

# FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors

## E5 series

Ultra Low ESR

Low Profile

Large Capacitance

Lead-free

RoHS Compliance



### ● 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

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

- The Lead-free of terminal plating (Sn)

### ● Specifications

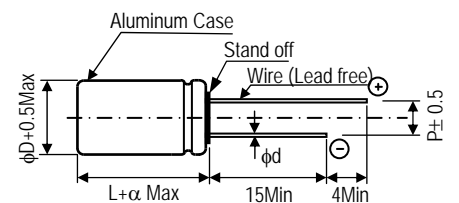
Items		Characteristics
		E5
Operating Temp. Range		- 55 to + 105°C
Rated Voltage Range		2.5 to 4.0V·DC
Capacitance Range		560 to 820μF
Capacitance Tolerance		± 20% (M)
Endurance	Condition	105°C 2000Hrs at rated voltage
	Capacitance	Within ± 20% of the value before test
	Leakage Current	Not to exceed 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)
560	8×8	8×8
820	8×8	

### ● Dimensions



[Unit : mm]

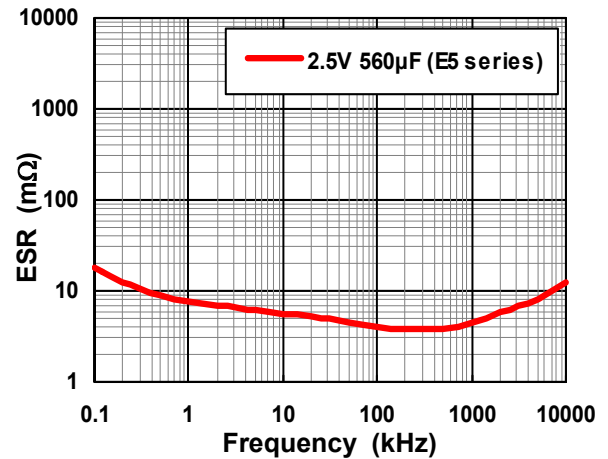
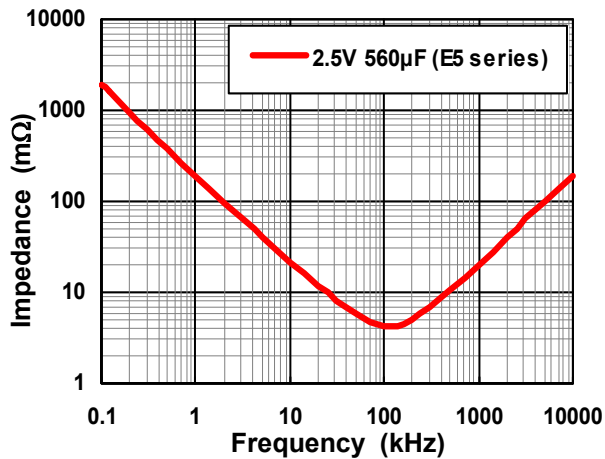
φD×L	φd	P	α
8×8	0.6	3.5	1.0

● 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	RE50E561MDN1□□	FP-2R5RE561M-E5□□	500	0.10	5	6300	8 × 8
	820	RE50E821MDN1□□	FP-2R5RE821M-E5□□	513	0.10	5	6300	8 × 8
4.0	560	RE50G561MDN1□□	FP-4R0RE561M-E5□□	560	0.10	5	6300	8 × 8

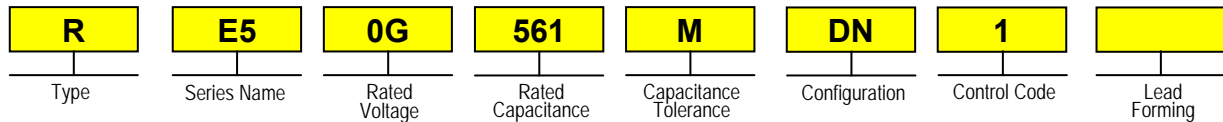
\* In case of some doubt about measured values, measure after applying rated voltage for 120 minutes at 105°C.

● Frequency Characteristics



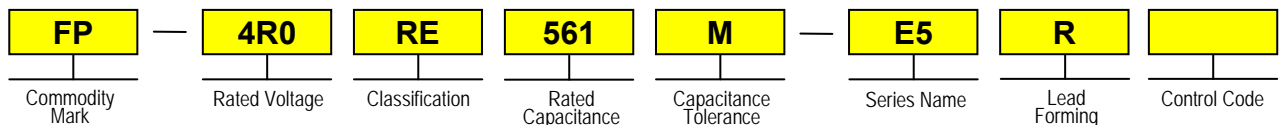
● Part Number (EX) 4V, 560μF

Nichicon P/N



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

FPCAP P/N



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