

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

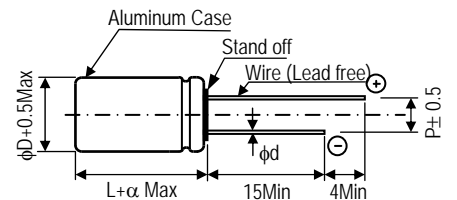
| Items | | Characteristics |
|-----------------------|-----------------|---|
| | | E5 |
| Operating Temp. Range | | - 55 to + 105°C |
| Rated Voltage Range | | 2.5 to 4.0V·DC |
| Capacitance Range | | 560 to 820μF |
| Capacitance Tolerance | | ± 20% (M) |
| Endurance | Condition | 105°C 2000Hrs at rated 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]

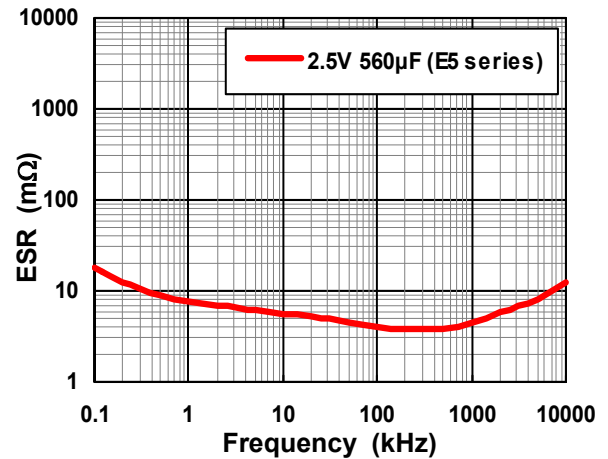
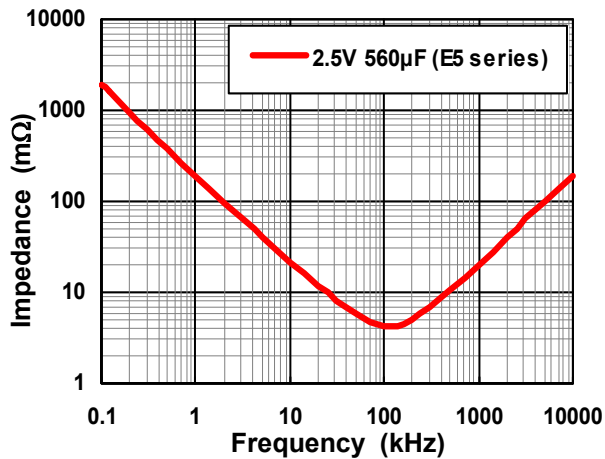
| φD×L | φd | P | α |
|------|-----|-----|-----|
| 8×8 | 0.6 | 3.5 | 1.0 |

● 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 |

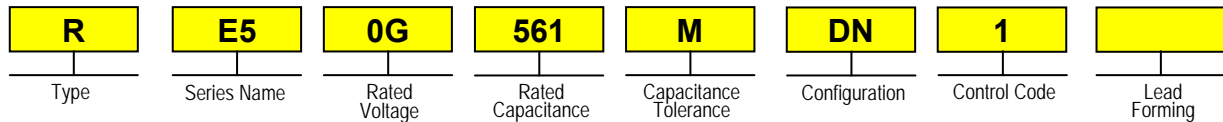
* In case of some doubt about measured values, measure after applying rated voltage for 120 minutes at 105°C.

● Frequency Characteristics



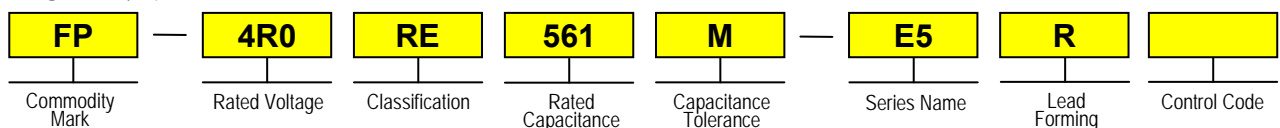
● Part Number (EX) 4V, 560μF

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)