	RDS0J221MCNAHFGS
10 (1A)	11.5	270	6.3×5.7	0.12	700	25	2550	1050	RDS0J271MCNAFECS
		330	8×6.7	0.12	700	18	4300	2050	RDS0J271MCNAHFGS
			6.3×5.7	0.12	700	25	3250	1800	RDS0J331MCNAFECS
		390	8×6.7	0.12	700	18	4900	2400	RDS0J331MCNAHFGS
			6.3×5.7	0.12	700	25	3700	1800	RDS1A470MCNAFECS
		47	6.3×5.7	0.12	700	25	3700	1800	RDS1A560MCNAFECS
		56	6.3×5.7	0.12	700	25	3700	1800	RDS1A680MCNAFECS
		68	6.3×5.7	0.12	700	25	3700	1800	RDS1A820MCNAFECS
		82	6.3×5.7	0.12	700	25	3700	1800	RDS1A101MCNAFECS
		100	6.3×5.7	0.12	700	25	3700	1800	RDS1A121MCNAFECS
		120	6.3×5.7	0.12	700	25	3700	1800	RDS1A121MCNAFECS
			8×6.7	0.12	700	18	4650	2450	RDS1A121MCNAHFGS
		150	6.3×5.7	0.12	700	25	3700	1800	RDS1A151MCNAFECS
			8×6.7	0.12	700	18	4550	2250	RDS1A151MCNAHFGS
		180	6.3×5.7	0.12	700	25	3700	1800	RDS1A181MCNAFECS
		220	6.3×5.7	0.12	700	25	3700	1800	RDS1A221MCNAFECS

(*3) Ambient temperature of a capacitor

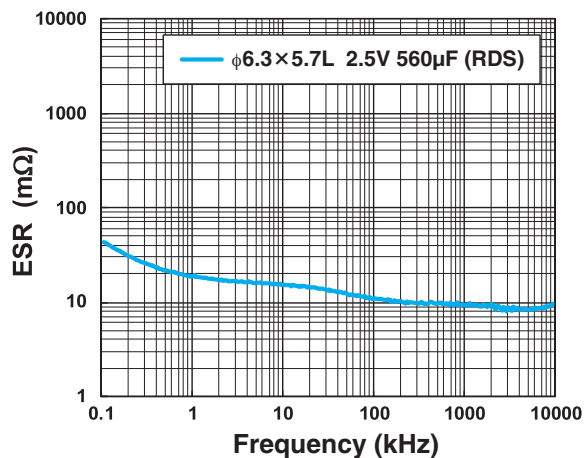
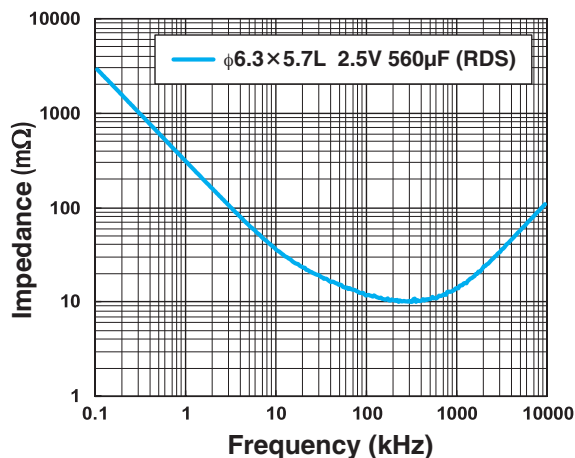
RDS

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μ F)	Case Size ϕ D×L (mm)	tan δ	Leakage Current (μ A) (at 20°C after 2 minutes)	ESR (m Ω) (20°C/100kHz)	Rated Ripple Current (mA _{rms} /100kHz)		Part Number
							$\leq 105^\circ\text{C}$ (*3)	$105^\circ\text{C} < \leq 125^\circ\text{C}$ (*3)	
16 (1C)	18.4	33	6.3×5.7	0.12	700	24	3850	2100	RDS1C330MCNAFECS
		39	6.3×5.7	0.12	700	24	3750	1800	RDS1C390MCNAFECS
		47	6.3×5.7	0.12	700	24	3750	1800	RDS1C470MCNAFECS
		56	6.3×5.7	0.12	700	24	3750	1800	RDS1C560MCNAFECS
			8×6.7	0.12	700	23	4500	2450	RDS1C560MCNAHFGS
		68	6.3×5.7	0.12	700	24	3750	1800	RDS1C680MCNAFECS
			8×6.7	0.12	700	23	3600	1800	RDS1C680MCNAHFGS
		82	6.3×5.7	0.12	700	24	3750	1800	RDS1C820MCNAFECS
			8×6.7	0.12	700	23	3600	1800	RDS1C820MCNAHFGS
		100	6.3×5.7	0.12	700	24	3700	1850	RDS1C101MCNAFECS
			8×6.7	0.12	700	23	3600	1800	RDS1C101MCNAHFGS
		120	6.3×5.7	0.12	700	24	3750	1800	RDS1C121MCNAFECS
			8×6.7	0.12	700	23	3600	1800	RDS1C121MCNAHFGS
		150	6.3×5.7	0.12	720	24	3750	1800	RDS1C151MCNAFECS
			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.