

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 _{DC} |
| Capacitance Range | | 100 to 1500 μ F |
| Capacitance Tolerance | | $\pm 20\%$ (M) |
| Endurance | Condition | 105°C 2000/5000Hrs at rated voltage |
| | Capacitance | Within $\pm 20\%$ 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) |

Ultra Low ESR

Large Capacitance

Endurance 2000/5000hrs

Low Profile

Lead-free

RoHS Compliance

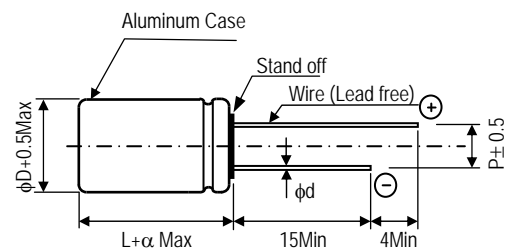
UPGRADE



● Size List

| Cap. [μ F] | R.V.(S.V.) [V] | | | | | |
|-----------------|----------------|-----------|-----------|-----------|-----------|--|
| | 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



[Unit : mm]

| $\phi D \times L$ | 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 | 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

| | | | | | | | |
|----------|-------------|---------------|-------------------|-----------------------|---------------|--------------|--------------|
| R | L8 | 0J | 561 | M | DN | ASQ | |
| Type | Series name | Rated Voltage | Rated Capacitance | Capacitance Tolerance | Configuration | Control code | Lead Forming |

FPCAP P/N

| | | | | | | | |
|----------------|---------------|----------------|-------------------|-----------------------|-------------|--------------|--------------|
| FP | 6R3 | RE | 561 | M | L8 | R | -5K |
| 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