CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

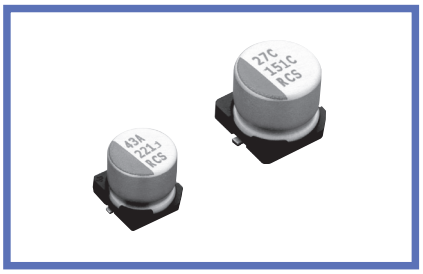
nichicon

RCS

High Capacitance,,
load life of 125°C 5000H

For SMD | High Ripple Current | Long Life | For High Frequency

FPCAP NEW



- High Capacitance, High ripple current.
- 85°C 85% 1000H; Load life of 5000 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

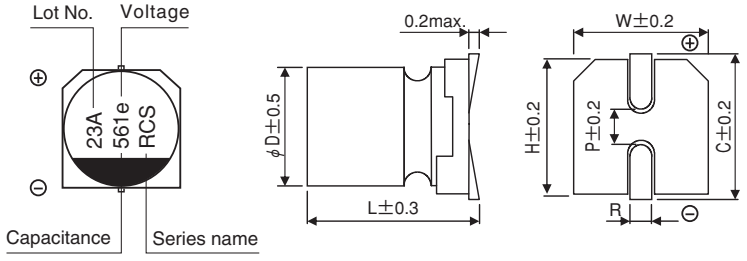
Item	Performance Characteristics	
Category Temperature Range	−55 to +125°C	
Rated Voltage Range	2.5 to 16V	
Rated Capacitance Range	33 to 820µF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Tangent of loss angle (tan δ)	Less than or equal to the specified value at 120Hz, 20°C	
ESR (※1)	Less than or equal 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, 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 specified value
Damp Heat (Steady State)	Test condition	Capacitors are restored to 20°C after the rated voltage is applied for 1K hours at 85°C85% RH.
	Capacitance change	Within ±20% of initial value before test
	tan δ	150% or less than the initial specified value
	ESR (※1)	200% 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.

※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.

※ I : Leakage Current (µA), C : Rated Capacitance (µF), V : Rated Voltage (V)

Dimensions



(mm)

Size Code	φD×L	W	H	C	R	P
FE	6.3×5.8	6.5	6.5	7.2	0.5 to 0.9	2.1
HF	8×6.8	8.3	8.3	9.0	0.8 to 1.1	3.2

Type numbering system (Example : 2.5V 560µF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
R	C	S	0	E	5	6	1	M	C	N	A	F	E	G	S

- Taping code
- Size code
- Control code
- Configuration
- Capacitance tolerance (±20%)
- Rated capacitance (560µF)
- Rated voltage (2.5V)
- Type, Series name

Frequency coefficient of rated ripple current

Frequency	120 Hz	1 kHz	10 kHz	100 kHz	300 kHz or more
Coefficient	0.10	0.45	0.50	1.00	1.00

● Dimension table in next page.

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■Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20℃ after 2 minutes)	ESR (mΩ) (20℃/100kHz)	Rated Ripple Current (mArms/100kHz) ≦105℃ (*3)	Rated Ripple Current (mArms/100kHz) 105℃< ≦125℃ (*3)	Part Number
2.5 (0E)	2.8	330	6.3×5.8	0.12	700	25	2450	1050	RCS0E331MCNAFEGS
		390	6.3×5.8	0.12	700	25	2650	1250	RCS0E391MCNAFEGS
		470	6.3×5.8	0.12	700	25	2450	1050	RCS0E471MCNAFEGS
			8×6.8	0.12	700	18	4700	2250	RCS0E471MCNAHFGS
		500	6.3×5.8	0.12	700	25	2450	1050	RCS0E501MCNAFEGS
			8×6.8	0.12	700	18	4500	2050	RCS0E501MCNAHFGS
		560	6.3×5.8	0.12	700	25	2450	1050	RCS0E561MCNAFEGS
			8×6.8	0.12	700	18	4500	2050	RCS0E561MCNAHFGS
		680	8×6.8	0.12	700	18	4500	2050	RCS0E681MCNAHFGS
		820	8×6.8	0.12	700	18	4500	2050	RCS0E821MCNAHFGS
4.0 (0G)	4.6	220	8×6.8	0.12	700	18	2450	1050	RCS0G221MCNAHFGS
		270	8×6.8	0.12	700	18	2450	1050	RCS0G271MCNAHFGS
		330	6.3×5.8	0.12	700	25	2450	1050	RCS0G331MCNAFEGS
			8×6.8	0.12	700	18	2450	1050	RCS0G331MCNAHFGS
		390	6.3×5.8	0.12	700	25	2450	1050	RCS0G391MCNAFEGS
			8×6.8	0.12	700	18	2450	1050	RCS0G391MCNAHFGS
		470	8×6.8	0.12	700	18	2450	1050	RCS0G471MCNAHFGS
		500	8×6.8	0.12	700	18	2450	1050	RCS0G501MCNAHFGS
		560	8×6.8	0.12	700	18	2450	1050	RCS0G561MCNAHFGS
6.3 (0J)	7.2	82	6.3×5.8	0.12	700	25	2500	1050	RCS0J820MCNAFEGS
		100	6.3×5.8	0.12	700	25	2500	1050	RCS0J101MCNAFEGS
		120	6.3×5.8	0.12	700	25	2500	1050	RCS0J121MCNAFEGS
		150	6.3×5.8	0.12	700	25	2500	1050	RCS0J151MCNAFEGS
			8×6.8	0.12	700	18	4650	2350	RCS0J151MCNAHFGS
		180	6.3×5.8	0.12	700	25	2500	1050	RCS0J181MCNAFEGS
			8×6.8	0.12	700	18	4300	2050	RCS0J181MCNAHFGS
		220	6.3×5.8	0.12	700	25	2950	1450	RCS0J221MCNAFEGS
			8×6.8	0.12	700	18	4300	2050	RCS0J221MCNAHFGS
		270	6.3×5.8	0.12	700	25	2550	1050	RCS0J271MCNAFEGS
			8×6.8	0.12	700	18	4300	2050	RCS0J271MCNAHFGS
		330	6.3×5.8	0.12	700	25	3250	1800	RCS0J331MCNAFEGS
			8×6.8	0.12	700	18	4900	2400	RCS0J331MCNAHFGS
		390	8×6.8	0.12	737	18	4300	2050	RCS0J391MCNAHFGS
		470	8×6.8	0.12	888	18	4300	2150	RCS0J471MCNAHFGS
10 (1A)	11.5	47	6.3×5.8	0.12	700	25	3700	1800	RCS1A470MCNAFEGS
		56	6.3×5.8	0.12	700	25	3700	1800	RCS1A560MCNAFEGS
		68	6.3×5.8	0.12	700	25	3700	1800	RCS1A680MCNAFEGS
		82	6.3×5.8	0.12	700	25	3700	1800	RCS1A820MCNAFEGS
		100	6.3×5.8	0.12	700	25	3700	1800	RCS1A101MCNAFEGS
		120	6.3×5.8	0.12	700	25	3700	1800	RCS1A121MCNAFEGS
			8×6.8	0.12	700	18	4650	2450	RCS1A121MCNAHFGS
		150	6.3×5.8	0.12	700	25	3700	1800	RCS1A151MCNAFEGS
			8×6.8	0.12	700	18	4550	2250	RCS1A151MCNAHFGS
		180	6.3×5.8	0.12	700	25	3700	1800	RCS1A181MCNAFEGS
		220	6.3×5.8	0.12	700	25	3700	1800	RCS1A221MCNAFEGS

(*3) Ambient temperature of a capacitor

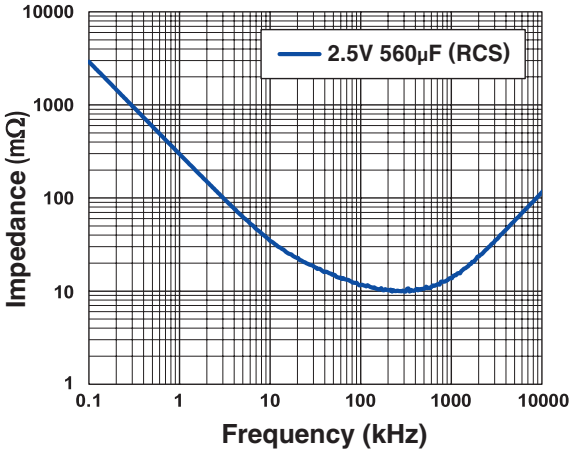
RCS

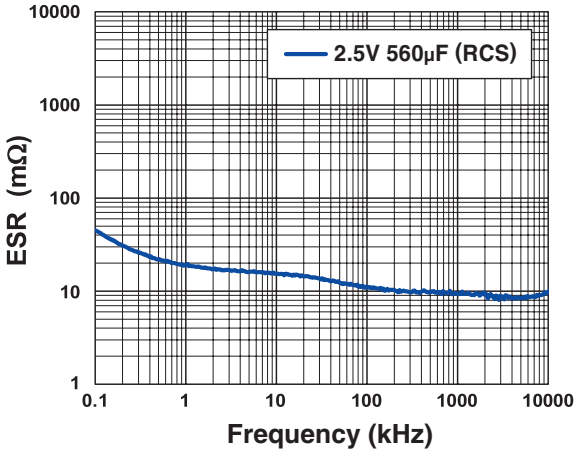
■Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20℃ after 2 minutes)	ESR (mΩ) (20℃/100kHz)	Rated Ripple Current (mArms/100kHz) ≦105℃ (*3)	Rated Ripple Current (mArms/100kHz) 105℃< ≦125℃ (*3)	Part Number
16 (1C)	18.4	33	6.3×5.8	0.12	700	24	3850	2100	RCS1C330MCNAFEGS
		39	6.3×5.8	0.12	700	24	3750	1800	RCS1C390MCNAFEGS
		47	6.3×5.8	0.12	700	24	3750	1800	RCS1C470MCNAFEGS
		56	6.3×5.8	0.12	700	24	3750	1800	RCS1C560MCNAFEGS
			8×6.8	0.12	700	23	4500	2450	RCS1C560MCNAHFGS
		68	6.3×5.8	0.12	700	24	3750	1800	RCS1C680MCNAFEGS
			8×6.8	0.12	700	23	3600	1800	RCS1C680MCNAHFGS
		82	6.3×5.8	0.12	700	24	3750	1800	RCS1C820MCNAFEGS
			8×6.8	0.12	700	23	3600	1800	RCS1C820MCNAHFGS
		100	6.3×5.8	0.12	700	24	3700	1850	RCS1C101MCNAFEGS
			8×6.8	0.12	700	23	3600	1800	RCS1C101MCNAHFGS
		120	6.3×5.8	0.12	700	24	3750	1800	RCS1C121MCNAFEGS
			8×6.8	0.12	700	23	3600	1800	RCS1C121MCNAHFGS
		150	6.3×5.8	0.12	720	24	3750	1800	RCS1C151MCNAFEGS
			8×6.8	0.12	720	23	3600	1800	RCS1C151MCNAHFGS
		180	8×6.8	0.12	864	23	3600	1800	RCS1C181MCNAHFGS
		220	8×6.8	0.12	1056	23	3600	1800	RCS1C221MCNAHFGS

(*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.