

# FPCAP *Functional Polymer Aluminum Solid Electrolytic Capacitors*

## F8 series

Ultra Low ESR

Large Capacitance

Low ESL

Lead-free

RoHS Compliance

### ● Features

By using Functional Polymer cathode, Frequency & Temp. characteristics are greatly improved.

- Low ESR and **Low ESL** at a high frequency range.
- High ripple current capability.
- Long life and high reliability.

### ● Applications

- Switching Power Supply and DC/DC Converter.
- Back up Power Supplies of CPU(VRM etc.)
- Miniature high Power Supply.



### ● Environmental Correspondence

Any environmental hazardous substances are not used.

- The lead free of terminal plating (Sn 100%)

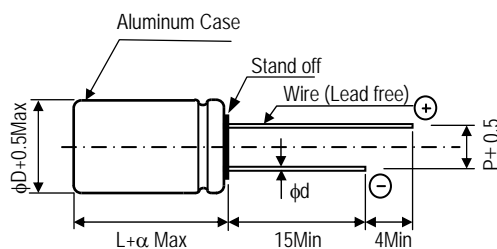
### ● Specifications

Items		Characteristics
		F8
Operating Temp. Range		- 55 to + 105°C
Rated Voltage Range		2.5 to 6.3V <sub>DC</sub>
Capacitance Range		100 to 560μF
Capacitance Tolerance		± 20% (M)
Endurance	Condition	105°C 2000Hrs at rated voltage
	Capacitance	Within ± 20% of the value before test
	Leakage Current	Not to exceed the value specified
	tan δ	Not to exceed 150% of the value specified
Failure Rate		0.1% / 1000Hrs. Max (60%CL)

### ● Size List

		[φD×L]		
Cap. [μF]	R.V (S.V.) [V]	2.5 (2.8)	4.0 (4.6)	6.3 (7.2)
	100		5×8	
270				5×8
330		5×8	5×8	
470		5×8		
560		5×8		

### ● Dimensions



[Unit : mm]

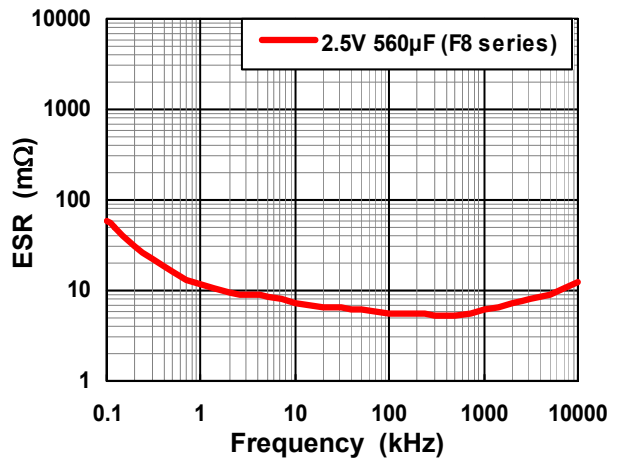
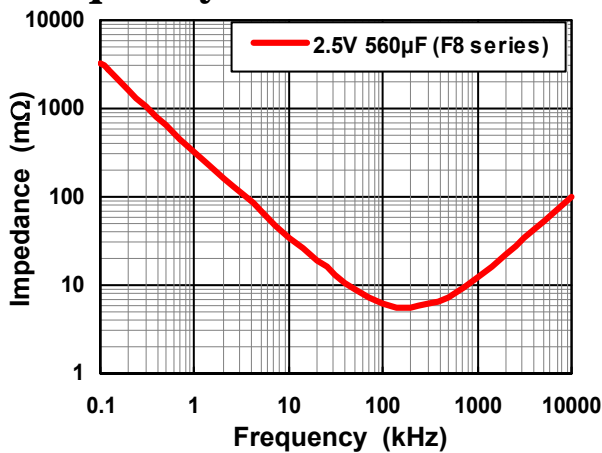
φD×L	φd	P	α
5×8	0.6	2.0	1.0

## ● Part number & Specifications

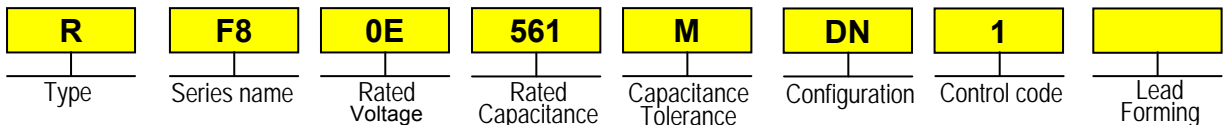
Rated Voltage (V)	Rated Capacitance ( $\mu$ F, 120Hz)	Part Number		Leakage Current * ( $\mu$ A, 2 min)	tan $\delta$ (120Hz)	ESR (m $\Omega$ , 100kHz)	ESL (Typ.) (nH, 10MHz)	Rated Ripple Current (mA, r.m.s.)	Case Size $\phi$ D×L(mm)
		NICHICON	FPCAP						
2.5	100	RF80E101MDN1□□	FP-2R5RE101M-F8□□	500	0.10	7	1.5	4200	5 × 8
	330	RF80E331MDN1□□	FP-2R5RE331M-F8□□	500	0.10	7	1.5	4200	5 × 8
	470	RF80E471MDN1□□	FP-2R5RE471M-F8□□	500	0.10	7	1.5	4200	5 × 8
	560	RF80E561MDN1□□	FP-2R5RE561M-F8□□	500	0.10	7	1.5	4200	5 × 8
4	330	RF80G331MDN1□□	FP-4R0RE331M-F8□□	500	0.10	8	1.5	4000	5 × 8
6.3	270	RF80J271MDN1□□	FP-6R3RE271M-F8□□	500	0.10	11	1.5	3700	5 × 8

\* In case of some doubt about measured values, measure after applying rated voltage for 120 minutes at 105°C.

## ● Frequency Characteristics

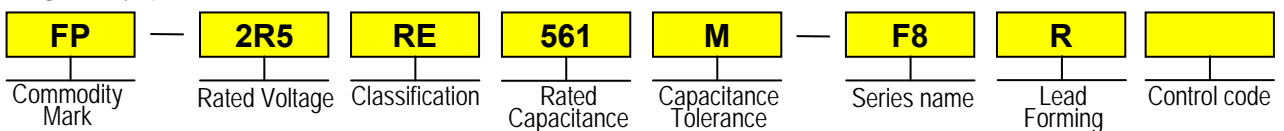


## ● Part Number (EX) 2.5V, 560 $\mu$ F Nichicon P/N



( CG: Cut lead (Bulk)  
JT:  $\phi$ 5x8, 2.5mm pitch taping  
PX:  $\phi$ 5x8, 5.0mm pitch taping )

### FPCAP P/N



( R: Long lead (Bulk)  
CG: Cut lead (Bulk)  
JT:  $\phi$ 5x8, 2.5mm pitch taping  
P :  $\phi$ 5x8, 5.0mm pitch taping )