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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

nichicon





FPCAP

- •Low ESR, High Capacitance, High ripple current.
- •Load life of 1000 hours at 125°C.
- Radial lead type : Lead free flow soldering condition correspondence.
- Compliant to the RoHS directive (2011/65/EU).



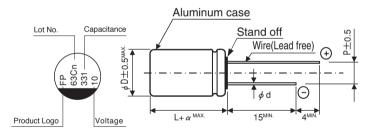
Specifications

| Item | Performance Characteristics | | | | |
|---------------------------------------|--|---|--|--|--|
| Category Temperature Range | –55 to +125°C | | | | |
| Rated Voltage Range | 6.3 to 35V | | | | |
| Rated Capacitance Range | 100 to 820µF | | | | |
| 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 | | | | |
| | Test condition | 125°C, rated voltage 1000Hrs. | | | |
| | Capacitance change | Within ±20% of initial value before test | | | |
| Endurance | tan δ | 200% or less than the initial specified value | | | |
| | ESR(*1) | 200% 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

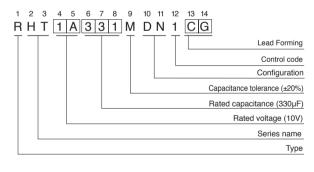


| | | | (mm) |
|---------|-----|-----|------|
| φD×L | φd | Р | α |
| 8×11.5 | 0.6 | 3.5 | 1.5 |
| 10×12.5 | 0.6 | 5.0 | 1.5 |

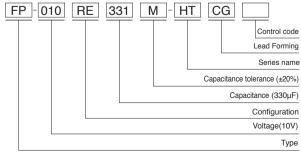
• Frequency coefficient of rated ripple current

| 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 : 10V 330µF) Nichicon part number



FPCAP part number

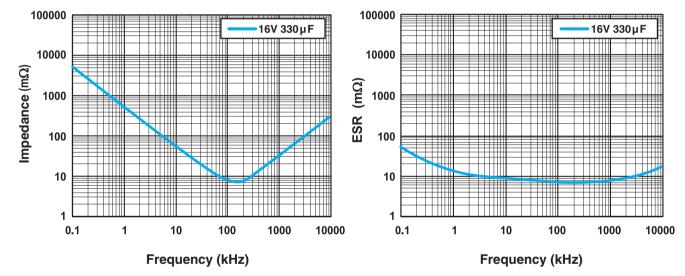


RHT Standard Ratings

| Rated Voltage (V) (code) | Surge Voltage (V) | Rated Capacitance (µF) | Case Size ∳D×L (mm) | tan δ | Leakage Current (µA, 2min.) | ESR (mΩ, 100kHz) | | ble Current rms) 105℃< ≦125℃ * | NICHICON | FPCAP |
|--------------------------------|-------------------------|------------------------------|------------------------|-------|-----------------------------------|---------------------|------|---|--------------|-----------------|
| 6.3 (0J) 7.2 | 7.0 | 680 | 10×12.5 | 0.12 | 857 | 12 | 5450 | 1740 | RHT0J681MDN1 | FP-6R3RE681M-HT |
| | 1.2 | 820 | 10×12.5 | 0.12 | 1033 | 12 | 5450 | 1740 | RHT0J821MDN1 | FP-6R3RE821M-HT |
| 10 (1A) 11.5 | | 220 | 8×11.5 | 0.12 | 440 | 17 | 3950 | 1260 | RHT1A221MDN1 | FP-010RE221M-HT |
| | 44.5 | 330 | 8×11.5 | 0.12 | 660 | 17 | 3950 | 1260 | RHT1A331MDN1 | FP-010RE331M-HT |
| | 11.5 | 390 | 8×11.5 | 0.12 | 780 | 16 | 3950 | 1260 | RHT1A391MDN1 | FP-010RE391M-HT |
| | | 560 | 10×12.5 | 0.12 | 1120 | 13 | 5250 | 1680 | RHT1A561MDN1 | FP-010RE561M-HT |
| 16 (1C) 18. | 19.4 | 270 | 10×12.5 | 0.12 | 864 | 16 | 4750 | 1520 | RHT1C271MDN1 | FP-016RE271M-HT |
| | 10.4 | 330 | 10×12.5 | 0.12 | 1056 | 16 | 4750 | 1520 | RHT1C331MDN1 | FP-016RE331M-HT |
| 20 (1D) | 23.0 | 150 | 10×12.5 | 0.12 | 600 | 20 | 4350 | 1390 | RHT1D151MDN1 | FP-020RE151M-HT |
| 35 (1V) | 40.2 | 100 | 10×12.5 | 0.12 | 700 | 25 | 3250 | 1040 | RHT1V101MDN1 | FP-035RE101M-HT |

*: At ambient temperature

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



• Taping specifications are given in page 26, 27.

• Please refer to page 3 for the minimum order quantity.