

# FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors

## S8 series

Ultra Low ESR	Large Capacitance	Endurance 2000/5000hrs
Low ESL	Lead-free	RoHS Compliance

**UPGRADE**



### 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

Corresponding to Lead-free, RoHS compliance and Halogen-free.

- The Lead-free of terminal plating (Sn)

### Specifications

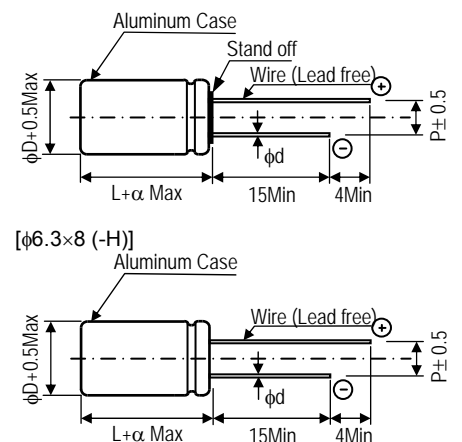
Items		Characteristics
		<b>S8</b>
Operating Temp. Range		- 55 to + 105°C
Rated Voltage Range		2.5 to 16V-dc
Capacitance Range		100 to 1200µF
Capacitance Tolerance		± 20% (M)
Endurance	Condition	105°C 2000/5000Hrs at rated voltage
	Capacitance	Within ± 20% of the value before test
	Leakage Current	Not 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

[φD×L]

R.V (S.V.) Cap. [µF]	2.5 (2.8)	4.0 (4.6)	6.3 (7.2)	16 (18.4)
100				6.3×8
270				6.3×8
330	6.3×8		6.3×8	
470	6.3×8		6.3×8	
560	6.3×8	6.3×8	6.3×8	
680			6.3×8	
820	6.3×8			
1200	6.3×8			

### Dimensions



[Unit : mm]

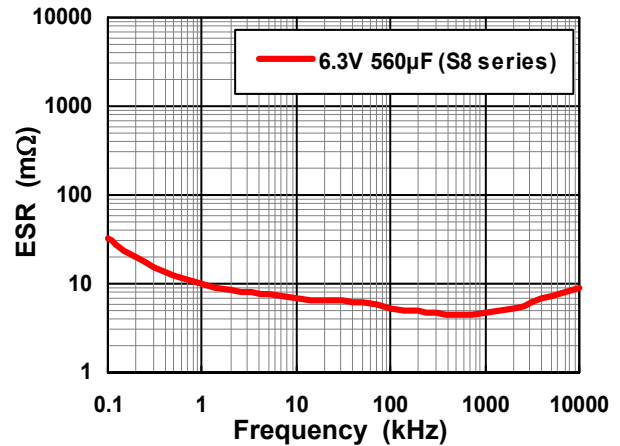
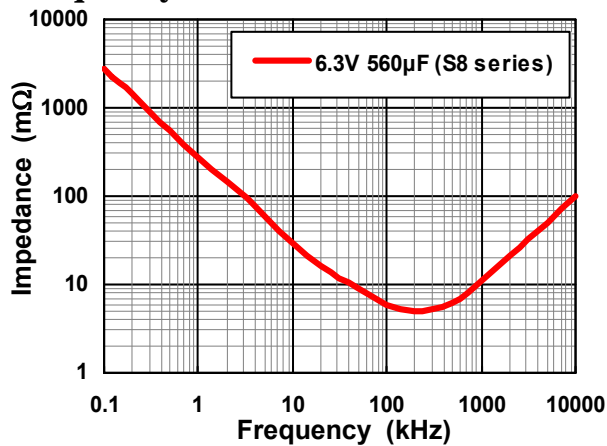
φD×L	φd	P	α
6.3×8	0.6	2.5	1.0

● 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, 40MHz)	Rated Ripple Current (mA, r.m.s.)	Case Size $\phi$ D $\times$ L(mm)
		NICHICON	FPCAP						
2.5	330	RS80E331MDN1□□	FP-2R5RE331M-S8□□	500	0.10	7	2	5600	6.3 $\times$ 8
	** 330	RS80E331MDNASQ□□	FP-2R5RE331M-S8□□-5K	500	0.10	7	2	5600	6.3 $\times$ 8
	470	RS80E471MDN1□□	FP-2R5RE471M-S8□□	500	0.10	7	2	5600	6.3 $\times$ 8
	** 470	RS80E471MDNASQ□□	FP-2R5RE471M-S8□□-5K	500	0.10	7	2	5600	6.3 $\times$ 8
	560	RS80E561MDN1□□	FP-2R5RE561M-S8□□	500	0.10	7	2	5600	6.3 $\times$ 8
	** 560	RS80E561MDNASQ□□	FP-2R5RE561M-S8□□-5K	500	0.10	7	2	5600	6.3 $\times$ 8
	820	RS80E821MDN1□□	FP-2R5RE821M-S8□□	512	0.10	7	2	5600	6.3 $\times$ 8
	** 820	RS80E821MDNASQ□□	FP-2R5RE821M-S8□□-5K	512	0.10	7	2	5600	6.3 $\times$ 8
4.0	1200	RS80E122MDN1□□	FP-2R5RE122M-S8□□	750	0.10	7	2	5600	6.3 $\times$ 8
	** 560	RS80G561MDN1□□	FP-4R0RE561M-S8□□	560	0.10	7	2	5000	6.3 $\times$ 8
4.0	** 560	RS80G561MDNASQ□□	FP-4R0RE561M-S8□□-5K	560	0.10	7	2	5000	6.3 $\times$ 8
	6.3	330	RS80J331MDN1□□	FP-6R3RE331M-S8□□	519	0.10	8	2	5000
** 330		RS80J331MDNASQ□□	FP-6R3RE331M-S8□□-5K	519	0.10	8	2	5000	6.3 $\times$ 8
470		RS80J471MDN1□□	FP-6R3RE471M-S8□□	740	0.10	8	2	5000	6.3 $\times$ 8
** 470		RS80J471MDNASQ□□	FP-6R3RE471M-S8□□-5K	740	0.10	8	2	5000	6.3 $\times$ 8
560		RS80J561MDN1□□	FP-6R3RE561M-S8□□	882	0.10	8	2	5000	6.3 $\times$ 8
** 560		RS80J561MDNASQ□□	FP-6R3RE561M-S8□□-5K	882	0.10	8	2	5000	6.3 $\times$ 8
16	680	RS80J681MCN1□□	FP-6R3RE681M-S8□□-H	1071	0.10	8	2	4700	6.3 $\times$ 8
	100	RS81C101MDN1□□	FP-016RE101M-S8□□	500	0.10	14	2	3800	6.3 $\times$ 8
16	270	RS81C271MDN1□□	FP-016RE271M-S8□□	1296	0.10	15	2	3800	6.3 $\times$ 8

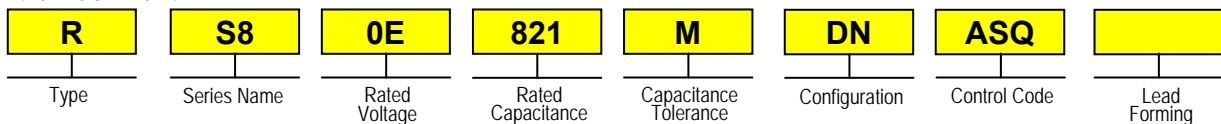
\* In case of some doubt about measured values, measure after applying rated voltage for 120 minutes at 105°C.  
 \*\* Endurance 5000hrs product.

● Frequency Characteristics



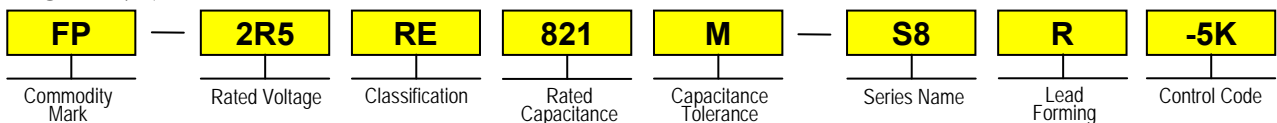
● Part Number (EX) 2.5V, 820 $\mu$ F, 5000hrs (Endurance)

Nichicon P/N



ASQ : 5000hrs  
 1 : 2000hrs  
 CG: Cut lead (Bulk)  
 JT:  $\phi$ 6.3, 2.5mm pitch taping  
 PX:  $\phi$ 6.3x8, 5.0mm pitch taping

FPCAP P/N



R: Long lead (Bulk)  
 CG: Cut lead (Bulk)  
 JT:  $\phi$ 6.3x8, 2.5mm pitch taping  
 P :  $\phi$ 6.3x8, 5.0mm pitch taping  
 -5K : 5000hrs  
 Without -5K: 2000hrs  
 -H : Flat rubber