CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS
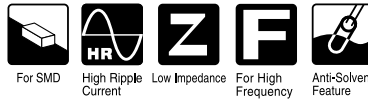
nichicon

RSS/RSA/RSB

High Capacitance (φ6.3)

FPCAP

- 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.
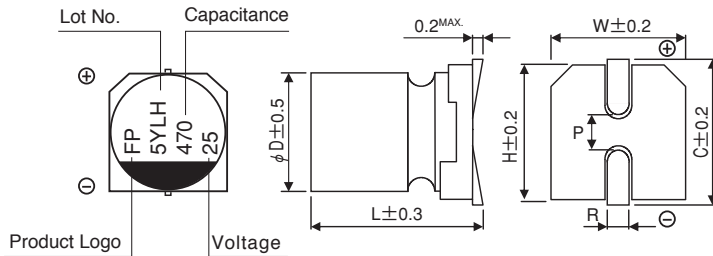- Compliant to the RoHS directive (2011/65/EU).

For SMD | High Ripple Current | Low Impedance | For High Frequency | Anti-Solvent Feature

RSS → Lower ESR → **RSA** → Lower ESR → **RSB**

■ 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		
	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.
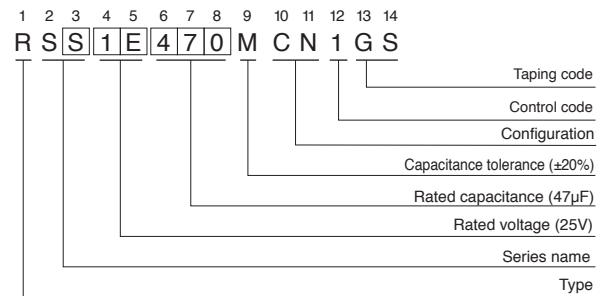
■ Dimensions

Lot No. | Capacitance
⊕
FP 5YLH 470 25
⊖
Product Logo | Voltage

0.2MAX. | W±0.2
φD±0.5
H±0.2
L±0.3
P
R
C±0.2
⊕
⊖

(mm)

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

● 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

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

Taping code
Control code
Configuration
Capacitance tolerance (±20%)
Rated capacitance (47µF)
Rated voltage (25V)
Series name
Type

FPCAP part number

FP	-	025	ME	470	M	-	SS	R	

Control code
Taping code
Series name
Capacitance tolerance (±20%)
Capacitance (47µF)
Configuration
Voltage(25V)
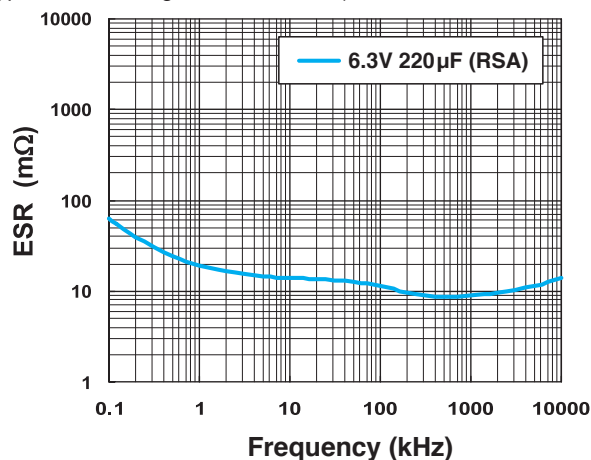Type

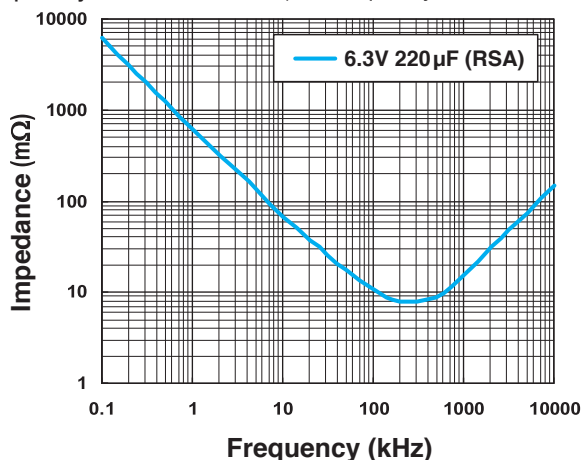● Dimension table in next page.

CAT.8100F

RSS / RSA / RSB

■ Standard Ratings

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (µF)	Case Size φD×L (mm)	tan δ	Leakage Current (µA, 2min.)	ESR (mΩ, 100kHz)	Rated Ripple Current (mArms)	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
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
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
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.)

6.3V 220µF (RSA)

Impedance (mΩ) vs Frequency (kHz)

6.3V 220µF (RSA)

ESR (mΩ) vs Frequency (kHz)

- 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.

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