

RPS / RPA

Standard
($\phi 6.3$, $\phi 8$, $\phi 10$)



For SMD



High Ripple Current



Low Impedance



For High Frequency

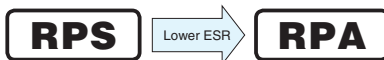


Anti-Solvent Feature

FPCAP

Expanded

- High voltage (to 63V), Low ESR, 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).



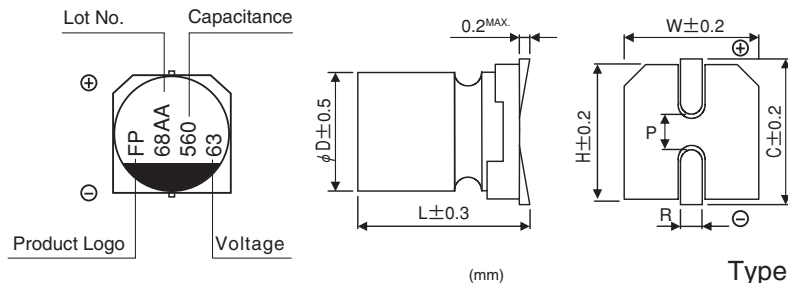
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	2.5 to 63V	
Rated Capacitance Range	8.2 to 1500 μ F	
Capacitance Tolerance	$\pm 20\%$ 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 $\pm 20\%$ 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



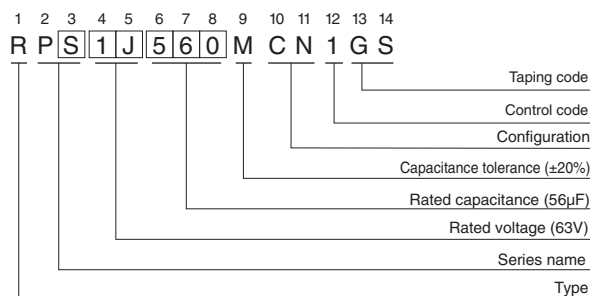
$\phi D \times L$	W	H	C	R	P
6.3 $\times$ 5.7	6.5	6.5	7.2	0.5 to 0.9	2.1
8 $\times$ 6.7	8.3	8.3	9.0	0.8 to 1.1	3.2
8 $\times$ 11.7	8.3	8.3	9.0	0.8 to 1.1	3.2
10 $\times$ 7.7	10.3	10.3	11.0	0.8 to 1.1	4.6
10 $\times$ 12.4	10.3	10.3	11.0	0.8 to 1.1	4.6

Frequency coefficient of rated ripple current

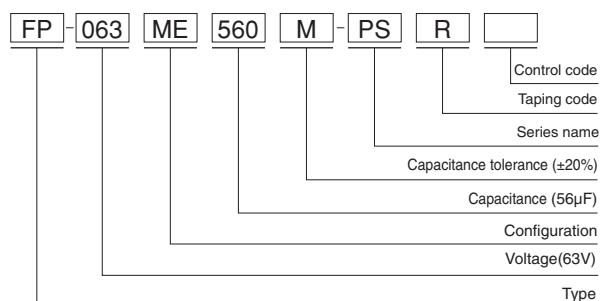
Frequency	120 Hz	1 kHz	10 kHz	100 kHz	300 kHz
Coefficient	0.10	0.45	0.50	1.00	1.00

Type numbering system (Example : 63V 56 μ F)

Nichicon part number



FPCAP part number



• Dimension table in next page.

RPS / RPA

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mA _{rms}) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	680	8×11.7	0.12	425	13	4500	RPS0E681MCN1GS	FP-2R5ME681M-PSR
		1500	10×12.4	0.12	938	10	5500	RPS0E152MCN1GS	FP-2R5ME152M-PSR
4.0 (0G)	4.6	100	6.3×5.7	0.12	80	35	2200	RPS0G101MCN1GS	FP-4R0ME101M-PSR
		220	8×6.7	0.12	176	30	2700	RPS0G221MCN1GS	FP-4R0ME221M-PSR
		330	8×6.7	0.12	264	30	2700	RPS0G331MCN1GS	FP-4R0ME331M-PSR
		470	10×7.7	0.12	376	22	3800	RPS0G471MCN1GS	FP-4R0ME471M-PSR
		560	8×11.7	0.12	448	13	4500	RPS0G561MCN1GS	FP-4R0ME561M-PSR
		560	8×11.7	0.12	448	9	5400	RPA0G561MCN1GS	FP-4R0ME561M-PAR
		680	10×7.7	0.12	544	22	3800	RPS0G681MCN1GS	FP-4R0ME681M-PSR
		1200	10×12.4	0.12	960	12	5500	RPS0G122MCN1GS	FP-4R0ME122M-PSR
6.3 (0J)	7.2	82	6.3×5.7	0.12	103	35	2200	RPS0J820MCN1GS	FP-6R3ME820M-PSR
		150	8×6.7	0.12	189	30	2600	RPS0J151MCN1GS	FP-6R3ME151M-PSR
		180	8×6.7	0.12	227	30	2600	RPS0J181MCN1GS	FP-6R3ME181M-PSR
		330	10×7.7	0.12	416	22	3600	RPS0J331MCN1GS	FP-6R3ME331M-PSR
		470	8×11.7	0.15	592	15	4300	RPS0J471MCN1GS	FP-6R3ME471M-PSR
		470	10×7.7	0.12	592	18	4300	RPA0J471MCN1GS	FP-6R3ME471M-PAR
		560	8×11.7	0.15	706	14	4400	RPS0J561MCN1GS	FP-6R3ME561M-PSR
		680	10×12.4	0.15	643	13	5200	RPS0J681MCN1GS	FP-6R3ME681M-PSR
		820	10×12.4	0.15	775	12	5500	RPS0J821MCN1GS	FP-6R3ME821M-PSR
		1000	10×12.4	0.15	945	12	5500	RPS0J102MCN1GS	FP-6R3ME102M-PSR
10 (1A)	11.5	47	6.3×5.7	0.12	94	40	2100	RPS1A470MCN1GS	FP-010ME470M-PSR
		56	6.3×5.7	0.12	112	40	2100	RPS1A560MCN1GS	FP-010ME560M-PSR
		120	8×6.7	0.12	240	30	2600	RPS1A121MCN1GS	FP-010ME121M-PSR
		270	10×7.7	0.12	540	25	3500	RPS1A271MCN1GS	FP-010ME271M-PSR
		330	8×11.7	0.15	660	17	4000	RPS1A331MCN1GS	FP-010ME331M-PSR
		330	10×7.7	0.12	660	20	3600	RPA1A331MCN1GS	FP-010ME331M-PAR
16 (1C)	18.4	560	10×12.4	0.15	840	13	5300	RPS1A561MCN1GS	FP-010ME561M-PSR
		33	6.3×5.7	0.10	211	40	1700	RPS1C330MCN1GS	FP-016ME330M-PSR
		39	6.3×5.7	0.10	125	45	2000	RPS1C390MCN1GS	FP-016ME390M-PSR
		39	6.3×5.7	0.10	125	24	2500	RPA1C390MCN1GS	FP-016ME390M-PAR
		56	8×6.7	0.10	179	40	2300	RPS1C560MCN1GS	FP-016ME560M-PSR
		82	8×6.7	0.10	262	40	2300	RPS1C820MCN1GS	FP-016ME820M-PSR
		100	10×7.7	0.10	320	30	3200	RPS1C101MCN1GS	FP-016ME101M-PSR
		150	10×7.7	0.10	480	30	3200	RPS1C151MCN1GS	FP-016ME151M-PSR
		180	8×11.7	0.12	576	20	3700	RPS1C181MCN1GS	FP-016ME181M-PSR
		180	10×7.7	0.12	576	20	3600	RPA1C181MCN1GS	FP-016ME181M-PAR
		220	8×11.7	0.12	704	20	3700	RPS1C221MCN1GS	FP-016ME221M-PSR
		220	10×7.7	0.10	704	22	3450	RPA1C221MCN1GS	FP-016ME221M-PAR
		270	8×11.7	0.12	864	14	4400	RPS1C271MCN1GS	FP-016ME271M-PSR
		330	10×12.4	0.12	792	16	4800	RPS1C331MCN1GS	FP-016ME331M-PSR
		470	10×12.4	0.12	1504	9	6100	RPS1C471MCN1GS	FP-016ME471M-PSR
20 (1D)	23.0	820	10×12.4	0.12	2640	18	4200	RPS1C821MCN1GS	FP-016ME821M-PSR
		1000	10×12.4	0.12	3200	12	5400	RPS1C102MCN1GS	FP-016ME102M-PSR
25 (1E)	28.7	560	10×12.4	0.10	2240	20	3100	RPA1D561MCN1GS	FP-020ME561M-PAR
		22	8×6.7	0.12	275	50	1800	RPS1E220MCN1GS	FP-025ME220M-PSR
		100	8×11.7	0.12	500	24	3320	RPS1E101MCN1GS	FP-025ME101M-PSR
		220	8×11.7	0.12	1100	18	4400	RPS1E221MCN1GS	FP-025ME221M-PSR
		*330	10×12.4	0.08	1650	14	5000	RPS1E331MCNASQGS	FP-025ME331M-PSR-5K
35 (1V)	40.2	390	10×12.4	0.12	1950	16	4800	RPS1E391MCN1GS	FP-025ME391M-PSR
		150	10×12.4	0.12	1050	28	2600	RPS1V151MCN1GS	FP-035ME151M-PSR
50 (1H)	57.5	12	6.3×5.7	0.12	120	40	1250	RPS1H120MCN1GS	FP-050ME120M-PSR
		22	8×6.7	0.12	220	37	1550	RPS1H220MCN1GS	FP-050ME220M-PSR
		33	10×7.7	0.12	330	32	1950	RPS1H330MCN1GS	FP-050ME330M-PSR
		39	8×11.7	0.15	390	26	2300	RPS1H390MCN1GS	FP-050ME390M-PSR
		47	8×11.7	0.15	470	26	2300	RPS1H470MCN1GS	FP-050ME470M-PSR
		82	10×12.4	0.15	820	23	2800	RPS1H820MCN1GS	FP-050ME820M-PSR
63 (1J)	72.5	8.2	6.3×5.7	0.12	103	41	1200	RPS1J8R2MCN1GS	FP-063ME8R2M-PSR
		12	8×6.7	0.12	151	38	1500	RPS1J120MCN1GS	FP-063ME120M-PSR
		22	10×7.7	0.12	277	33	1900	RPS1J220MCN1GS	FP-063ME220M-PSR
		33	8×11.7	0.15	416	27	2250	RPS1J330MCN1GS	FP-063ME330M-PSR
		56	10×12.4	0.15	706	24	2700	RPS1J560MCN1GS	FP-063ME560M-PSR

- Taping specifications are given in page 28.
- Recommended land size, soldering by reflow are given in page 25.
- Please refer to page 3 for the minimum order quantity.

* : Load life 5000hours.

RHS / RHA

High Capacitance
(φ8)

- 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).



For SMD



High Ripple Current



Low Impedance



For High Frequency



Anti-Solvent Feature

RHS

Lower ESR

RHA

FPCAP Expanded



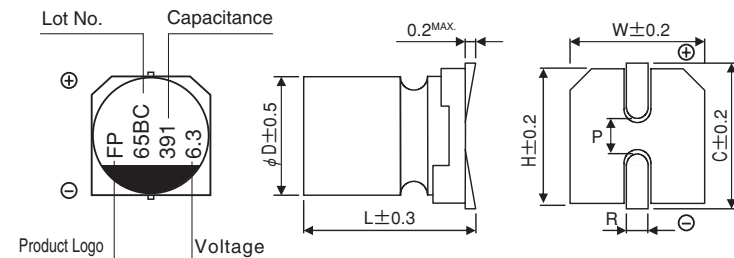
Specifications

Item	Performance Characteristics
Category Temperature Range	-55 to +105°C
Rated Voltage Range	2.5 to 35V
Rated Capacitance Range	56 to 1500μF
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.

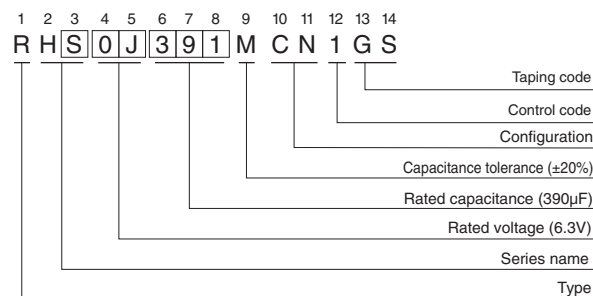
※2 Conditioning : If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

Dimensions

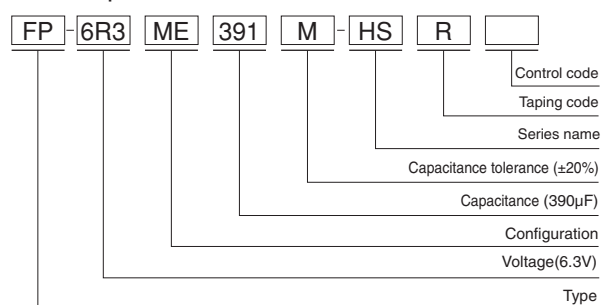


φD×L	W	H	C	R	P
8×6.7	8.3	8.3	9.0	0.8 to 1.1	3.2
8×7.7	8.3	8.3	9.0	0.8 to 1.1	3.2
8×8.7	8.3	8.3	9.0	0.8 to 1.1	3.2
8×11.7	8.3	8.3	9.0	0.8 to 1.1	3.2

Type numbering system (Example : 6.3V 390μF)
Nichicon part number



FPCAP 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

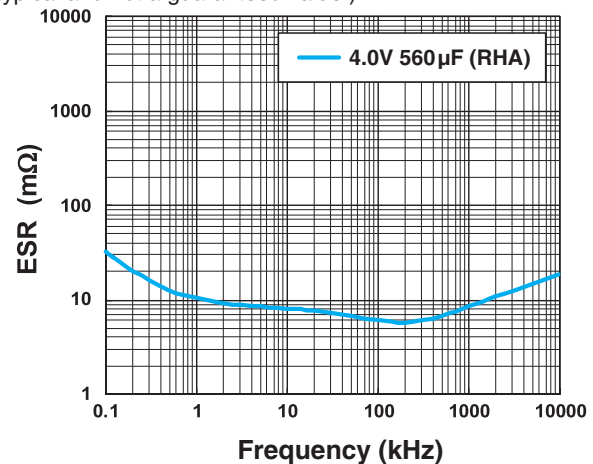
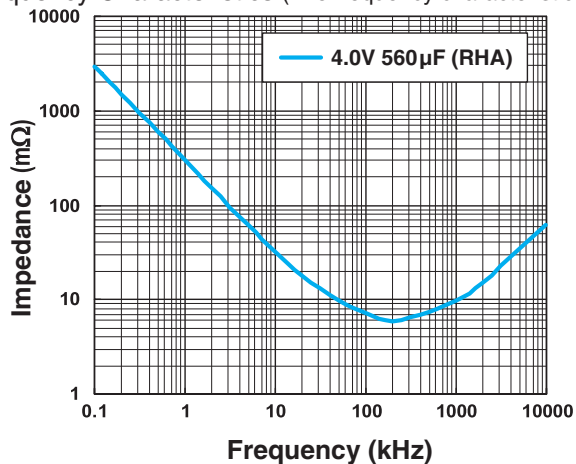
• Dimension table in next page.

RHS / RHA

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mA _{rms}) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	680	8×6.7	0.12	700	8	5000	RHA0E681MCN1GS	FP-2R5ME681M-HAR
		820	8×11.7	0.12	700	9	5400	RHS0E821MCN1GS	FP-2R5ME821M-HSR
		820	8×6.7	0.12	700	8	5000	RHA0E821MCN1GS	FP-2R5ME821M-HAR
		1000	8×7.7	0.12	750	8	5000	RHA0E102MCN1GS	FP-2R5ME102M-HAR
		1500	8×11.7	0.12	1125	9	5400	RHS0E152MCN1GS	FP-2R5ME152M-HSR
4.0 (0G)	4.6	560	8×6.7	0.12	700	16	3200	RHS0G561MCN1GS	FP-4R0ME561M-HSR
		560	8×6.7	0.12	700	8	5000	RHA0G561MCN1GS	FP-4R0ME561M-HAR
		680	8×7.7	0.12	816	8	5000	RHA0G681MCN1GS	FP-4R0ME681M-HAR
		1200	8×11.7	0.12	1440	9	5400	RHS0G122MCN1GS	FP-4R0ME122M-HSR
		1500	8×11.7	0.12	1800	12	4700	RHS0G152MCN1GS	FP-4R0ME152M-HSR
6.3 (0J)	7.2	330	8×6.7	0.12	700	9	4500	RHA0J331MCN1GS	FP-6R3ME331M-HAR
		390	8×6.7	0.12	737	18	3200	RHS0J391MCN1GS	FP-6R3ME391M-HSR
		390	8×6.7	0.12	737	9	4500	RHA0J391MCN1GS	FP-6R3ME391M-HAR
		470	8×6.7	0.12	888	9	4500	RHA0J471MCN1GS	FP-6R3ME471M-HAR
		560	8×7.7	0.12	1058	9	4500	RHA0J561MCN1GS	FP-6R3ME561M-HAR
		820	8×11.7	0.12	1550	10	5150	RHS0J821MCN1GS	FP-6R3ME821M-HSR
		1000	8×11.7	0.12	1890	10	5150	RHS0J102MCN1GS	FP-6R3ME102M-HSR
10 (1A)	11.5	150	8×6.7	0.12	700	25	3000	RHS1A151MCN1GS	FP-010ME151M-HSR
		330	8×7.7	0.12	660	19	3390	RHS1A331MCN1GS	FP-010ME331M-HSR
16 (1C)	18.4	150	8×6.7	0.12	700	22	3220	RHA1C151MCN1GS	FP-016ME151M-HAR
		270	8×6.7	0.12	864	22	3300	RHA1C271MCN1GS	FP-016ME271M-HAR
		560	8×11.7	0.12	1792	14	4950	RHS1C561MCN1GS	FP-016ME561M-HSR
20 (1D)	23.0	390	8×11.7	0.12	1560	14	4950	RHS1D391MCN1GS	FP-020ME391M-HSR
25 (1E)	28.7	100	8×8.7	0.12	700	18	4000	RHS1E101MCN1GS	FP-025ME101M-HSR
35 (1V)	40.2	56	8×8.7	0.12	392	25	3000	RHS1V560MCN1GS	FP-035ME560M-HSR
		100	8×8.7	0.12	700	25	3000	RHS1V101MCN1GS	FP-035ME101M-HSR

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



- Taping specifications are given in page 28.
- Recommended land size, soldering by reflow are given in page 25.
- Please refer to page 3 for the minimum order quantity.

RSS/RSA/RSB

High Capacitance
(φ6.3)



For SMD



High Ripple Current



Low Impedance



For High Frequency



Anti-Solvent Feature

FPCAP

Expanded

- 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).



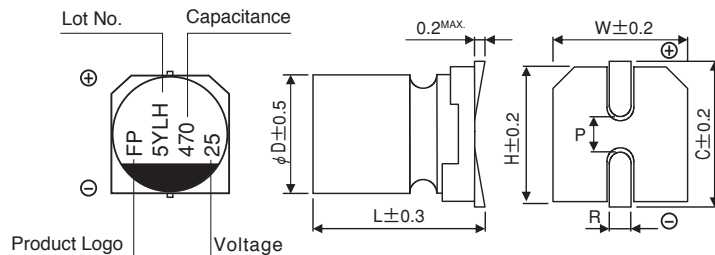
Specifications

Item	Performance Characteristics
Category Temperature Range	-55 to +105°C
Rated Voltage Range	2.5 to 35V
Rated Capacitance Range	10 to 560μF
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
Endurance	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



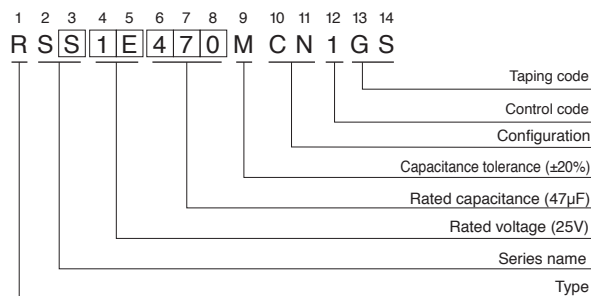
φD×L	W	H	C	R	P
6.3×5.7	6.5	6.5	7.2	0.5 to 0.9	2.1
6.3×7.7	6.5	6.5	7.2	0.5 to 0.9	2.1

(mm)

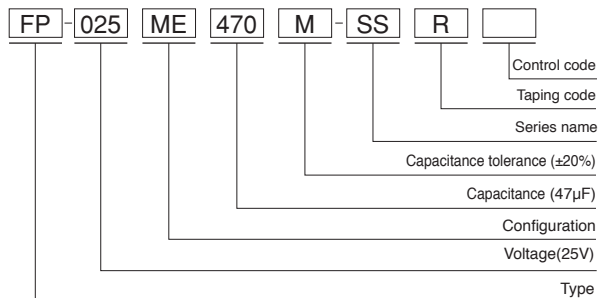
Frequency coefficient of rated ripple current

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 : 25V 47μF) Nichicon part number



FPCAP part number

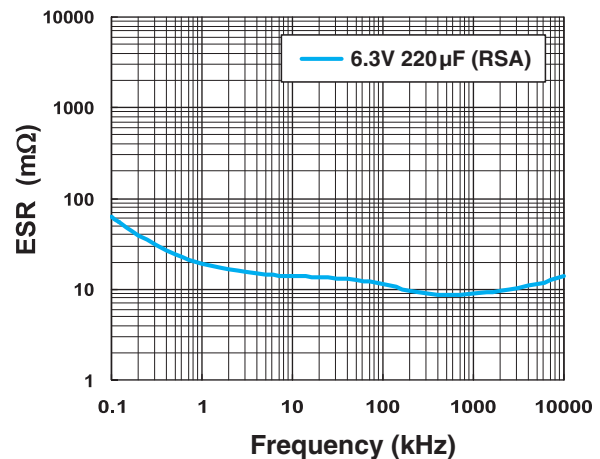
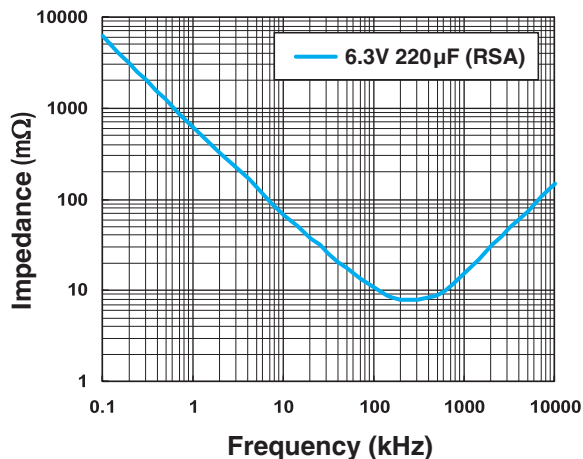


RSS / RSA / RSB

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	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
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 (1A)	11.5	120	6.3×5.7	0.12	700	18	2900	RSA1A121MCN1GS	FP-010ME121M-SAR
		220	6.3×5.7	0.12	500	20	3000	RSA1A221MCN1GS	FP-010ME221M-SAR
16 (1C)	18.4	100	6.3×5.7	0.12	700	24	2490	RSS1C101MCN1GS	FP-016ME101M-SSR
		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
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 28.
- Recommended land size, soldering by reflow are given in page 25.
- Please refer to page 3 for the minimum order quantity.

RFS/RFA

High Capacitance
($\phi 4$, $\phi 5$)



FPCAP Expanded

- 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).



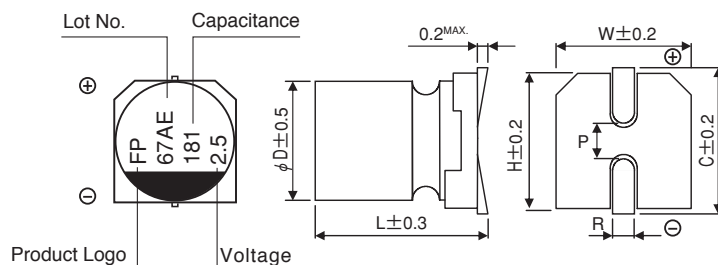
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	2.5 to 25V	
Rated Capacitance Range	10 to 330 μ F	
Capacitance Tolerance	$\pm 20\%$ 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 $\pm 20\%$ 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

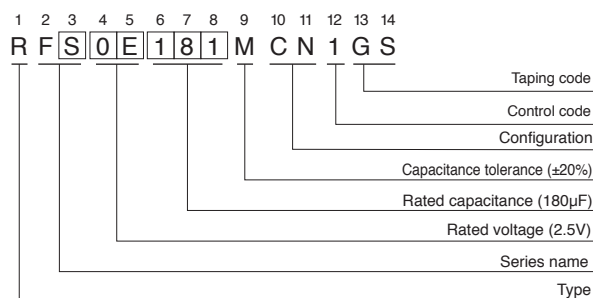
※1 ESR should be measured at both of the terminal ends closest where the terminals protrude through the plastic platform.

※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



Type numbering system (Example : 2.5V 180 μ F)
Nichicon part number



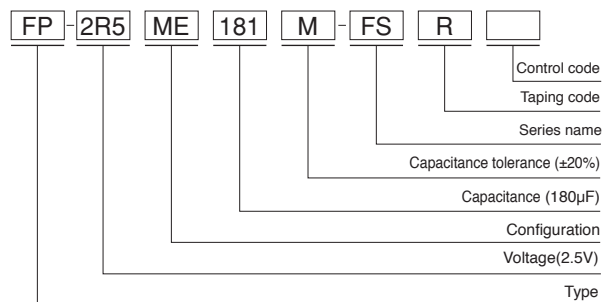
(mm)

$\phi D \times L$	W	H	C	R	P
4x5.2	4.3	4.3	5.1	0.5 to 0.9	1.0
5x5.7	5.3	5.3	5.9	0.5 to 0.9	1.4

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

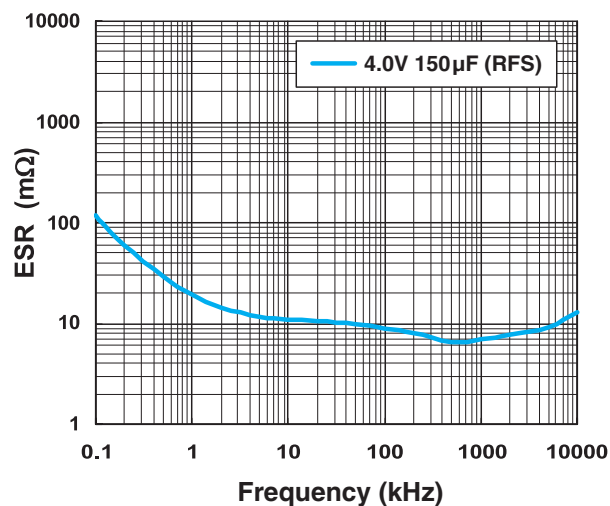
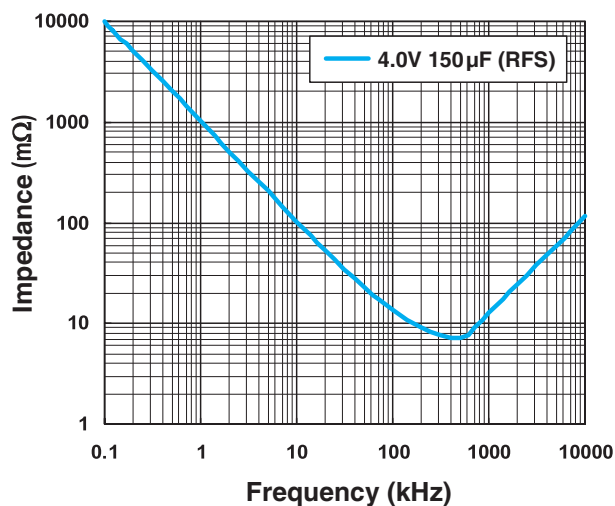


RFS / RFA

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mA) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	180	5×5.7	0.12	300	21	2670	RFS0E181MCN1GS	FP-2R5ME181M-FSR
		330	5×5.7	0.12	500	10	3300	RFA0E331MCN1GS	FP-2R5ME331M-FAR
4.0 (0G)	4.6	100	5×5.7	0.12	300	22	2610	RFS0G101MCN1GS	FP-4R0ME101M-FSR
		150	5×5.7	0.12	300	22	2610	RFS0G151MCN1GS	FP-4R0ME151M-FSR
6.3 (0J)	7.2	47	5×5.7	0.12	300	30	2000	RFS0J470MCN1GS	FP-6R3ME470M-FSR
		100	5×5.7	0.12	300	24	2500	RFS0J101MCN1GS	FP-6R3ME101M-FSR
		120	5×5.7	0.12	300	24	2500	RFS0J121MCN1GS	FP-6R3ME121M-FSR
		180	5×5.7	0.12	567	17	3390	RFA0J181MCN1GS	FP-6R3ME181M-FAR
10 (1A)	11.5	10	4×5.2	0.12	100	220	700	RFS1A100MCN1GB	FP-010ME100M-FSR
		68	5×5.7	0.12	300	30	2000	RFS1A680MCN1GS	FP-010ME680M-FSR
16 (1C)	18.4	22	5×5.7	0.12	100	45	1210	RFS1C220MCN1GS	FP-016ME220M-FSR
		33	5×5.7	0.12	105	35	2070	RFS1C330MCN1GS	FP-016ME330M-FSR
		39	5×5.7	0.12	125	35	2070	RFS1C390MCN1GS	FP-016ME390M-FSR
25 (1E)	28.7	22	5×5.7	0.12	300	40	2200	RFS1E220MCN1GS	FP-025ME220M-FSR
		27	5×5.7	0.12	135	40	2450	RFS1E270MCN1GS	FP-025ME270M-FSR

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



- Taping specifications are given in page 28.
- Recommended land size, soldering by reflow are given in page 25.
- Please refer to page 3 for the minimum order quantity.

RSL

Low Profile (φ6.3)



For SMD



Smaller



High Ripple Current



Low Impedance



For High Frequency



Anti-Solvent Feature

FPCAP

Expanded

- Low ESR, High Capacitance, High ripple current.
- Low Profile (Height 4.2mm).
- 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).



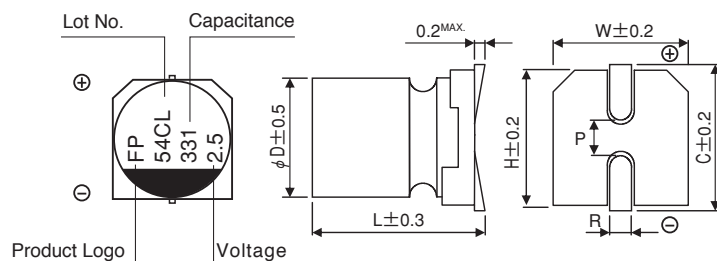
Specifications

Item	Performance Characteristics
Category Temperature Range	-55 to +105°C
Rated Voltage Range	2.5 to 25V
Rated Capacitance Range	15 to 330μF
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.

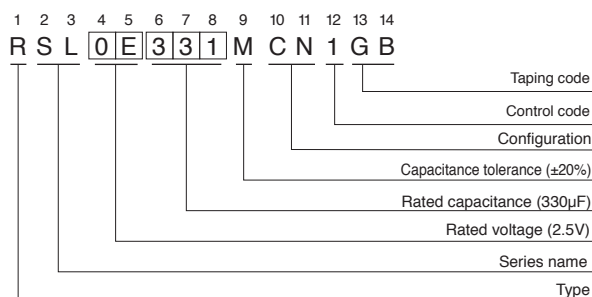
※2 Conditioning : If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

Dimensions



(mm)					
φD×L	W	H	C	R	P
6.3×4.2	6.5	6.5	7.2	0.5 to 0.9	2.1

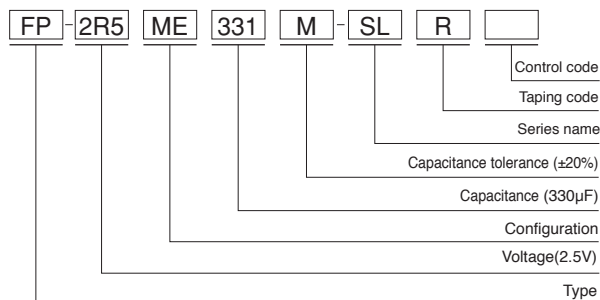
Type numbering system (Example : 2.5V 330μF)
Nichicon part number



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

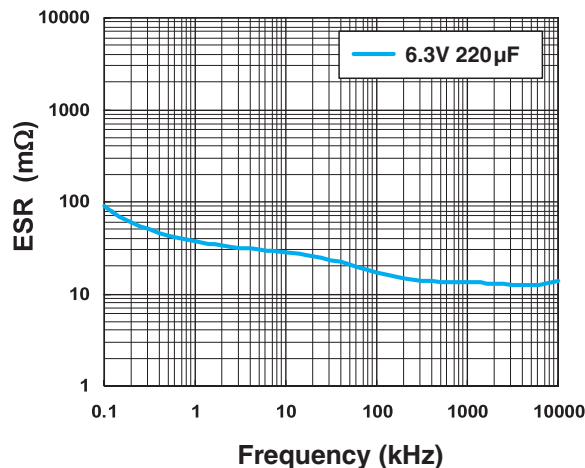
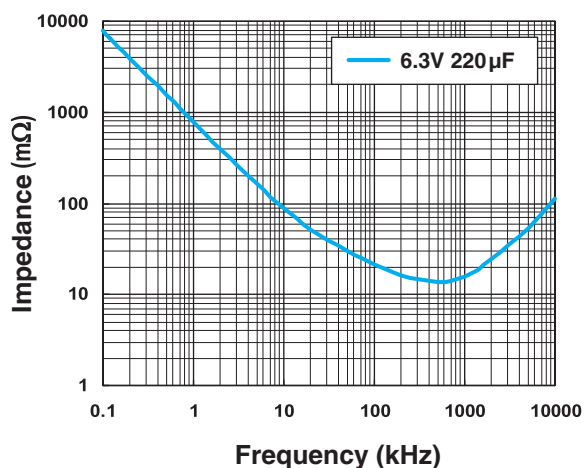


RSL

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μ F)	Case Size ϕ D×L (mm)	$\tan \delta$	Leakage Current (μ A, 2min.)	ESR (m Ω) (20°C/100kHz)	Rated Ripple Current (mA _{rms}) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	100	6.3×4.2	0.12	300	16	3500	RSL0E101MCN1GB	FP-2R5ME101M-SLR
		220	6.3×4.2	0.12	300	16	3500	RSL0E221MCN1GB	FP-2R5ME221M-SLR
		330	6.3×4.2	0.12	413	16	3500	RSL0E331MCN1GB	FP-2R5ME331M-SLR
6.3 (0J)	7.2	100	6.3×4.2	0.12	315	18	3200	RSL0J101MCN1GB	FP-6R3ME101M-SLR
		150	6.3×4.2	0.12	473	18	3200	RSL0J151MCN1GB	FP-6R3ME151M-SLR
		220	6.3×4.2	0.12	693	18	3200	RSL0J221MCN1GB	FP-6R3ME221M-SLR
10 (1A)	11.5	100	6.3×4.2	0.12	500	25	2500	RSL1A101MCN1GB	FP-010ME101M-SLR
16 (1C)	18.4	15	6.3×4.2	0.12	300	45	1900	RSL1C150MCN1GB	FP-016ME150M-SLR
25 (1E)	28.7	15	6.3×4.2	0.12	100	55	1700	RSL1E150MCN1GB	FP-025ME150M-SLR

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



- Taping specifications are given in page 28.
- Recommended land size, soldering by reflow are given in page 25.
- Please refer to page 3 for the minimum order quantity.

RNS Standard



FPCAP

- Low ESR, High ripple current.
- Load life of 2000 hours at 105°C.
- Radial lead type : Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2011/65/EU).



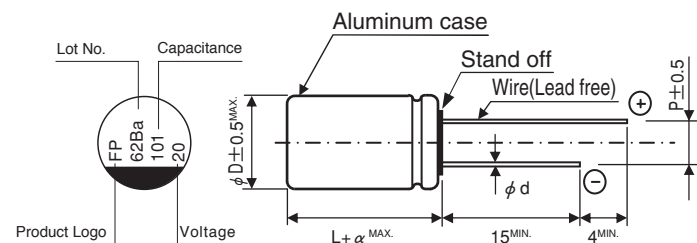
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	4.0 to 25V	
Rated Capacitance Range	10 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 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

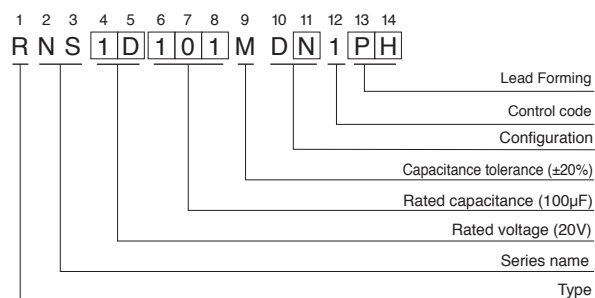


(mm)			
φD×L	φd	P	α
6.3×7	0.45	2.5	1.0
6.3×10	0.5	2.5	1.0
8×11.5	0.6	3.5	1.5
10×12.5	0.6	5.0	1.5

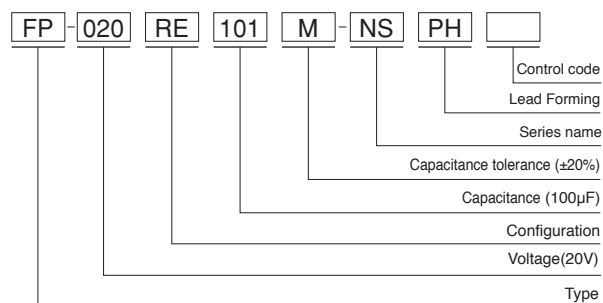
Frequency coefficient of rated ripple current

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 : 20V 100μF) Nichicon part number



FPCAP part number



RNS

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mA _{rms}) (105°C/100kHz)	NICHICON	FPCAP
4.0 (0G)	4.6	560	8×11.5	0.08	336	10	5230	RNS0G561MDN1□□	FP-4R0RE561M-NS□□
		820	10×12.5	0.08	492	10	5500	RNS0G821MDN1□□	FP-4R0RE821M-NS□□
		1200	10×12.5	0.15	720	10	5500	RNS0G122MDN1□□	FP-4R0RE122M-NS□□
6.3 (0J)	7.2	47	6.3×7	0.07	50	42	2050	RNS0J470MDS1□□	FP-6R3RE470M-NS□□
		150	8×11.5	0.07	142	21	3900	RNS0J151MDN1□□	FP-6R3RE151M-NS□□
		220	8×11.5	0.07	208	21	3900	RNS0J221MDN1□□	FP-6R3RE221M-NS□□
		330	10×12.5	0.07	312	10	5500	RNS0J331MDN1□□	FP-6R3RE331M-NS□□
		390	8×11.5	0.08	369	10	5230	RNS0J391MDN1□□	FP-6R3RE391M-NS□□
		680	10×12.5	0.08	643	10	5500	RNS0J681MDN1□□	FP-6R3RE681M-NS□□
		820	10×12.5	0.12	775	10	5500	RNS0J821MDN1□□	FP-6R3RE821M-NS□□
		1000	10×12.5	0.12	945	10	5500	RNS0J102MDN1□□	FP-6R3RE102M-NS□□
10 (1A)	11.5	33	6.3×7	0.07	50	49	1900	RNS1A330MDS1□□	FP-010RE330M-NS□□
		68	6.3×10	0.07	102	35	2650	RNS1A680MDS1□□	FP-010RE680M-NS□□
		100	8×11.5	0.07	150	21	3900	RNS1A101MDN1□□	FP-010RE101M-NS□□
		220	10×12.5	0.07	330	10	5500	RNS1A221MDN1□□	FP-010RE221M-NS□□
		470	10×12.5	0.08	705	10	5500	RNS1A471MDN1□□	FP-010RE471M-NS□□
16 (1C)	18.4	22	6.3×7	0.06	53	49	1900	RNS1C220MDS1□□	FP-016RE220M-NS□□
		33	6.3×7	0.06	79	49	1900	RNS1C330MDS1□□	FP-016RE330M-NS□□
		47	6.3×10	0.06	113	42	2400	RNS1C470MDS1□□	FP-016RE470M-NS□□
		68	8×11.5	0.06	163	25	3600	RNS1C680MDN1□□	FP-016RE680M-NS□□
		100	8×11.5	0.06	240	21	3900	RNS1C101MDN1□□	FP-016RE101M-NS□□
		150	10×12.5	0.06	360	10	5500	RNS1C151MDN1□□	FP-016RE151M-NS□□
		180	8×11.5	0.08	432	16	4700	RNS1C181MDN1□□	FP-016RE181M-NS□□
		330	10×12.5	0.08	792	10	5500	RNS1C331MDN1□□	FP-016RE331M-NS□□
20 (1D)	23.0	15	6.3×7	0.06	50	63	1700	RNS1D150MDS1□□	FP-020RE150M-NS□□
		22	6.3×7	0.06	66	49	1900	RNS1D220MDS1□□	FP-020RE220M-NS□□
		33	6.3×10	0.06	99	49	2200	RNS1D330MDS1□□	FP-020RE330M-NS□□
		47	8×11.5	0.06	141	28	3400	RNS1D470MDN1□□	FP-020RE470M-NS□□
		68	8×11.5	0.06	204	25	3600	RNS1D680MDN1□□	FP-020RE680M-NS□□
		100	10×12.5	0.06	300	15	4500	RNS1D101MDN1□□	FP-020RE101M-NS□□
25 (1E)	28.7	10	6.3×7	0.06	50	63	1700	RNS1E100MDS1□□	FP-025RE100M-NS□□
		15	6.3×10	0.06	75	49	2200	RNS1E150MDS1□□	FP-025RE150M-NS□□
		22	8×11.5	0.06	110	28	3400	RNS1E220MDN1□□	FP-025RE220M-NS□□
		33	10×12.5	0.06	165	20	3800	RNS1E330MDN1□□	FP-025RE330M-NS□□
		47	10×12.5	0.06	235	20	3800	RNS1E470MDN1□□	FP-025RE470M-NS□□
		100	10×12.5	0.08	500	15	4500	RNS1E101MDN1□□	FP-025RE101M-NS□□

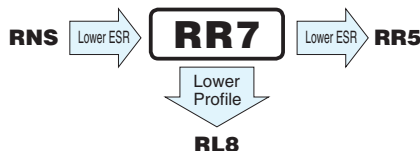
- Taping specifications are given in page 26, 27.
- Please refer to page 3 for the minimum order quantity.

RR7 Low ESR



FPCAP Expanded

- Ultra Low ESR, High ripple current.
- Load life of 2000 hours at 105°C.
- Radial lead type : Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2011/65/EU).



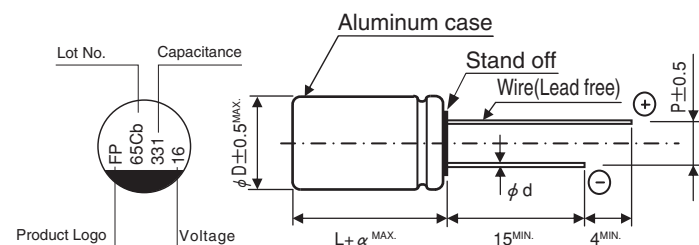
Specifications

Item	Performance Characteristics
Category Temperature Range	-55 to +105°C
Rated Voltage Range	2.5 to 16V
Rated Capacitance Range	68 to 1500μF
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
Endurance	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.

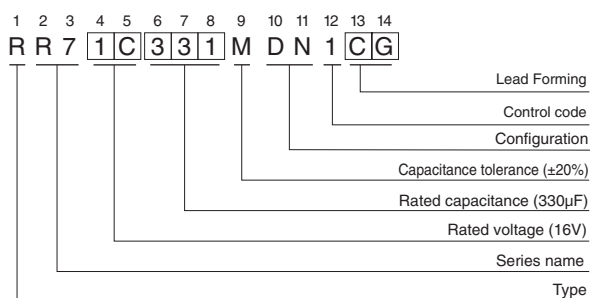
*2 Conditioning : If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

Dimensions

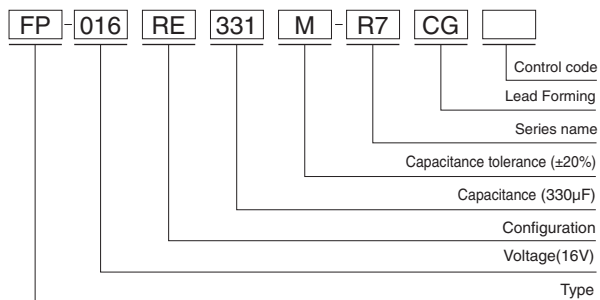


φD×L	φd	P	α
8×11.5	0.6	3.5	1.5
10×12.5	0.6	5.0	1.5

Type numbering system (Example : 16V 330μF) Nichicon part number



FPCAP 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

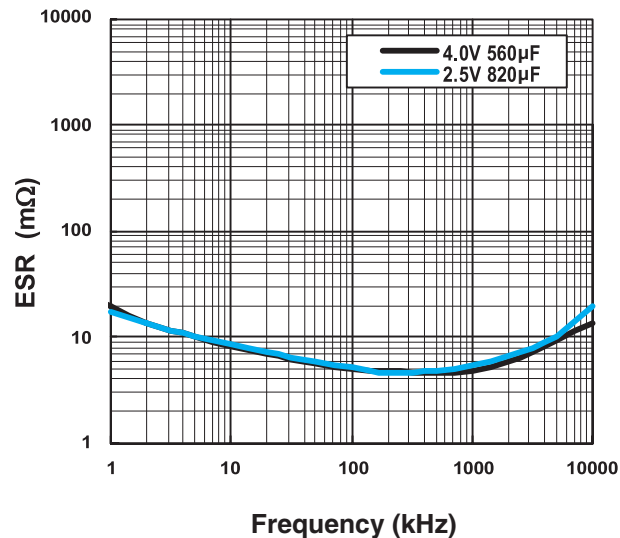
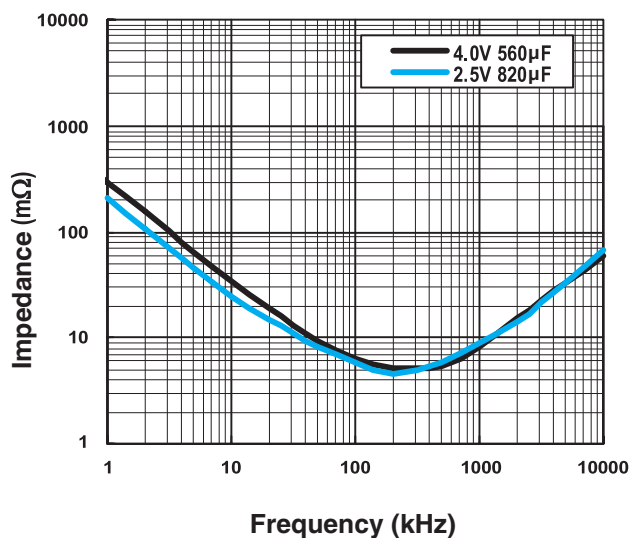
RR7

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μ F)	Case Size ϕ D×L (mm)	$\tan \delta$	Leakage Current (μ A, 2min.)	ESR (m Ω) (20°C/100kHz)	Rated Ripple Current (mA _{rms}) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	680	8×11.5	0.08	425	7	5600	RR70E681MDN1□□	FP-2R5RE681M-R7□□
		820	8×11.5	0.08	513	7	5600	RR70E821MDN1□□	FP-2R5RE821M-R7□□
		1500	10×12.5	0.08	938	7	6100	RR70E152MDN1□□	FP-2R5RE152M-R7□□
4.0 (0G)	4.6	560	8×11.5	0.08	224	7	5600	RR70G561MDN1□□	FP-4R0RE561M-R7□□
		820	10×12.5	0.08	328	7	6100	RR70G821MDN1□□	FP-4R0RE821M-R7□□
		1200	10×12.5	0.15	960	7	6100	RR70G122MDN1□□	FP-4R0RE122M-R7□□
6.3 (0J)	7.2	150	8×11.5	0.07	47	7	5600	RR70J151MDN1□□	FP-6R3RE151M-R7□□
		220	8×11.5	0.07	69	7	5600	RR70J221MDN1□□	FP-6R3RE221M-R7□□
		330	10×12.5	0.07	104	7	6100	RR70J331MDN1□□	FP-6R3RE331M-R7□□
		390	8×11.5	0.08	246	7	5600	RR70J391MDN1□□	FP-6R3RE391M-R7□□
		680	10×12.5	0.08	428	7	6100	RR70J681MDN1□□	FP-6R3RE681M-R7□□
		820	10×12.5	0.12	517	7	6100	RR70J821MDN1□□	FP-6R3RE821M-R7□□
		1000	10×12.5	0.12	630	7	6100	RR70J102MDN1□□	FP-6R3RE102M-R7□□
10 (1A)	11.5	100	8×11.5	0.07	50	7	5600	RR71A101MDN1□□	FP-010RE101M-R7□□
		220	10×12.5	0.07	110	7	6100	RR71A221MDN1□□	FP-010RE221M-R7□□
		470	10×12.5	0.08	470	7	6100	RR71A471MDN1□□	FP-010RE471M-R7□□
		680	10×12.5	0.10	1360	7	6100	RR71A681MDN1□□	FP-010RE681M-R7□□
16 (1C)	18.4	68	8×11.5	0.06	54	7	5600	RR71C680MDN1□□	FP-016RE680M-R7□□
		100	8×11.5	0.06	80	7	5600	RR71C101MDN1□□	FP-016RE101M-R7□□
		150	10×12.5	0.06	120	7	6100	RR71C151MDN1□□	FP-016RE151M-R7□□
		270	10×12.5	0.08	648	7	6100	RR71C271MDN1□□	FP-016RE271M-R7□□
		330	10×12.5	0.08	792	7	6100	RR71C331MDN1□□	FP-016RE331M-R7□□
		*330	10×12.5	0.08	792	7	6100	RR71C331MDNASQ□□	FP-016RE331M-R7□□-5K

* : Load life 5000hours.

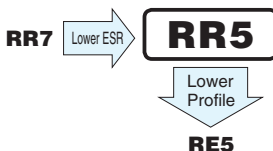
■ Frequency Characteristics (The frequency characteristics are typical and not a guaranteed value.)



- Taping specifications are given in page 26, 27.
- Please refer to page 3 for the minimum order quantity.

RR5 Ultra-low ESR

- Ultra Low ESR, High ripple current.
- Load life of 2000 hours at 105°C.
- Radial lead type : Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2011/65/EU).



FPCAP



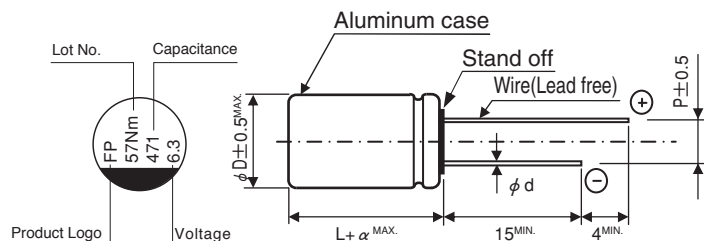
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	2.5 to 6.3V	
Rated Capacitance Range	390 to 1500μF	
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 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

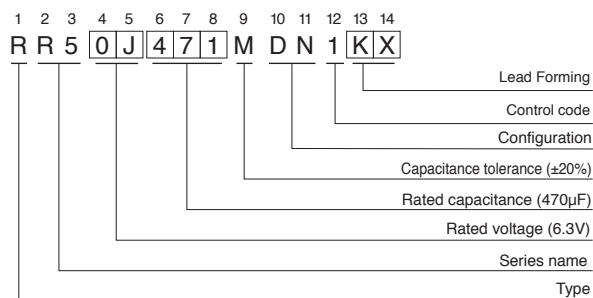


φD×L	φd	P	α
8×11.5	0.6	3.5	1.5
10×12.5	0.6	5.0	1.5

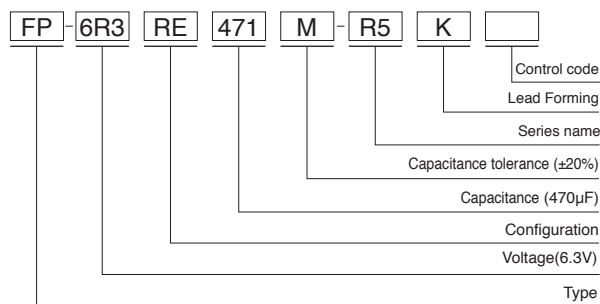
Frequency coefficient of rated ripple current

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 470μF) Nichicon part number



FPCAP part number

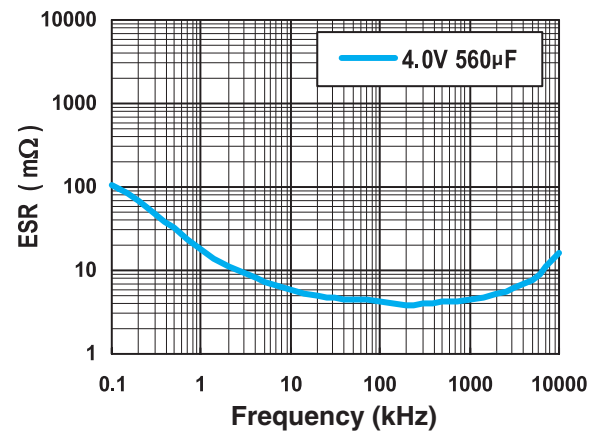
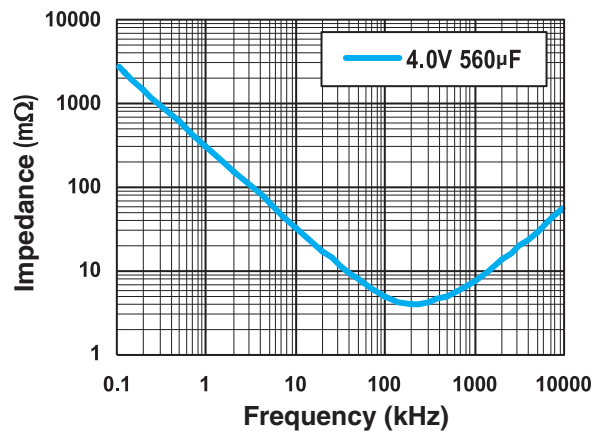


RR5

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mA _{RMS}) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	560	8×11.5	0.15	350	5	6630	RR50E561MDN1□□	FP-2R5RE561M-R5□□
		680	8×11.5	0.15	425	5	6630	RR50E681MDN1□□	FP-2R5RE681M-R5□□
		820	8×11.5	0.15	513	5	6630	RR50E821MDN1□□	FP-2R5RE821M-R5□□
		1000	8×11.5	0.15	625	5	6630	RR50E102MDN1□□	FP-2R5RE102M-R5□□
		1500	10×12.5	0.15	938	5	7220	RR50E152MDN1□□	FP-2R5RE152M-R5□□
4.0 (0G)	4.6	560	8×11.5	0.15	560	5	6630	RR50G561MDN1□□	FP-4R0RE561M-R5□□
		820	10×12.5	0.15	820	5	7220	RR50G821MDN1□□	FP-4R0RE821M-R5□□
		1200	10×12.5	0.15	1200	5	7220	RR50G122MDN1□□	FP-4R0RE122M-R5□□
6.3 (0J)	7.2	390	8×11.5	0.15	614	5	6630	RR50J391MDN1□□	FP-6R3RE391M-R5□□
		470	8×11.5	0.15	592	5	6630	RR50J471MDN1□□	FP-6R3RE471M-R5□□
		680	10×12.5	0.15	1071	5	7220	RR50J681MDN1□□	FP-6R3RE681M-R5□□
		820	10×12.5	0.15	1292	5	7220	RR50J821MDN1□□	FP-6R3RE821M-R5□□

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



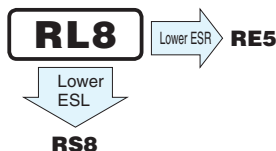
- Taping specifications are given in page 26, 27.
- Please refer to page 3 for the minimum order quantity.

RL8 Low ESR, Low Profile (φ8)



FPCAP *Expanded*

- Ultra Low ESR, 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).



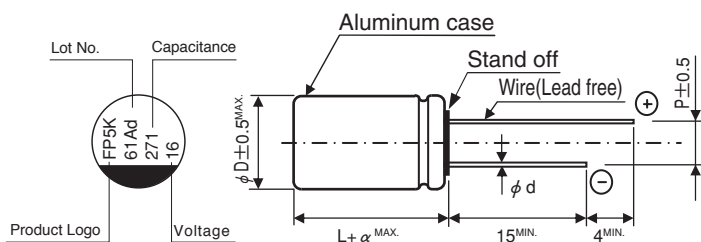
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	2.5 to 35V	
Rated Capacitance Range	100 to 1500μF	
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

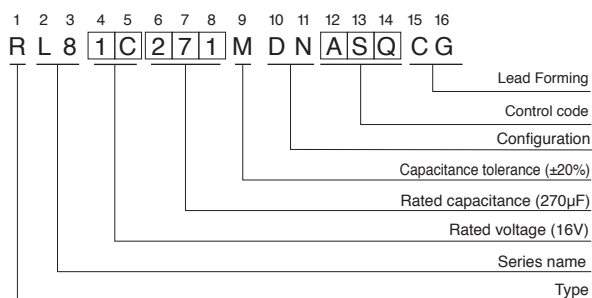


(mm)			
φD×L	φd	P	α
8×8	0.6	3.5	1.0

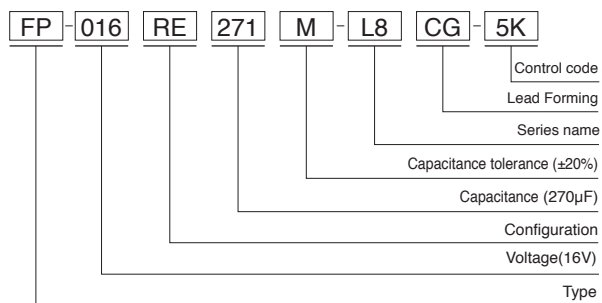
● Frequency coefficient of rated ripple current

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 : 16V 270μF) Nichicon part number



FPCAP part number



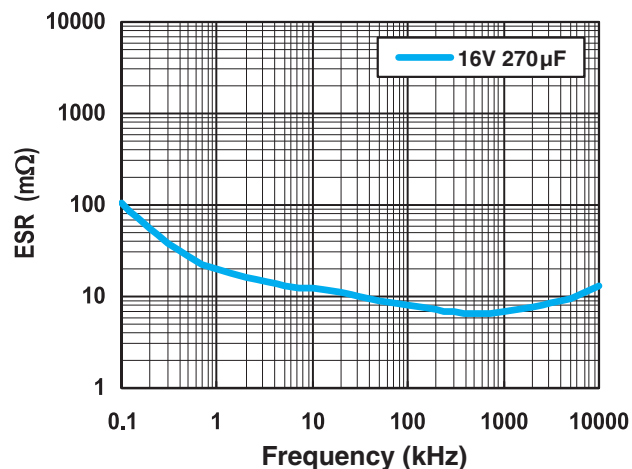
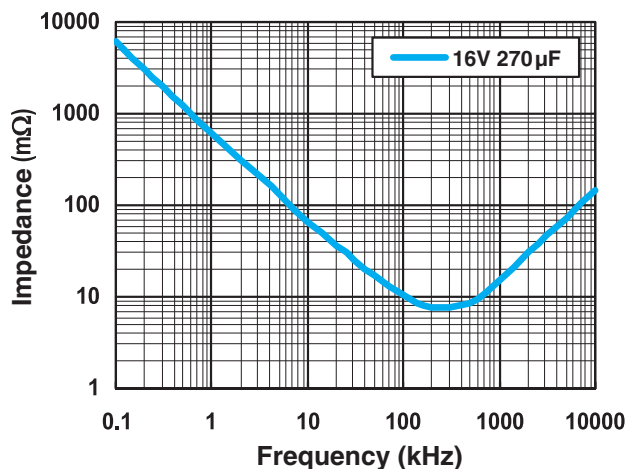
RL8

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mA) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	560	8×8	0.12	500	6	6100	RL80E561MDN1□□	FP-2R5RE561M-L8□□
		*560	8×8	0.12	500	6	6100	RL80E561MDNASQ□□	FP-2R5RE561M-L8□□-5K
		820	8×8	0.12	513	6	6100	RL80E821MDN1□□	FP-2R5RE821M-L8□□
		*820	8×8	0.12	513	6	6100	RL80E821MDNASQ□□	FP-2R5RE821M-L8□□-5K
		1000	8×8	0.12	625	6	6100	RL80E102MDN1□□	FP-2R5RE102M-L8□□
		1200	8×8	0.12	750	7	6100	RL80E122MDN1□□	FP-2R5RE122M-L8□□
		1500	8×8	0.12	938	7	6100	RL80E152MDN1□□	FP-2R5RE152M-L8□□
4.0 (0G)	4.6	560	8×8	0.12	560	6	6100	RL80G561MDN1□□	FP-4R0RE561M-L8□□
		*560	8×8	0.12	560	6	6100	RL80G561MDNASQ□□	FP-4R0RE561M-L8□□-5K
		820	8×8	0.12	820	6	6100	RL80G821MDN1□□	FP-4R0RE821M-L8□□
6.3 (0J)	7.2	470	8×8	0.12	592	8	5700	RL80J471MDN1□□	FP-6R3RE471M-L8□□
		*470	8×8	0.12	592	8	5700	RL80J471MDNASQ□□	FP-6R3RE471M-L8□□-5K
		560	8×8	0.12	706	8	5700	RL80J561MDN1□□	FP-6R3RE561M-L8□□
		*560	8×8	0.12	706	8	5700	RL80J561MDNASQ□□	FP-6R3RE561M-L8□□-5K
		680	8×8	0.12	857	8	5700	RL80J681MDN1□□	FP-6R3RE681M-L8□□
		820	8×8	0.12	1033	8	5700	RL80J821MDN1□□	FP-6R3RE821M-L8□□
		1000	8×8	0.12	1260	9	5700	RL80J102MDN1□□	FP-6R3RE102M-L8□□
		*1000	8×8	0.12	1260	9	5700	RL80J102MDNASQ□□	FP-6R3RE102M-L8□□-5K
16 (1C)	18.4	100	8×8	0.12	320	12	5000	RL81C101MDN1□□	FP-016RE101M-L8□□
		180	8×8	0.12	576	12	5000	RL81C181MDN1□□	FP-016RE181M-L8□□
		220	8×8	0.12	704	12	5000	RL81C221MDN1□□	FP-016RE221M-L8□□
		270	8×8	0.12	864	10	5000	RL81C271MDN1□□	FP-016RE271M-L8□□
		*270	8×8	0.12	864	10	5000	RL81C271MDNASQ□□	FP-016RE271M-L8□□-5K
		330	8×8	0.12	1056	12	5000	RL81C331MDN1□□	FP-016RE331M-L8□□
		*330	8×8	0.12	1056	12	5000	RL81C331MDNASQ□□	FP-016RE331M-L8□□-5K
		470	8×8	0.12	1504	16	4000	RL81C471MDN1□□	FP-016RE471M-L8□□
35 (1V)	40.2	100	8×8	0.12	700	25	3000	RL81V101MDN1□□	FP-035RE101M-L8□□

* : Load life 5000hours.

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



- Taping specifications are given in page 26, 27.
- Please refer to page 3 for the minimum order quantity.

RE5

Ultra-low ESR, Low Profile (φ8)



High Ripple Current



Low Impedance



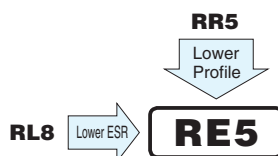
For High Frequency



Anti-Solvent Feature

FPCAP

- Ultra Low ESR, High ripple current.
- Low Profile (Height 8mm).
- Load life of 2000 hours at 105°C.
- Radial lead type : Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2011/65/EU).



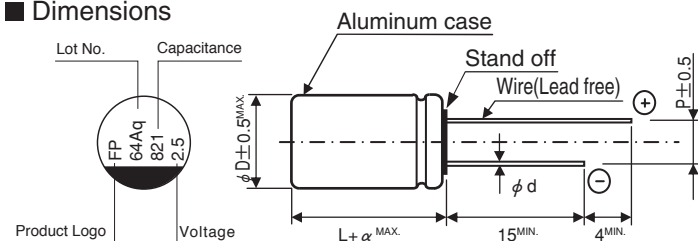
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	2.5 to 4.0V	
Rated Capacitance Range	560 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 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.

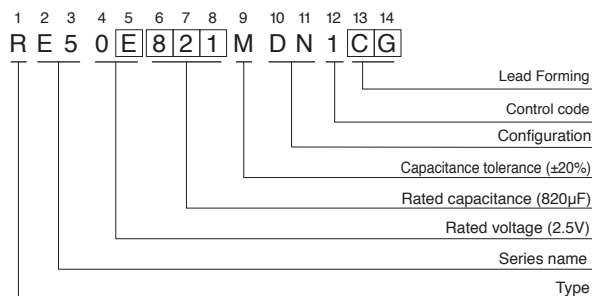
Dimensions



φD×L	φd	P	α
8×8	0.6	3.5	1.0

(mm)

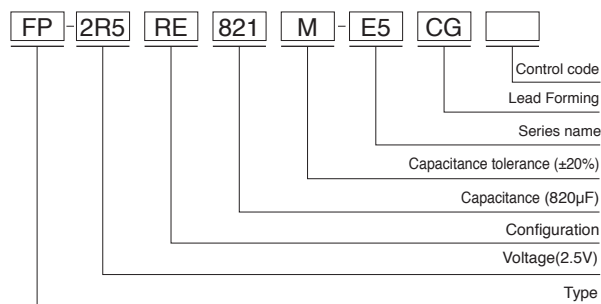
Type numbering system (Example : 2.5V 820μF)
Nichicon part number



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

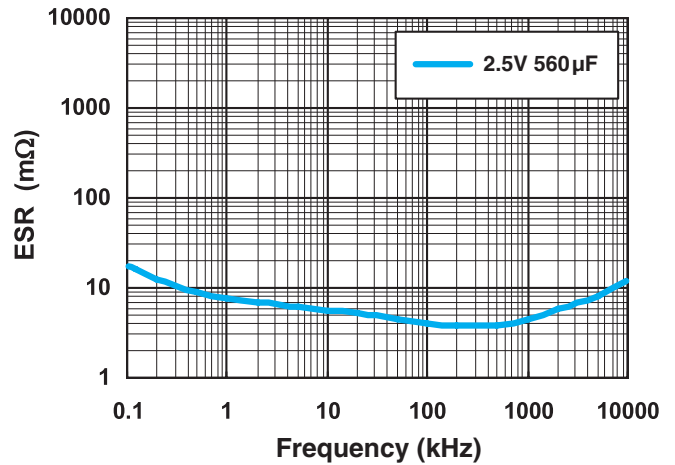
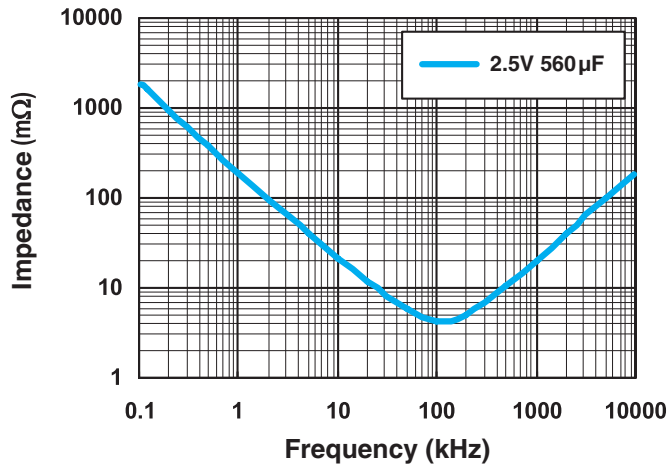


RE5

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mA _{rms}) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	560	8×8	0.10	500	5	6300	RE50E561MDN1□□	FP-2R5RE561M-E5□□
		820	8×8	0.10	513	5	6300	RE50E821MDN1□□	FP-2R5RE821M-E5□□
4.0 (0G)	4.6	560	8×8	0.10	560	5	6300	RE50G561MDN1□□	FP-4R0RE561M-E5□□

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



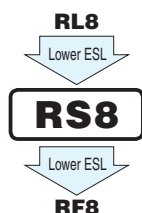
- Taping specifications are given in page 26, 27.
- Please refer to page 3 for the minimum order quantity.

RS8 Low ESR / ESL, Low Profile (φ6.3)



FPCAP *Expanded*

- 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).



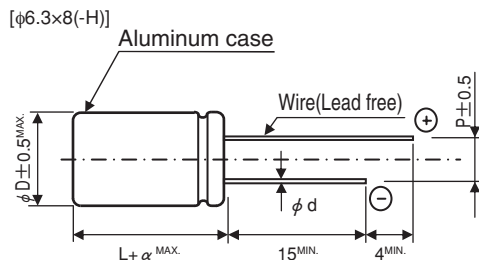
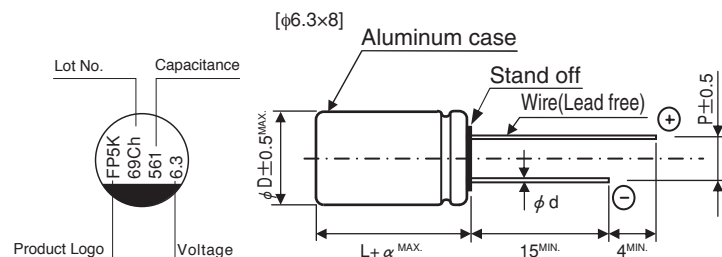
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	2.5 to 16V	
Rated Capacitance Range	100 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

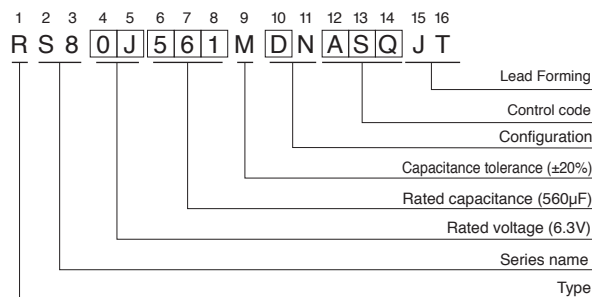


φD×L	φd	P	α
6.3×8	0.6	2.5	1.0

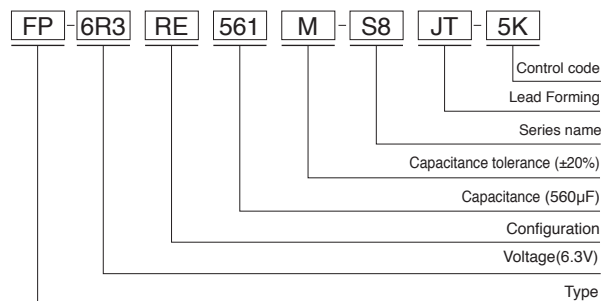
Frequency coefficient of rated ripple current

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



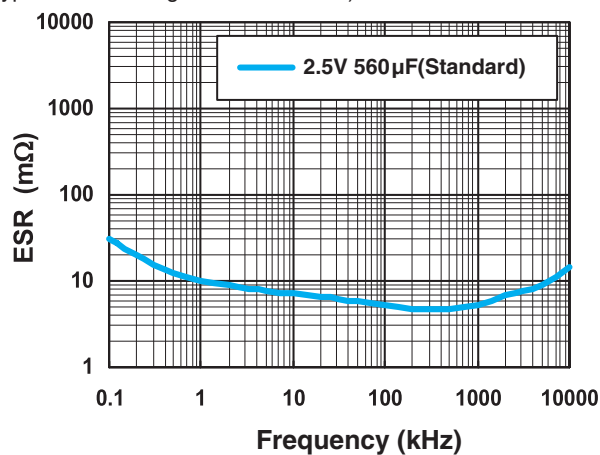
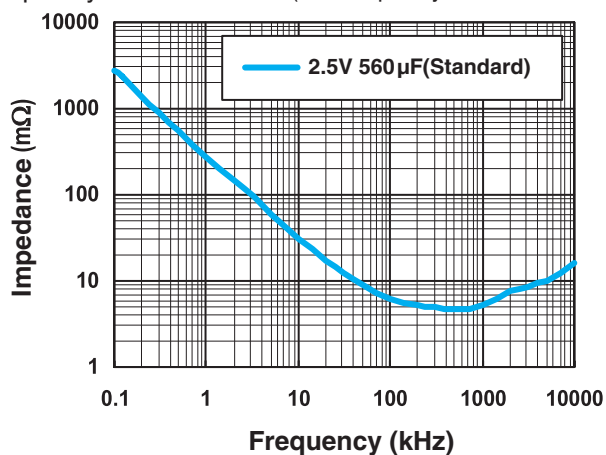
RS8

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	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	RS80E331MDNASQ□□	FP-2R5RE331M-S8□□-5K
		470	6.3×8	0.10	500	7	2	5600	RS80E471MDN1□□	FP-2R5RE471M-S8□□
		*470	6.3×8	0.10	500	7	2	5600	RS80E471MDNASQ□□	FP-2R5RE471M-S8□□-5K
		560	6.3×8	0.10	500	7	2	5600	RS80E561MDN1□□	FP-2R5RE561M-S8□□
		*560	6.3×8	0.10	500	7	2	5600	RS80E561MDNASQ□□	FP-2R5RE561M-S8□□-5K
		820	6.3×8	0.10	512	7	2	5600	RS80E821MDN1□□	FP-2R5RE821M-S8□□
		*820	6.3×8	0.10	512	7	2	5600	RS80E821MDNASQ□□	FP-2R5RE821M-S8□□-5K
		1200	6.3×8	0.10	750	7	2	5600	RS80E122MDN1□□	FP-2R5RE122M-S8□□
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	RS80G561MDNASQ□□	FP-4R0RE561M-S8□□-5K
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	RS80J331MDNASQ□□	FP-6R3RE331M-S8□□-5K
		470	6.3×8	0.10	740	8	2	5000	RS80J471MDN1□□	FP-6R3RE471M-S8□□
		*470	6.3×8	0.10	740	8	2	5000	RS80J471MDNASQ□□	FP-6R3RE471M-S8□□-5K
		560	6.3×8	0.10	882	8	2	5000	RS80J561MDN1□□	FP-6R3RE561M-S8□□
		*560	6.3×8	0.10	882	8	2	5000	RS80J561MDNASQ□□	FP-6R3RE561M-S8□□-5K
		680	6.3×8	0.10	1071	8	2	4700	RS80J681MCN1□□	FP-6R3RE681M-S8□□-H
		820	6.3×8	0.10	1292	8	2	4700	RS80J821MDS1□□	FP-6R3RE821M-S8□□
16 (1C)	18.4	100	6.3×8	0.10	500	14	2	3800	RS81C101MDN1□□	FP-016RE101M-S8□□
		270	6.3×8	0.10	1296	15	2	3800	RS81C271MDN1□□	FP-016RE271M-S8□□
		*270	6.3×8	0.10	1296	15	2	3800	RS81C271MDNASQ□□	FP-016RE271M-S8□□-5K

* : Load life 5000hours.

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



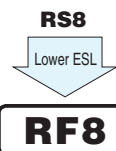
- Taping specifications are given in page 26, 27.
- Please refer to page 3 for the minimum order quantity.

RF8 Low ESR / ESL, Low Profile (φ5)



FPCAP

- Low ESR/ESL, High ripple current.
- Low Profile (Height 8mm).
- Load life of 2000 hours at 105°C.
- Radial lead type : Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2011/65/EU).



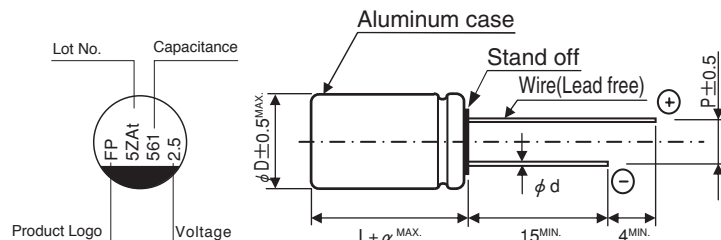
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	2.5 to 6.3V	
Rated Capacitance Range	100 to 560μF	
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.

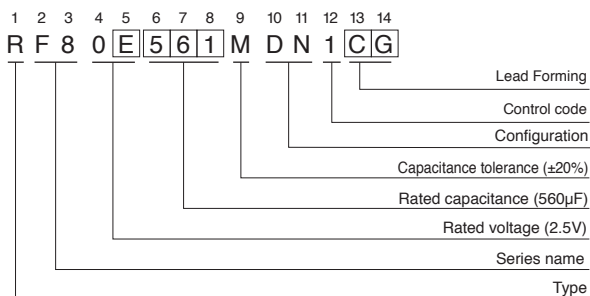
※2 Conditioning : If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

Dimensions



φD×L	φd	P	α
5×8	0.6	2.0	1.0

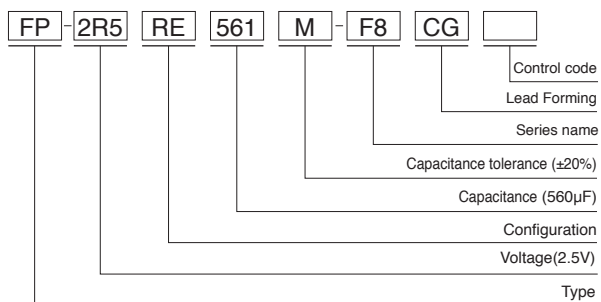
Type numbering system (Example : 2.5V 560μF)
Nichicon part number



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

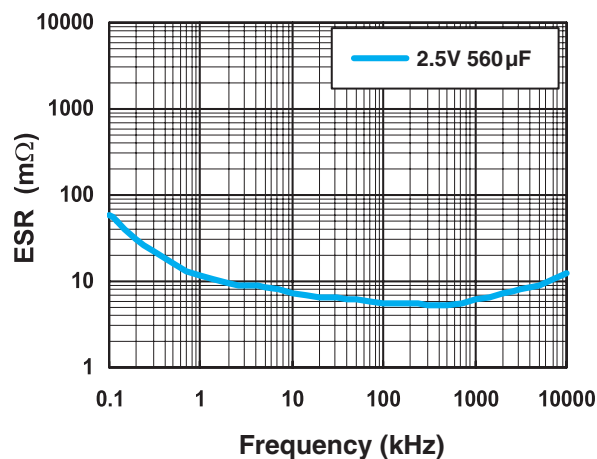
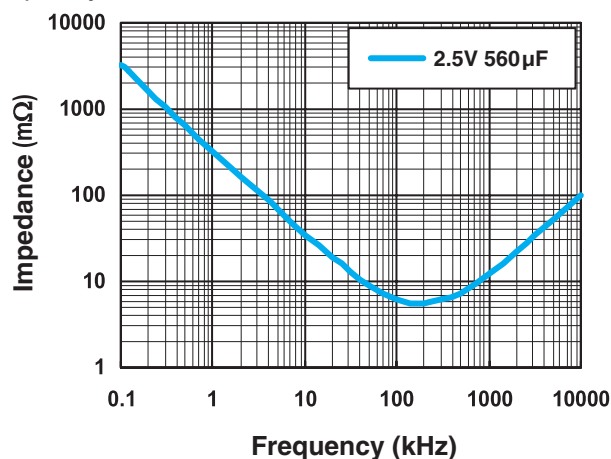


RF8

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μ F)	Case Size ϕ D×L (mm)	$\tan \delta$	Leakage Current (μ A, 2min.)	ESR (m Ω) (20°C/100kHz)	ESL (Typ.) (nH, 40MHz)	Rated Ripple Current (mA _{rms}) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	100	5×8	0.10	500	7	1.5	4200	RF80E101MDN1□□	FP-2R5RE101M-F8□□
		330	5×8	0.10	500	7	1.5	4200	RF80E331MDN1□□	FP-2R5RE331M-F8□□
		470	5×8	0.10	500	7	1.5	4200	RF80E471MDN1□□	FP-2R5RE471M-F8□□
		560	5×8	0.10	500	7	1.5	4200	RF80E561MDN1□□	FP-2R5RE561M-F8□□
4.0 (0G)	4.6	330	5×8	0.10	500	8	1.5	4000	RF80G331MDN1□□	FP-4R0RE331M-F8□□
6.3 (0J)	7.2	270	5×8	0.10	500	11	1.5	3700	RF80J271MDN1□□	FP-6R3RE271M-F8□□
		330	5×8	0.10	500	11	1.5	3700	RF80J331MDN1□□	FP-6R3RE331M-F8□□

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



- Taping specifications are given in page 26, 27.
- Please refer to page 3 for the minimum order quantity.

RNU

High Capacitance



High Ripple Current



Low Impedance



For High Frequency



Long Life

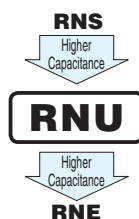


Anti-Solvent Feature

FPCAP

Expanded

- Low ESR, High Capacitance, High ripple current.
- 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).



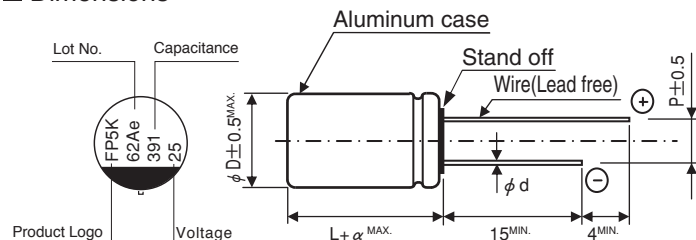
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	2.5 to 63V	
Rated Capacitance Range	10 to 2700μF	
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

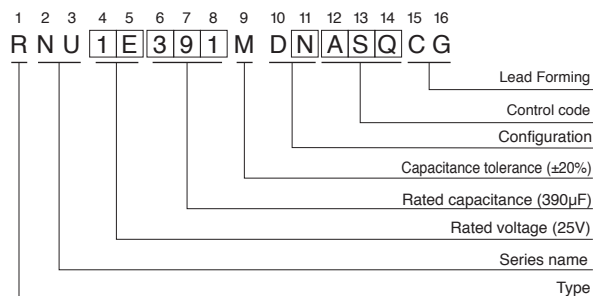


φD×L	φd	P	α
4×5	0.45	1.5	1.0
6.3×10	0.5	2.5	1.0
8×11.5	0.6	3.5	1.5
10×12.5	0.6	5.0	1.5

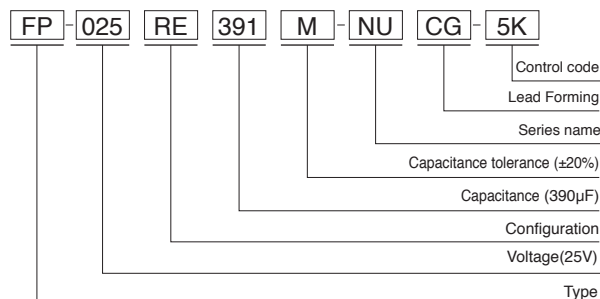
Frequency coefficient of rated ripple current

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 : 25V 390μF) Nichicon part number



FPCAP part number



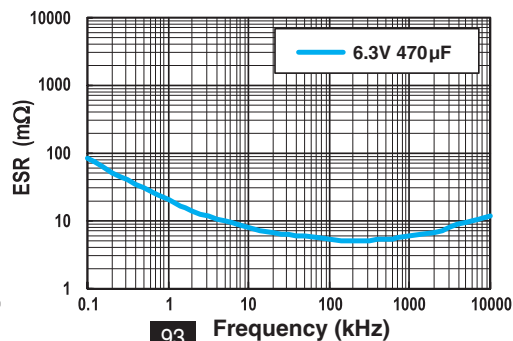
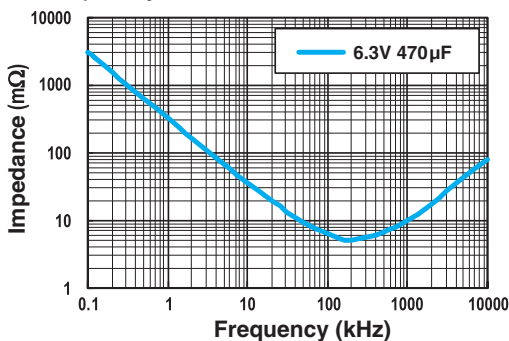
RNU

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mA rms) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	1500	8×11.5	0.08	938	7	5700	RNU0E152MDN1□□	FP-2R5RE152M-NU□□
		2700	10×12.5	0.08	1350	7	6100	RNU0E272MDN1□□	FP-2R5RE272M-NU□□
4.0 (0G)	4.6	820	8×11.5	0.08	656	7	5700	RNU0G821MDN1□□	FP-4R0RE821M-NU□□
		1000	8×11.5	0.08	800	7	5700	RNU0G102MDN1□□	FP-4R0RE102M-NU□□
		1200	8×11.5	0.08	960	7	5700	RNU0G122MDN1□□	FP-4R0RE122M-NU□□
		1800	10×12.5	0.08	1440	7	6100	RNU0G182MDN1□□	FP-4R0RE182M-NU□□
		2200	10×12.5	0.08	1760	7	6100	RNU0G222MDN1□□	FP-4R0RE222M-NU□□
6.3 (0J)	7.2	220	6.3×10	0.08	277	20	3200	RNU0J221MDS1□□	FP-6R3RE221M-NU□□
		470	8×11.5	0.08	592	7	5700	RNU0J471MDN1□□	FP-6R3RE471M-NU□□
		680	8×11.5	0.08	857	7	5700	RNU0J681MDN1□□	FP-6R3RE681M-NU□□
		820	8×11.5	0.08	1033	7	5700	RNU0J821MDN1□□	FP-6R3RE821M-NU□□
		1000	8×11.5	0.08	1260	7	5700	RNU0J102MDN1□□	FP-6R3RE102M-NU□□
		1200	8×11.5	0.08	1512	9	6100	RNU0J122MDN1□□	FP-6R3RE122M-NU□□
		1500	10×12.5	0.08	1890	7	6100	RNU0J152MDN1□□	FP-6R3RE152M-NU□□
10 (1A)	11.5	10	4×5	0.12	300	220	700	RNU1A100MDS1□□	FP-010RE100M-NU□□
		*10	4×5	0.12	300	220	700	RNU1A100MDSASQ□□	FP-010RE100M-NU□□-5K
		820	8×11.5	0.08	1640	10	5800	RNU1A821MDN1□□	FP-010RE821M-NU□□
		*820	8×11.5	0.08	1640	10	5800	RNU1A821MDNASQ□□	FP-010RE821M-NU□□-5K
		1200	10×12.5	0.08	2400	9	6200	RNU1A122MDN1□□	FP-010RE122M-NU□□
16 (1C)	18.4	100	6.3×10	0.08	320	25	2820	RNU1C101MDS1□□	FP-016RE101M-NU□□
		*100	6.3×10	0.08	320	25	2820	RNU1C101MDSASQ□□	FP-016RE101M-NU□□-5K
		180	8×11.5	0.08	576	8	5700	RNU1C181MDN1□□	FP-016RE181M-NU□□
		270	8×11.5	0.08	864	8	5000	RNU1C271MDN1□□	FP-016RE271M-NU□□
		*270	8×11.5	0.08	864	8	5000	RNU1C271MDNASQ□□	FP-016RE271M-NU□□-5K
		330	8×11.5	0.08	1056	8	6100	RNU1C331MDN1□□	FP-016RE331M-NU□□
		470	10×12.5	0.08	1504	10	6100	RNU1C471MDN1□□	FP-016RE471M-NU□□
		*470	10×12.5	0.08	1504	10	6100	RNU1C471MDNASQ□□	FP-016RE471M-NU□□-5K
		680	10×12.5	0.08	2176	10	6100	RNU1C681MDN1□□	FP-016RE681M-NU□□
20 (1D)	23.0	390	8×11.5	0.12	1560	14	4970	RNU1D391MDN1□□	FP-020RE391M-NU□□
		*390	8×11.5	0.12	1560	14	4970	RNU1D391MDNASQ□□	FP-020RE391M-NU□□-5K
		680	10×12.5	0.12	2720	12	5400	RNU1D681MDN1□□	FP-020RE681M-NU□□
25 (1E)	28.7	33	8×11.5	0.12	413	24	3600	RNU1E330MDN1□□	FP-025RE330M-NU□□
		47	8×11.5	0.12	588	24	3600	RNU1E470MDN1□□	FP-025RE470M-NU□□
		68	8×11.5	0.12	850	24	3600	RNU1E680MDN1□□	FP-025RE680M-NU□□
		180	8×11.5	0.12	900	16	4650	RNU1E181MDN1□□	FP-025RE181M-NU□□
		220	8×11.5	0.12	1100	16	4650	RNU1E221MDN1□□	FP-025RE221M-NU□□
		*220	8×11.5	0.12	1100	16	4650	RNU1E221MDNASQ□□	FP-025RE221M-NU□□-5K
		330	10×12.5	0.12	1650	14	5000	RNU1E331MDN1□□	FP-025RE331M-NU□□
		*330	10×12.5	0.12	1650	14	5000	RNU1E331MDNASQ□□	FP-025RE331M-NU□□-5K
		390	10×12.5	0.12	1950	14	5000	RNU1E391MDN1□□	FP-025RE391M-NU□□
		*390	10×12.5	0.12	1950	14	5000	RNU1E391MDNASQ□□	FP-025RE391M-NU□□-5K
35 (1V)	40.2	47	8×11.5	0.12	329	24	3600	RNU1V470MDN1□□	FP-035RE470M-NU□□
		*82	8×11.5	0.12	574	20	4000	RNU1V820MDNASQ□□	FP-035RE820M-NU□□-5K
		*120	10×12.5	0.12	840	18	4400	RNU1V121MDNASQ□□	FP-035RE121M-NU□□-5K
		150	10×12.5	0.12	1050	20	3800	RNU1V151MDN1□□	FP-035RE151M-NU□□
50 (1H)	57.5	39	8×11.5	0.12	390	25	2400	RNU1H390MDN1□□	FP-050RE390M-NU□□
		47	10×12.5	0.12	470	24	2700	RNU1H470MDN1□□	FP-050RE470M-NU□□
		68	10×12.5	0.12	680	24	2700	RNU1H680MDN1□□	FP-050RE680M-NU□□
63 (1J)	72.5	33	8×11.5	0.12	416	26	2300	RNU1J330MDN1□□	FP-063RE330M-NU□□
		39	10×12.5	0.12	492	25	2600	RNU1J390MDN1□□	FP-063RE390M-NU□□
		47	10×12.5	0.12	592	25	2600	RNU1J470MDN1□□	FP-063RE470M-NU□□
		56	10×12.5	0.12	706	25	2600	RNU1J560MDN1□□	FP-063RE560M-NU□□

*: Load life 5000hours.

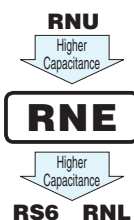
■ Frequency Characteristics (The frequency characteristics are typical and not a guaranteed value.)



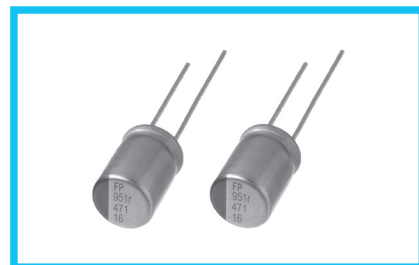
- Taping specifications are given in page 26, 27.
- Please refer to page 3 for the minimum order quantity.

RNE High Capacitance

- Low ESR, High Capacitance, High ripple current.
- 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).



FPCAP *Expanded*



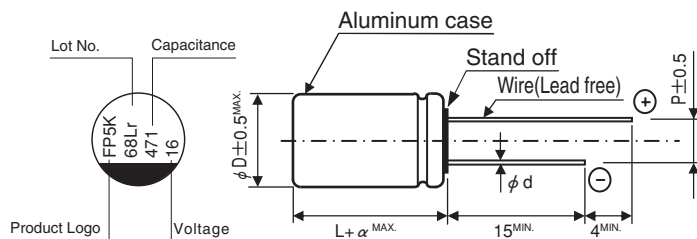
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	2.5 to 16V	
Rated Capacitance Range	100 to 1500μF	
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

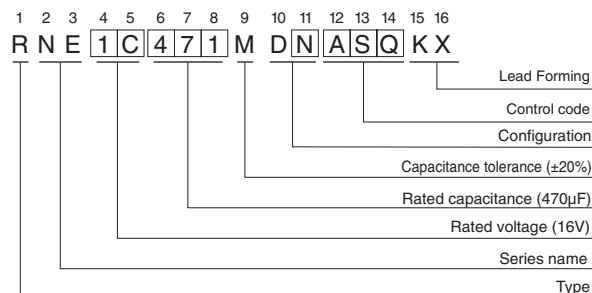


φD×L	φd	P	α
5×8	0.5	2.0	1.0
5×10	0.5	2.0	1.0
6.3×10	0.5	2.5	1.0
8×6	0.6	3.5	1.0
8×9	0.6	3.5	1.0
8×11.5	0.6	3.5	1.5
10×12.5	0.6	5.0	1.5

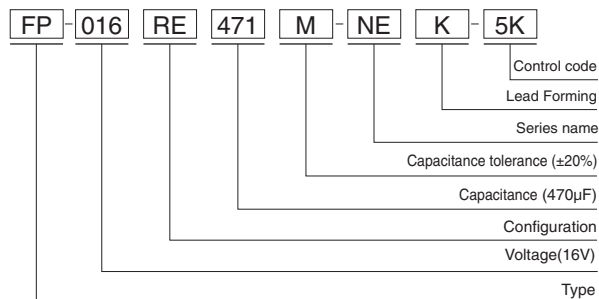
Frequency coefficient of rated ripple current

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 : 16V 470μF)
Nichicon part number



FPCAP part number



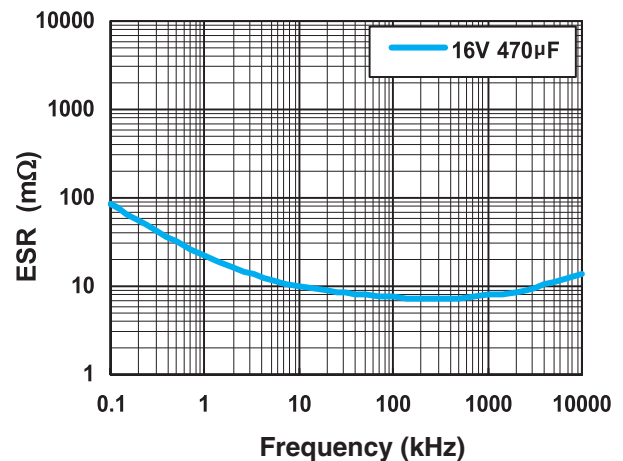
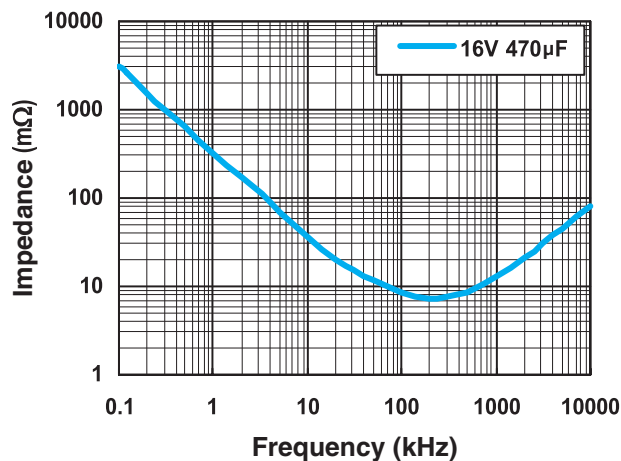
RNE

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mA _{rms}) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	680	8×6	0.10	500	8	4900	RNE0E681MDN1□□	FP-2R5RE681M-NE□□
		*820	8×6	0.10	500	8	4900	RNE0E821MCNASQ□□	FP-2R5RE821M-NE□□-5KH
6.3 (0J)	7.2	270	5×8	0.10	500	12	3600	RNE0J271MDS1□□	FP-6R3RE271M-NE□□
		330	5×8	0.10	500	10	3700	RNE0J331MCS1□□	FP-6R3RE331M-NE□□-H
		1200	8×9	0.08	1512	10	5700	RNE0J122MDN1□□	FP-6R3RE122M-NE□□
		1500	8×11.5	0.12	1890	10	5400	RNE0J152MDN1□□	FP-6R3RE152M-NE□□
10 (1A)	11.5	220	6.3×10	0.08	440	30	2500	RNE1A221MDS1□□	FP-010RE221M-NE□□
16 (1C)	18.4	100	5×10	0.08	320	35	2300	RNE1C101MDS1□□	FP-016RE101M-NE□□
		220	8×6	0.1	500	13	4150	RNE1C221MDN1□□	FP-016RE221M-NE□□
		470	8×11.5	0.08	1504	10	5400	RNE1C471MDN1□□	FP-016RE471M-NE□□
		*470	8×11.5	0.08	1504	10	5400	RNE1C471MDNASQ□□	FP-016RE471M-NE□□-5K
		560	8×11.5	0.08	1792	14	5000	RNE1C560MDN1□□	FP-016RE561M-NE□□
		*560	8×11.5	0.08	1792	14	5000	RNE1C561MDNASQ□□	FP-016RE561M-NE□□-5K
		820	10×12.5	0.08	2624	11	5600	RNE1C821MDN1□□	FP-016RE821M-NE□□
		*820	10×12.5	0.08	2624	11	5600	RNE1C821MDNASQ□□	FP-016RE821M-NE□□-5K
		1000	10×12.5	0.08	3200	10	6100	RNE1C102MDN1□□	FP-016RE102M-NE□□
		*1000	10×12.5	0.08	3200	10	6100	RNE1C102MDNASQ□□	FP-016RE102M-NE□□-5K

*: Load life 5000hours.

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



- Taping specifications are given in page 26, 27.
- Please refer to page 3 for the minimum order quantity.

RNL Large Sized, High Capacitance



FPCAP Expanded

- Low ESR, High Capacitance, High ripple current.
- Large Sized.
- Load life of 2000 hours at 105°C.
- Radial lead type : Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2011/65/EU).



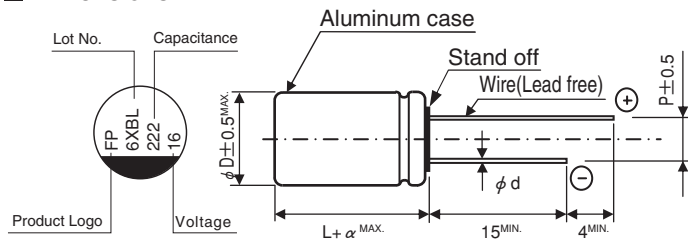
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	16V	
Rated Capacitance Range	680 to 2200μF	
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



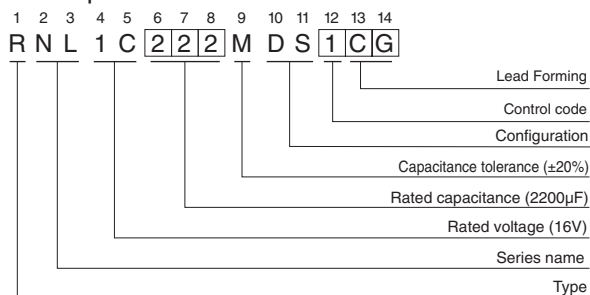
φD×L	φd	P	α
φ8×16L	0.6	3.5	1.5
φ8×20L	0.6	3.5	1.5
φ10×20L	0.6	5.0	1.5

Frequency coefficient of rated ripple current

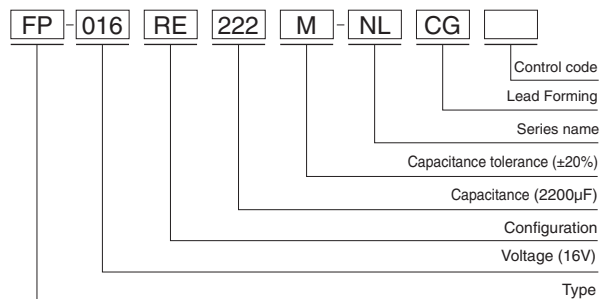
Frequency	120 Hz	1 kHz	10 kHz	100 kHz	300 kHz
Coefficient	0.10	0.45	0.50	1.00	1.00

Type numbering system (Example : 16V 2200μF)

Nichicon part number



FPCAP part number



RNL

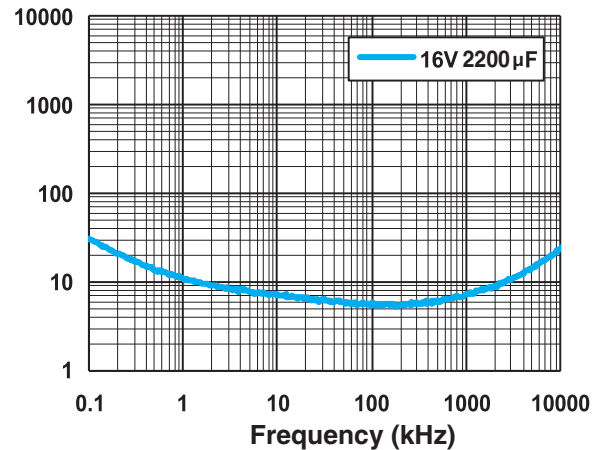
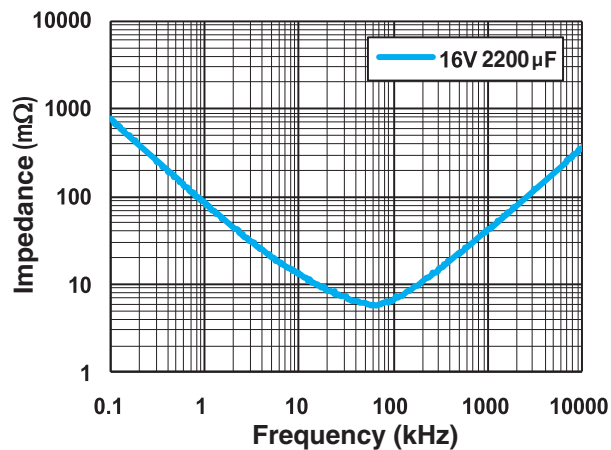
■ Dimensions

Rated Voltage (V)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA, 2min.)	ESR (mΩ) (20°C/100kHz)	Rated Ripple Current (mA _{rms}) (105°C/100kHz)	NICHICON	FPCAP
16 (1C)	18.4	680	8 × 16	0.12	1088	8	7000	RNL1C681MDS1□□	FP-016RE681M-NL□□
		820	▲ 8 × 16	0.12	1312	8	7000	RNL1C821MDS6□□	FP-016RE821M-NL□□-DS
		820	8 × 20	0.12	1312	8	7500	RNL1C821MDS1□□	FP-016RE821M-NL□□
		*820	8 × 20	0.12	1312	8	7500	RNL1C821MDSASQ□□	FP-016RE821M-NL□□-5K
		1000	8 × 20	0.12	1600	8	7500	RNL1C102MDS1□□	FP-016RE102M-NL□□
		*1000	8 × 20	0.12	1600	8	7500	RNL1C102MDSASQ□□	FP-016RE102M-NL□□-5K
		1200	8 × 20	0.12	1920	8	7500	RNL1C122MDS1□□	FP-016RE122M-NL□□
		*1200	8 × 20	0.12	1920	8	7500	RNL1C122MDSASQ□□	FP-016RE122M-NL□□-5K
		1500	▲ 8 × 20	0.12	2400	8	7500	RNL1C152MDS6□□	FP-016RE152M-NL□□-DS
		1500	10 × 20	0.12	2400	8	8100	RNL1C152MDS1□□	FP-016RE152M-NL□□
		*1500	10 × 20	0.12	2400	8	8100	RNL1C152MDSASQ□□	FP-016RE152M-NL□□-5K
		1800	10 × 20	0.12	2880	8	8100	RNL1C182MDS1□□	FP-016RE182M-NL□□
		*1800	10 × 20	0.12	2880	8	8100	RNL1C182MDSASQ□□	FP-016RE182M-NL□□-5K
		2200	10 × 20	0.12	3520	8	8100	RNL1C222MDS1□□	FP-016RE222M-NL□□
		*2200	10 × 20	0.12	3520	8	8100	RNL1C222MDSASQ□□	FP-016RE222M-NL□□-5K

*: Load life 5000hours.

"▲" In this case, [6] will be put at 12th digit of type numbering system.

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



- Taping specifications are given in page 26, 27.
- Please refer to page 3 for the minimum order quantity.

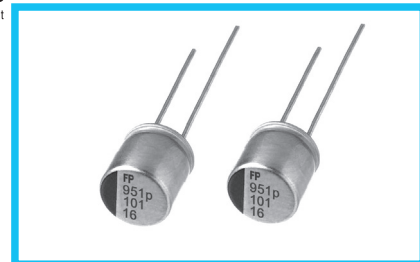
RS6 Miniature Sized, High Capacitance



FPCAP

Expanded

- Low ESR, High Capacitance, High ripple current.
- Miniature Sized.
- Load life of 2000 hours at 105°C.
- Radial lead type : Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2011/65/EU).



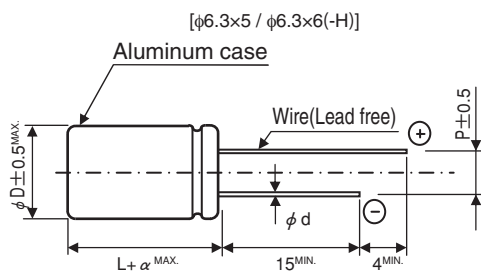
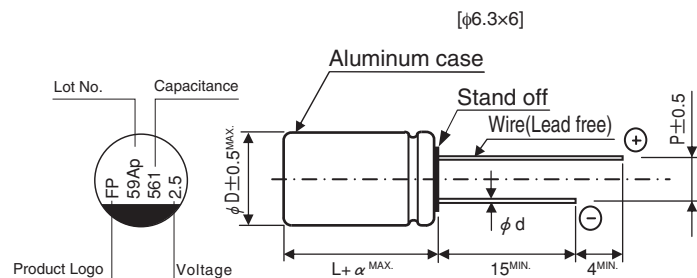
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +125°C	
Rated Voltage Range	2.5 to 25V	
Rated Capacitance Range	33 to 560μF	
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

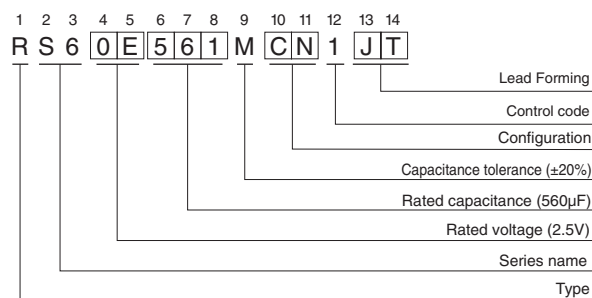


φD×L	φd	P	α
6.3×5	0.5	2.5	1.0
6.3×6	0.45	2.5	1.0

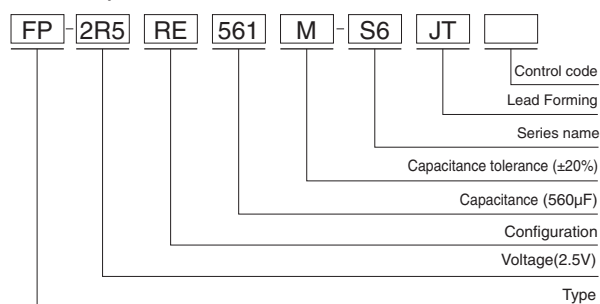
Frequency coefficient of rated ripple current

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 : 2.5V 560μF) Nichicon part number



FPCAP part number



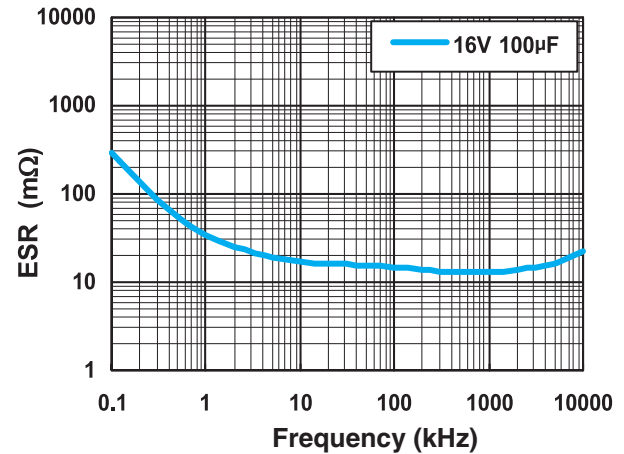
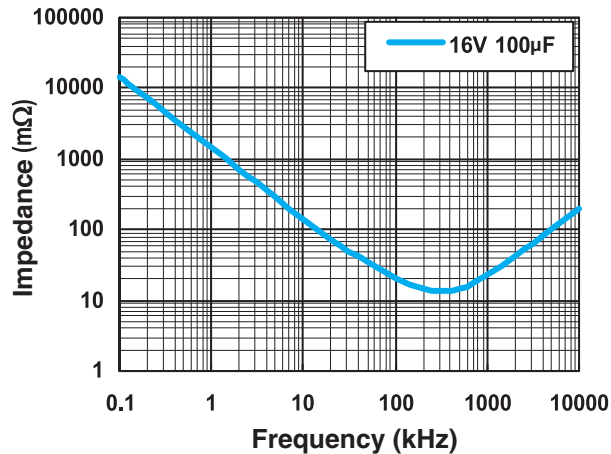
RS6

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μ F)	Case Size ϕ D×L (mm)	$\tan \delta$	Leakage Current (μ A, 2min.)	ESR (m Ω) (20°C/100kHz)	Rated Ripple Current (mA rms) (105°C/100kHz)	NICHICON	FPCAP
2.5 (0E)	2.8	390	6.3×5	0.10	500	12	3500	RS60E391MCN1□□	FP-2R5RE391M-S6□□
		560	6.3×5	0.12	700	13	3600	RS60E561MCN1□□	FP-2R5RE561M-S6□□
		*560	6.3×5	0.12	700	13	3600	RS60E561MCNASQ□□	FP-2R5RE561M-S6□□-5K
10 (1A)	11.5	150	6.3×5	0.10	450	25	2500	RS61A151MCN1□□	FP-010RE151M-S6□□
16 (1C)	18.4	100	6.3×6	0.10	500	24	2490	RS61C101MDS1□□	FP-016RE101M-S6□□
		100	6.3×6	0.10	500	24	2490	RS61C101MCS1□□	FP-016RE101M-S6□□-H
		180	6.3×5	0.10	576	20	3200	RS61C181MCN1□□	FP-016RE181M-S6□□
25 (1E)	28.7	33	6.3×5	0.10	165	60	1700	RS61E330MCN1□□	FP-025RE330M-S6□□
		56	6.3×5	0.10	280	30	2800	RS61E560MCN1□□	FP-025RE560M-S6□□

* : Load life 5000hours.

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



- Taping specifications are given in page 26, 27.
- Please refer to page 3 for the minimum order quantity.

RHT High Temperature(125°C)



FPCAP Expanded

- Low ESR, High Capacitance, High ripple current.
- Load life of 1000 hours at 125°C.
- Radial lead type : Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2011/65/EU).



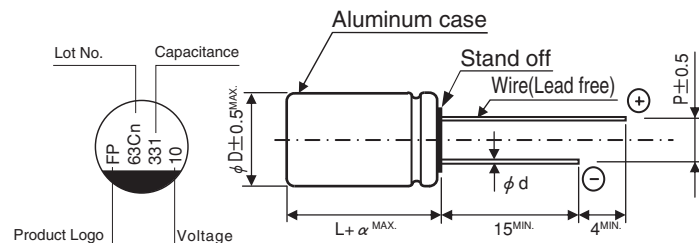
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +125°C	
Rated Voltage Range	6.3 to 35V	
Rated Capacitance Range	100 to 1000μF	
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	125°C, rated voltage 1000Hrs.
	Capacitance change	Within ±20% of initial value before test
	tan δ	200% 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 initial specified value

※1 ESR should be measured at both of the terminal ends closest to the capacitor body.

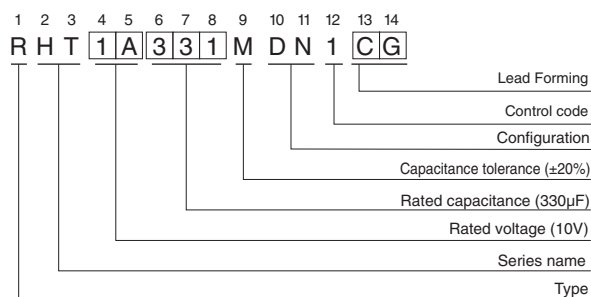
※2 Conditioning : If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

Dimensions



φD×L	φd	P	α
8×11.5	0.6	3.5	1.5
10×12.5	0.6	5.0	1.5

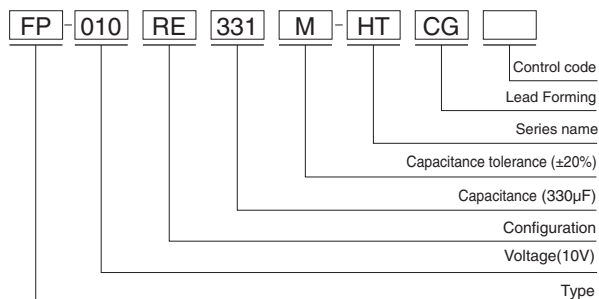
Type numbering system (Example : 10V 330μF) Nichicon part number



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



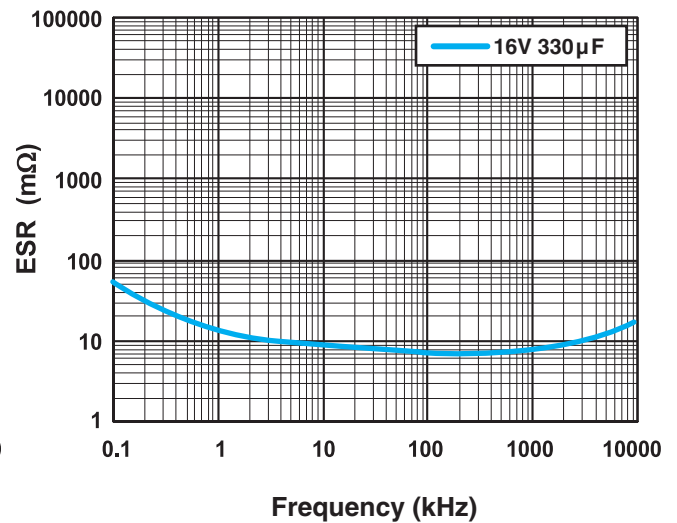
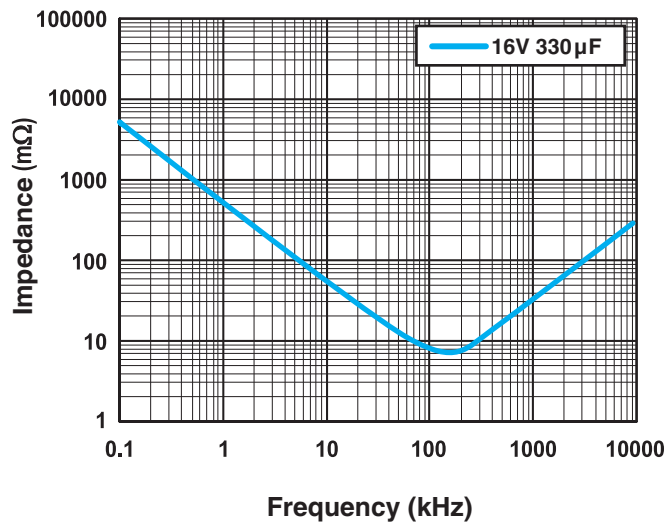
RHT

■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μ F)	Case Size ϕ D×L (mm)	tan δ	Leakage Current (μ A, 2min.)	ESR (m Ω) (20°C/100kHz)	Rated Ripple Current (mA rms)(105°C/100kHz)		NICHICON	FPCAP
							$\leq 105^\circ\text{C}$ *	$105^\circ\text{C} < \leq 125^\circ\text{C}$ *		
6.3 (0J)	7.2	680	10×12.5	0.12	857	12	5450	1740	RHT0J681MDN1□□	FP-6R3RE681M-HT□□
		820	10×12.5	0.12	1033	12	5450	1740	RHT0J821MDN1□□	FP-6R3RE821M-HT□□
		1000	8×11.5	0.12	1260	10	5200	1600	RHT0J102MDN1□□	FP-6R3RE102M-HT□□
10 (1A)	11.5	220	8×11.5	0.12	440	17	3950	1260	RHT1A221MDN1□□	FP-010RE221M-HT□□
		330	8×11.5	0.12	660	17	3950	1260	RHT1A331MDN1□□	FP-010RE331M-HT□□
		390	8×11.5	0.12	780	16	3950	1260	RHT1A391MDN1□□	FP-010RE391M-HT□□
		560	10×12.5	0.12	1120	13	5250	1680	RHT1A561MDN1□□	FP-010RE561M-HT□□
16 (1C)	18.4	270	10×12.5	0.12	864	16	4750	1520	RHT1C271MDN1□□	FP-016RE271M-HT□□
		330	10×12.5	0.12	1056	16	4750	1520	RHT1C331MDN1□□	FP-016RE331M-HT□□
		470	10×12.5	0.12	1504	16	4750	1520	RHT1C471MDN1□□	FP-016RE471M-HT□□
20 (1D)	23.0	150	10×12.5	0.12	600	20	4350	1390	RHT1D151MDN1□□	FP-020RE151M-HT□□
35 (1V)	40.2	100	10×12.5	0.12	700	25	3250	1040	RHT1V101MDN1□□	FP-035RE101M-HT□□

*: At ambient temperature

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



- Taping specifications are given in page 26, 27.
- Please refer to page 3 for the minimum order quantity.