

# FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors

## L8 series

### Features

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

- Low ESR 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
		L8
Operating Temp. Range		- 55 to + 105°C
Rated Voltage Range		2.5 to 35V <sub>DC</sub>
Capacitance Range		100 to 1500μF
Capacitance Tolerance		± 20% (M)
Endurance	Condition	105°C 2000/5000Hrs 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

Cap. [μF]	R.V.(S.V.) [V]						[φD×L]	
	2.5 (2.8)	4.0 (4.6)	6.3 (7.2)	16 (18.4)	35 (40.2)			
100				8×8	8×8			
180				8×8				
220				8×8				
270				8×8				
330				8×8				
470			8×8					
560	8×8	8×8	8×8					
680			8×8					
820	8×8	8×8	8×8					
1000	8×8		8×8					
1200	8×8							
1500	8×8							

### Dimensions



Ultra Low ESR

Large Capacitance

Endurance 2000/5000hrs

Low Profile

Lead-free

RoHS Compliance

UPGRADE



## ● Part number & Specifications

Rated Voltage (V)	Rated Capacitance (μF, 120Hz)	Part Number		Leakage Current * (μA, 2 min)	tanδ (120Hz)	ESR (mΩ, 100kHz)	Rated Ripple Current (mA, r.m.s.)	Case Size φD×L(mm)
		NICHICON	FPCAP					
2.5	560	RL80E561MDN1□□	FP-2R5RE561M-L8□□	500	0.12	6	6100	8 × 8
	** 560	RL80E561MDNASQ□□	FP-2R5RE561M-L8□□-5K	500	0.12	6	6100	8 × 8
	820	RL80E821MDN1□□	FP-2R5RE821M-L8□□	513	0.12	6	6100	8 × 8
	** 820	RL80E821MDNASQ□□	FP-2R5RE821M-L8□□-5K	513	0.12	6	6100	8 × 8
	1000	RL80E102MDN1□□	FP-2R5RE102M-L8□□	625	0.12	6	6100	8 × 8
	1200	RL80E122MDN1□□	FP-2R5RE122M-L8□□	750	0.12	7	6100	8 × 8
4.0	1500	RL80E152MDN1□□	FP-2R5RE152M-L8□□	938	0.12	7	6100	8 × 8
	560	RL80G561MDN1□□	FP-4R0RE561M-L8□□	560	0.12	6	6100	8 × 8
	** 560	RL80G561MDNASQ□□	FP-4R0RE561M-L8□□-5K	560	0.12	6	6100	8 × 8
6.3	820	RL80G821MDN1□□	FP-4R0RE821M-L8□□	820	0.12	6	6100	8 × 8
	470	RL80J471MDN1□□	FP-6R3RE471M-L8□□	592	0.12	8	5700	8 × 8
	** 470	RL80J471MDNASQ□□	FP-6R3RE471M-L8□□-5K	592	0.12	8	5700	8 × 8
	560	RL80J561MDN1□□	FP-6R3RE561M-L8□□	706	0.12	8	5700	8 × 8
	** 560	RL80J561MDNASQ□□	FP-6R3RE561M-L8□□-5K	706	0.12	8	5700	8 × 8
	680	RL80J681MDN1□□	FP-6R3RE681M-L8□□	857	0.12	8	5700	8 × 8
16	820	RL80J821MDN1□□	FP-6R3RE821M-L8□□	1033	0.12	8	5700	8 × 8
	1000	RL80J102MDN1□□	FP-6R3RE102M-L8□□	1260	0.12	9	5700	8 × 8
	100	RL81C101MDN1□□	FP-016RE101M-L8□□	320	0.12	12	5000	8 × 8
	180	RL81C181MDN1□□	FP-016RE181M-L8□□	576	0.12	12	5000	8 × 8
	220	RL81C221MDN1□□	FP-016RE221M-L8□□	704	0.12	12	5000	8 × 8
35	270	RL81C271MDN1□□	FP-016RE271M-L8□□	864	0.12	10	5000	8 × 8
	330	RL81C331MDN1□□	FP-016RE331M-L8□□	1056	0.12	12	5000	8 × 8
	100	RL81V101MDN1□□	FP-035RE101M-L8□□	700	0.12	25	3000	8 × 8

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

\*\* Endurance 5000hrs product.

## ● Frequency Characteristics



## ● Part Number (EX) 6.3V, 560μF, 5000hrs (Endurance)

Nichicon P/N

<b>R</b>	<b>L8</b>	<b>0J</b>	<b>561</b>	<b>M</b>	<b>DN</b>	<b>ASQ</b>	
Type	Series name	Rated Voltage	Rated Capacitance	Capacitance Tolerance	Configuration	Control code	Lead Forming

FPCAP P/N

<b>FP</b>	<b>6R3</b>	<b>RE</b>	<b>561</b>	<b>M</b>	<b>L8</b>	<b>R</b>	<b>-5K</b>
Commodity Mark	Rated Voltage	Classification	Rated Capacitance	Capacitance Tolerance	Series name	Lead Forming	Control code

ASQ : 5000hrs  
1 : 2000hrs

CG: Cut lead (Bulk)  
KX: φ8, 3.5mm pitch taping  
PX: φ8, 5.0mm pitch taping

R: Long lead (Bulk)  
CG: Cut lead (Bulk)  
K : φ8, 3.5mm pitch taping  
P : φ8, 5.0mm pitch taping

-5K : 5000hrs  
Without -5K: 2000hrs