

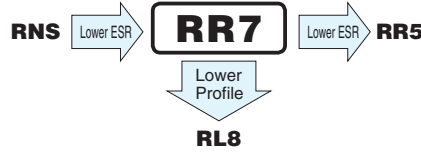
# RR7 Low ESR



## 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).



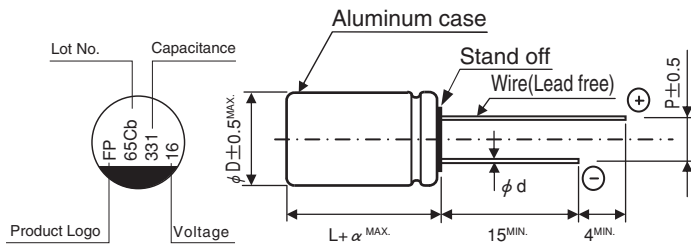
### Specifications

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
	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

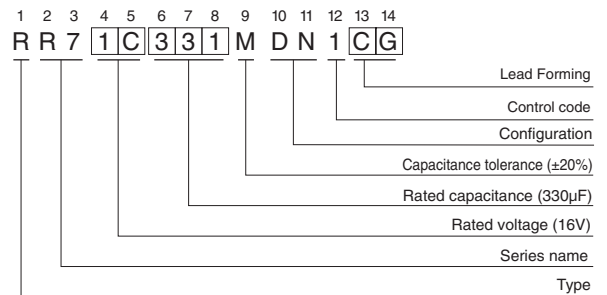


φD×L	φd	P	α
8×11.5	0.6	3.5	1.5
10×12.5	0.6	5.0	1.5

(mm)

### Type numbering system (Example : 16V 330μF)

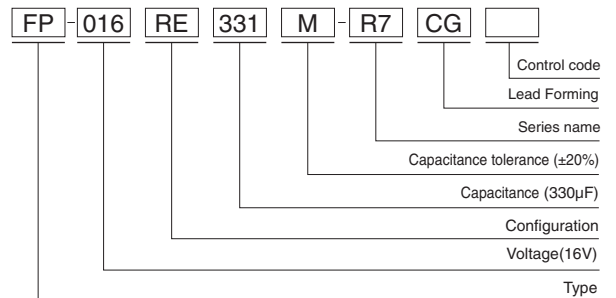
#### Nichicon part number



### ● 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



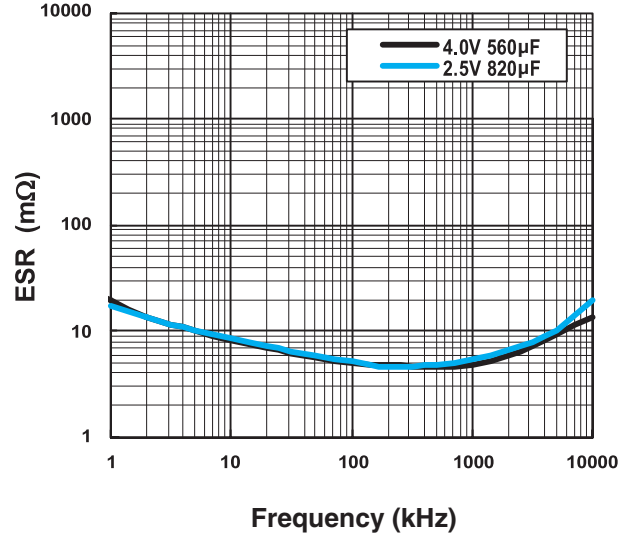
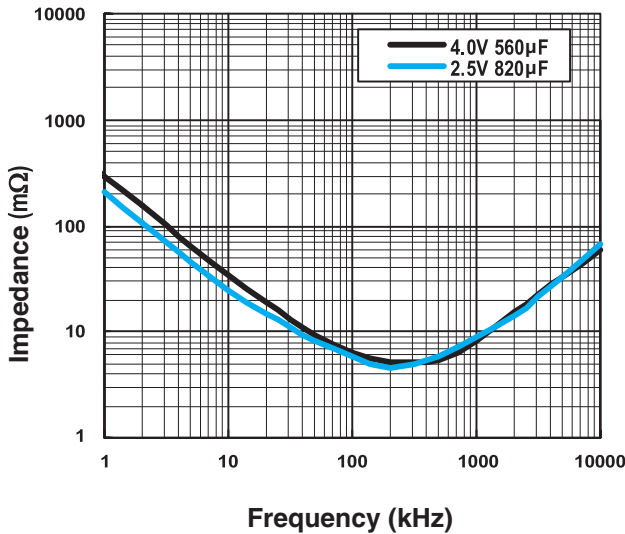
# RR7

## ■ 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 <sub>rms</sub> ) (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.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Nichicon:

[RR70E152MDN1](#) [RR70E681MDN1](#) [RR70E821MDN1](#) [RR70G122MDN1](#) [RR70G561MDN1](#) [RR70G821MDN1](#)  
[RR70J102MDN1](#) [RR70J151MDN1](#) [RR70J221MDN1](#) [RR70J331MDN1](#) [RR70J391MDN1](#) [RR70J681MDN1](#)  
[RR70J821MDN1](#) [RR71A101MDN1](#) [RR71A221MDN1](#) [RR71A471MDN1](#) [RR71A681MDN1](#) [RR71C101MDN1](#)  
[RR71C151MDN1](#) [RR71C331MDN1](#) [RR71C680MDN1](#) [RR71C271MDN1PH](#) [RR71A221MDN1PH](#) [RR71C271MDN1](#)  
[RR71A681MDN1PH](#) [RR70E681MDN1KX](#) [RR70G561MDN1KX](#) [RR71C151MDN1PH](#) [RR71A101MDN1PX](#)  
[RR71C101MDN1KX](#) [RR71C101MDN1PX](#)