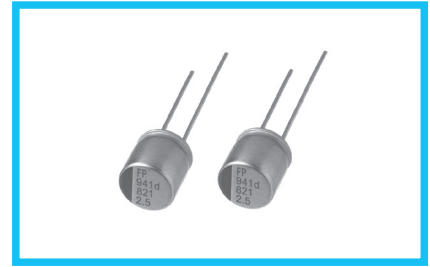


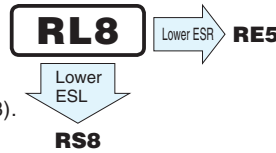
RL8 Low ESR, Low Profile (φ8)



FPCAP



- Ultra Low ESR, High ripple current.
- Low Profile(Height 8mm).
- Load life of 2000/5000 hours at 105°C.
- Radial lead type : Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



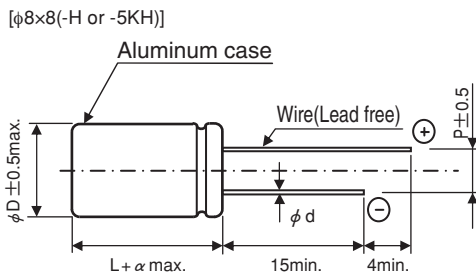
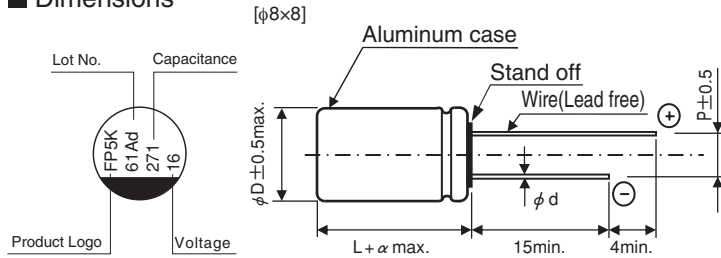
Specifications

| Item | Performance Characteristics | |
|-------------------------------|--|---|
| Category Temperature Range | -55 to +105°C | |
| Rated Voltage Range | 2.5 to 35V | |
| Rated Capacitance Range | 100 to 1500μF | |
| Capacitance Tolerance | ±20% at 120Hz, 20°C | |
| Tangent of loss angle (tan δ) | Less than or equal to the specified value at 120Hz, 20°C | |
| ESR (※1) | Less than or equal to the specified value at 100kHz, 20°C | |
| Leakage Current (※2) | Less than or equal to the specified value. After 2 minutes' application of rated voltage at 20°C | |
| Endurance | Test condition | 105°C, rated voltage 2000 / 5000Hrs. |
| | Capacitance change | Within ±20% of initial value before test |
| | tan δ | 150% or less than the initial specified value |
| | ESR(※1) | 150% or less than the initial specified value |
| | Leakage current (※2) | Less than or equal to the initial specified value |

※1 ESR should be measured at both of the terminal ends closest to the capacitor body.

※2 Conditioning : If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

Dimensions

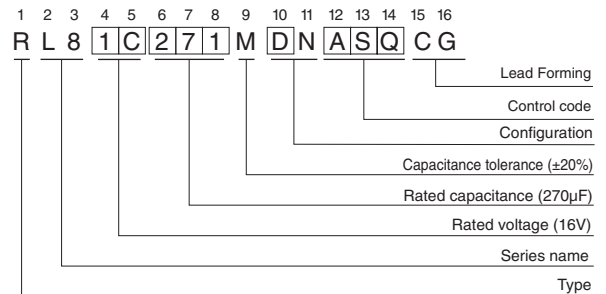


| (mm) | | | |
|------|-----|-----|-----|
| φD×L | φd | P | α |
| 8×8 | 0.6 | 3.5 | 1.0 |

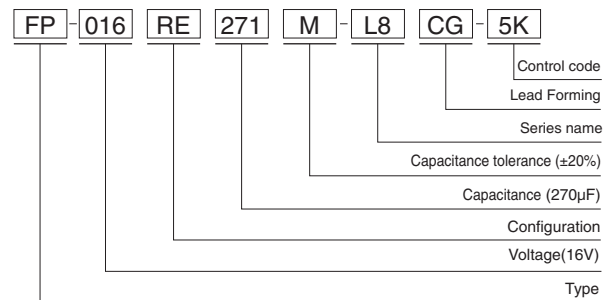
● Frequency coefficient of rated ripple current

| Frequency | 120 Hz | 1 kHz | 10 kHz | 100 kHz | 300 kHz |
|-------------|--------|-------|--------|---------|---------|
| Coefficient | 0.10 | 0.45 | 0.50 | 1.00 | 1.00 |

Type numbering system (Example : 16V 270μF) Nichicon part number



FPCAP part number



RL8

■ Dimensions

| Rated Voltage (V) (code) | Surge Voltage (V) | Rated Capacitance (μF) | Case Size φD×L (mm) | tan δ | Leakage Current (μA) (at 20°C after 2 minutes) | ESR (mΩ) (20°C/100kHz) | Rated Ripple Current (mA rms) (105°C/100kHz) | NICHICON | FPCAP |
|--------------------------|-------------------|------------------------|---------------------|-------|--|------------------------|--|------------------|-----------------------|
| 2.5 (0E) | 2.8 | 560 | 8×8 | 0.12 | 500 | 6 | 6100 | RL80E561MDN1□□ | FP-2R5RE561M-L8□□ |
| | | 560 | 8×8 | 0.12 | 500 | 6 | 6100 | RL80E561MCN1□□ | FP-2R5RE561M-L8□□-H |
| | | * 560 | 8×8 | 0.12 | 500 | 6 | 6100 | RL80E561MDNASQ□□ | FP-2R5RE561M-L8□□-5K |
| | | * 560 | 8×8 | 0.12 | 500 | 6 | 6100 | RL80E561MCNASQ□□ | FP-2R5RE561M-L8□□-5KH |
| | | 820 | 8×8 | 0.12 | 512 | 6 | 6100 | RL80E821MDN1□□ | FP-2R5RE821M-L8□□ |
| | | 820 | 8×8 | 0.12 | 512 | 6 | 6100 | RL80E821MCN1□□ | FP-2R5RE821M-L8□□-H |
| | | * 820 | 8×8 | 0.12 | 512 | 6 | 6100 | RL80E821MDNASQ□□ | FP-2R5RE821M-L8□□-5K |
| | | * 820 | 8×8 | 0.12 | 512 | 6 | 6100 | RL80E821MCNASQ□□ | FP-2R5RE821M-L8□□-5KH |
| | | 1000 | 8×8 | 0.12 | 625 | 6 | 6100 | RL80E102MDN1□□ | FP-2R5RE102M-L8□□ |
| | | 1000 | 8×8 | 0.12 | 625 | 6 | 6100 | RL80E102MCN1□□ | FP-2R5RE102M-L8□□-H |
| | | * 1000 | 8×8 | 0.12 | 625 | 6 | 6100 | RL80E102MDNASQ□□ | FP-2R5RE102M-L8□□-5K |
| | | * 1000 | 8×8 | 0.12 | 625 | 6 | 6100 | RL80E102MCNASQ□□ | FP-2R5RE102M-L8□□-5KH |
| | | 1200 | 8×8 | 0.12 | 750 | 7 | 6100 | RL80E122MDN1□□ | FP-2R5RE122M-L8□□ |
| | | 1200 | 8×8 | 0.12 | 750 | 7 | 6100 | RL80E122MCN1□□ | FP-2R5RE122M-L8□□-H |
| | | * 1200 | 8×8 | 0.12 | 750 | 7 | 6100 | RL80E122MDNASQ□□ | FP-2R5RE122M-L8□□-5K |
| | | * 1200 | 8×8 | 0.12 | 750 | 7 | 6100 | RL80E122MCNASQ□□ | FP-2R5RE122M-L8□□-5KH |
| | | 1500 | 8×8 | 0.12 | 937 | 7 | 6100 | RL80E152MDN1□□ | FP-2R5RE152M-L8□□ |
| | | 1500 | 8×8 | 0.12 | 937 | 7 | 6100 | RL80E152MCN1□□ | FP-2R5RE152M-L8□□-H |
| * 1500 | 8×8 | 0.12 | 937 | 7 | 6100 | RL80E152MDNASQ□□ | FP-2R5RE152M-L8□□-5K | | |
| * 1500 | 8×8 | 0.12 | 937 | 7 | 6100 | RL80E152MCNASQ□□ | FP-2R5RE152M-L8□□-5KH | | |
| 4.0 (0G) | 4.6 | 560 | 8×8 | 0.12 | 560 | 6 | 6100 | RL80G561MDN1□□ | FP-4R0RE561M-L8□□ |
| | | 560 | 8×8 | 0.12 | 560 | 6 | 6100 | RL80G561MCN1□□ | FP-4R0RE561M-L8□□-H |
| | | * 560 | 8×8 | 0.12 | 560 | 6 | 6100 | RL80G561MDNASQ□□ | FP-4R0RE561M-L8□□-5K |
| | | * 560 | 8×8 | 0.12 | 560 | 6 | 6100 | RL80G561MCNASQ□□ | FP-4R0RE561M-L8□□-5KH |
| | | 820 | 8×8 | 0.12 | 820 | 6 | 6100 | RL80G821MDN1□□ | FP-4R0RE821M-L8□□ |
| | | 820 | 8×8 | 0.12 | 820 | 6 | 6100 | RL80G821MCN1□□ | FP-4R0RE821M-L8□□-H |
| | | * 820 | 8×8 | 0.12 | 820 | 6 | 6100 | RL80G821MDNASQ□□ | FP-4R0RE821M-L8□□-5K |
| | | * 820 | 8×8 | 0.12 | 820 | 6 | 6100 | RL80G821MCNASQ□□ | FP-4R0RE821M-L8□□-5KH |
| 6.3 (0J) | 7.2 | 470 | 8×8 | 0.12 | 592 | 8 | 5700 | RL80J471MDN1□□ | FP-6R3RE471M-L8□□ |
| | | 470 | 8×8 | 0.12 | 592 | 8 | 5700 | RL80J471MCN1□□ | FP-6R3RE471M-L8□□-H |
| | | * 470 | 8×8 | 0.12 | 592 | 8 | 5700 | RL80J471MDNASQ□□ | FP-6R3RE471M-L8□□-5K |
| | | * 470 | 8×8 | 0.12 | 592 | 8 | 5700 | RL80J471MCNASQ□□ | FP-6R3RE471M-L8□□-5KH |
| | | 560 | 8×8 | 0.12 | 705 | 8 | 5700 | RL80J561MDN1□□ | FP-6R3RE561M-L8□□ |
| | | 560 | 8×8 | 0.12 | 705 | 8 | 5700 | RL80J561MCN1□□ | FP-6R3RE561M-L8□□-H |
| | | * 560 | 8×8 | 0.12 | 705 | 8 | 5700 | RL80J561MDNASQ□□ | FP-6R3RE561M-L8□□-5K |
| | | * 560 | 8×8 | 0.12 | 705 | 8 | 5700 | RL80J561MCNASQ□□ | FP-6R3RE561M-L8□□-5KH |
| | | 680 | 8×8 | 0.12 | 856 | 8 | 5700 | RL80J681MDN1□□ | FP-6R3RE681M-L8□□ |
| | | 680 | 8×8 | 0.12 | 856 | 8 | 5700 | RL80J681MCN1□□ | FP-6R3RE681M-L8□□-H |
| | | * 680 | 8×8 | 0.12 | 856 | 8 | 5700 | RL80J681MDNASQ□□ | FP-6R3RE681M-L8□□-5K |
| | | * 680 | 8×8 | 0.12 | 856 | 8 | 5700 | RL80J681MCNASQ□□ | FP-6R3RE681M-L8□□-5KH |
| | | 820 | 8×8 | 0.12 | 1033 | 8 | 5700 | RL80J821MDN1□□ | FP-6R3RE821M-L8□□ |
| | | 820 | 8×8 | 0.12 | 1033 | 8 | 5700 | RL80J821MCN1□□ | FP-6R3RE821M-L8□□-H |
| | | * 820 | 8×8 | 0.12 | 1033 | 8 | 5700 | RL80J821MDNASQ□□ | FP-6R3RE821M-L8□□-5K |
| | | * 820 | 8×8 | 0.12 | 1033 | 8 | 5700 | RL80J821MCNASQ□□ | FP-6R3RE821M-L8□□-5KH |
| | | 1000 | 8×8 | 0.12 | 1260 | 9 | 5700 | RL80J102MDN1□□ | FP-6R3RE102M-L8□□ |
| | | 1000 | 8×8 | 0.12 | 1260 | 9 | 5700 | RL80J102MCN1□□ | FP-6R3RE102M-L8□□-H |
| * 1000 | 8×8 | 0.12 | 1260 | 9 | 5700 | RL80J102MDNASQ□□ | FP-6R3RE102M-L8□□-5K | | |
| * 1000 | 8×8 | 0.12 | 1260 | 9 | 5700 | RL80J102MCNASQ□□ | FP-6R3RE102M-L8□□-5KH | | |

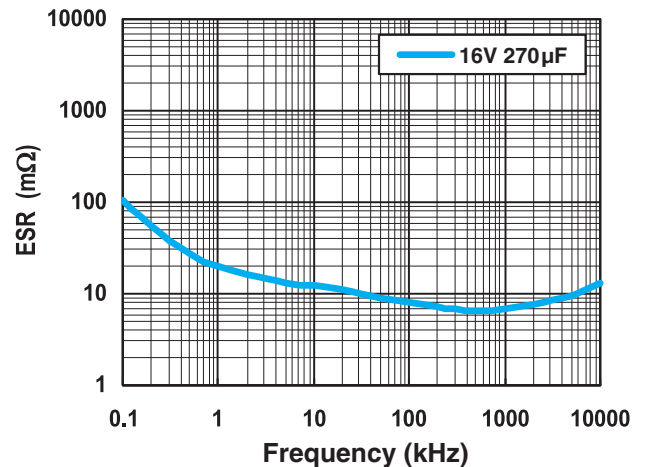
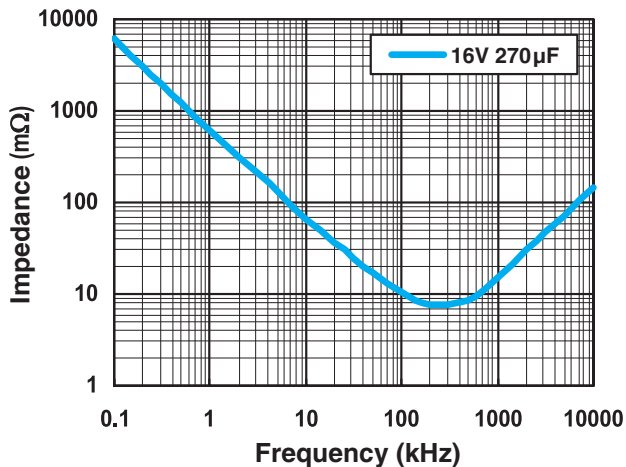
RL8

■ Dimensions

| Rated Voltage (V) (code) | Surge Voltage (V) | Rated Capacitance (μF) | Case Size φD×L (mm) | tan δ | Leakage Current (μA) (at 20°C after 2 minutes) | ESR (mΩ) (20°C/100kHz) | Rated Ripple Current (mA _{rms}) (105°C/100kHz) | NICHICON | FPCAP |
|--------------------------|-------------------|------------------------|---------------------|-------|--|------------------------|--|------------------|-----------------------|
| 16 (1C) | 18.4 | 100 | 8×8 | 0.12 | 320 | 12 | 5000 | RL81C101MDN1□□ | FP-016RE101M-L8□□ |
| | | 100 | 8×8 | 0.12 | 320 | 12 | 5000 | RL81C101MCN1□□ | FP-016RE101M-L8□□-H |
| | | *100 | 8×8 | 0.12 | 320 | 12 | 5000 | RL81C101MDNASQ□□ | FP-016RE101M-L8□□-5K |
| | | *100 | 8×8 | 0.12 | 320 | 12 | 5000 | RL81C101MCNASQ□□ | FP-016RE101M-L8□□-5KH |
| | | 180 | 8×8 | 0.12 | 576 | 12 | 5000 | RL81C181MDN1□□ | FP-016RE181M-L8□□ |
| | | 180 | 8×8 | 0.12 | 576 | 12 | 5000 | RL81C181MCN1□□ | FP-016RE181M-L8□□-H |
| | | *180 | 8×8 | 0.12 | 576 | 12 | 5000 | RL81C181MDNASQ□□ | FP-016RE181M-L8□□-5K |
| | | *180 | 8×8 | 0.12 | 576 | 12 | 5000 | RL81C181MCNASQ□□ | FP-016RE181M-L8□□-5KH |
| | | 220 | 8×8 | 0.12 | 704 | 12 | 5000 | RL81C221MDN1□□ | FP-016RE221M-L8□□ |
| | | 220 | 8×8 | 0.12 | 704 | 12 | 5000 | RL81C221MCN1□□ | FP-016RE221M-L8□□-H |
| | | *220 | 8×8 | 0.12 | 704 | 12 | 5000 | RL81C221MDNASQ□□ | FP-016RE221M-L8□□-5K |
| | | *220 | 8×8 | 0.12 | 704 | 12 | 5000 | RL81C221MCNASQ□□ | FP-016RE221M-L8□□-5KH |
| | | 270 | 8×8 | 0.12 | 864 | 10 | 5000 | RL81C271MDN1□□ | FP-016RE271M-L8□□ |
| | | 270 | 8×8 | 0.12 | 864 | 10 | 5000 | RL81C271MCN1□□ | FP-016RE271M-L8□□-H |
| | | *270 | 8×8 | 0.12 | 864 | 10 | 5000 | RL81C271MDNASQ□□ | FP-016RE271M-L8□□-5K |
| | | *270 | 8×8 | 0.12 | 864 | 10 | 5000 | RL81C271MCNASQ□□ | FP-016RE271M-L8□□-5KH |
| | | 330 | 8×8 | 0.12 | 1056 | 12 | 5000 | RL81C331MDN1□□ | FP-016RE331M-L8□□ |
| | | 330 | 8×8 | 0.12 | 1056 | 12 | 5000 | RL81C331MCN1□□ | FP-016RE331M-L8□□-H |
| | | *330 | 8×8 | 0.12 | 1056 | 12 | 5000 | RL81C331MDNASQ□□ | FP-016RE331M-L8□□-5K |
| | | *330 | 8×8 | 0.12 | 1056 | 12 | 5000 | RL81C331MCNASQ□□ | FP-016RE331M-L8□□-5KH |
| 470 | 8×8 | 0.12 | 1504 | 16 | 4000 | RL81C471MDN1□□ | FP-016RE471M-L8□□ | | |
| 470 | 8×8 | 0.12 | 1504 | 16 | 4000 | RL81C471MCN1□□ | FP-016RE471M-L8□□-H | | |
| *470 | 8×8 | 0.12 | 1504 | 16 | 4000 | RL81C471MDNASQ□□ | FP-016RE471M-L8□□-5K | | |
| *470 | 8×8 | 0.12 | 1504 | 16 | 4000 | RL81C471MCNASQ□□ | FP-016RE471M-L8□□-5KH | | |
| 20 (1D) | 23.0 | *330 | 8×8 | 0.12 | 1320 | 17 | 3880 | RL81D331MCNASQ□□ | FP-020RE331M-L8□□-5KH |
| 35 (1V) | 40.2 | 100 | 8×8 | 0.12 | 700 | 25 | 3000 | RL81V101MDN1□□ | FP-035RE101M-L8□□ |
| | | 100 | 8×8 | 0.12 | 700 | 25 | 3000 | RL81V101MCN1□□ | FP-035RE101M-L8□□-H |

* : Load life 5000hours.

■ Frequency Characteristics (The frequency characteristics are typical and not a guaranteed value.)



• For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

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