

**RHT** High Temperature (125°C)



High Ripple Current



Low Impedance



For High Frequency



Long Life



Anti-Solvent Feature

**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 |                                                   |
| Endurance                     | Test condition                                                                                   | 125°C, rated voltage 1000Hrs.                     |
|                               | Capacitance change                                                                               | Within ±20% of initial value before test          |
|                               | 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 |

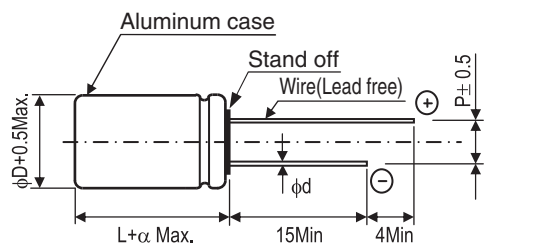
※1 ESR should be measured at both of the terminal ends closest to the capacitor body.

※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.

## Size List

[φD×L(mm)]

| Cap [μF] | R.V.(V) | 6.3 | 10      | 16      | 20      | 35   |
|----------|---------|-----|---------|---------|---------|------|
|          | S.V.(V) | 7.2 | 11.5    | 18.4    | 23.0    | 40.2 |
| 100      |         |     |         |         | 10×12.5 |      |
| 150      |         |     |         |         | 10×12.5 |      |
| 220      |         |     | 8×11.5  |         |         |      |
| 270      |         |     |         | 10×12.5 |         |      |
| 330      |         |     | 8×11.5  | 10×12.5 |         |      |
| 390      |         |     | 8×11.5  |         |         |      |
| 560      |         |     | 10×12.5 |         |         |      |
| 680      | 10×12.5 |     |         |         |         |      |
| 820      | 10×12.5 |     |         |         |         |      |



| φD×L    | φd  | P   | α   |
|---------|-----|-----|-----|
| 8×11.5  | 0.6 | 3.5 | 1.5 |
| 10×12.5 | 0.6 | 5.0 | 1.5 |

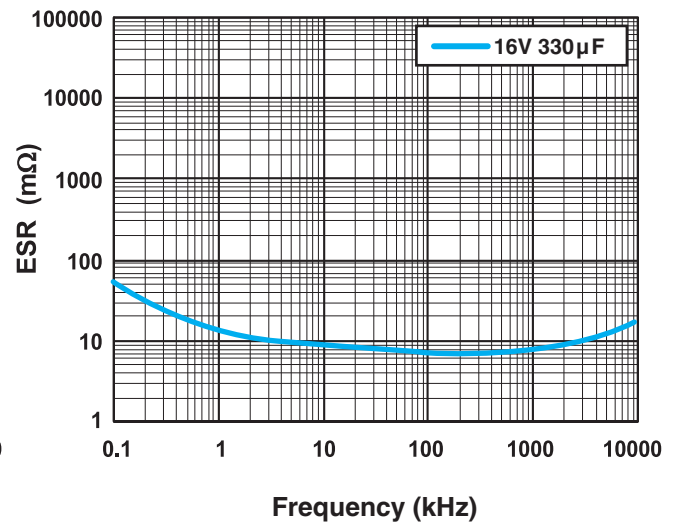
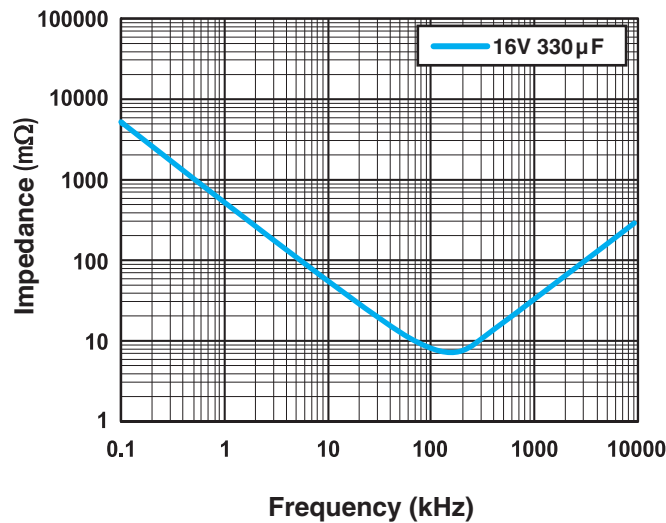
## RHT

## ■ Standard Ratings

| Rated Voltage<br>(V)<br>(code) | Surge<br>Voltage<br>(V) | Rated<br>Capacitance<br>( $\mu\text{F}$ ) | Case Size<br>$\phi\text{D}\times\text{L}$ (mm) | $\tan \delta$ | Leakage<br>Current<br>( $\mu\text{A}$ , 2min.) | ESR<br>( $\text{m}\Omega$ , 100kHz) | Rated Ripple Current<br>(mA <sub>rms</sub> ) |                                                | NICHICON       | FPCAP             |
|--------------------------------|-------------------------|-------------------------------------------|------------------------------------------------|---------------|------------------------------------------------|-------------------------------------|----------------------------------------------|------------------------------------------------|----------------|-------------------|
|                                |                         |                                           |                                                |               |                                                |                                     | $\leq 105^\circ\text{C}$ *                   | $105^\circ\text{C} < \leq 125^\circ\text{C}$ * |                |                   |
| 6.3<br>(0J)                    | 7.2                     | 680                                       | 10 $\times$ 12.5                               | 0.12          | 857                                            | 12                                  | 5450                                         | 1740                                           | RHT0J681MDN1□□ | FP-6R3RE681M-HT□□ |
|                                |                         | 820                                       | 10 $\times$ 12.5                               | 0.12          | 1033                                           | 12                                  | 5450                                         | 1740                                           | RHT0J821MDN1□□ | FP-6R3RE821M-HT□□ |
| 10<br>(1A)                     | 11.5                    | 220                                       | 8 $\times$ 11.5                                | 0.12          | 440                                            | 17                                  | 3950                                         | 1260                                           | RHT1A221MDN1□□ | FP-010RE221M-HT□□ |
|                                |                         | 330                                       | 8 $\times$ 11.5                                | 0.12          | 660                                            | 17                                  | 3950                                         | 1260                                           | RHT1A331MDN1□□ | FP-010RE331M-HT□□ |
|                                |                         | 390                                       | 8 $\times$ 11.5                                | 0.12          | 780                                            | 16                                  | 3950                                         | 1260                                           | RHT1A391MDN1□□ | FP-010RE391M-HT□□ |
|                                |                         | 560                                       | 10 $\times$ 12.5                               | 0.12          | 1120                                           | 13                                  | 5250                                         | 1680                                           | RHT1A561MDN1□□ | FP-010RE561M-HT□□ |
| 16<br>(1C)                     | 18.4                    | 270                                       | 10 $\times$ 12.5                               | 0.12          | 864                                            | 16                                  | 4750                                         | 1520                                           | RHT1C271MDN1□□ | FP-016RE271M-HT□□ |
|                                |                         | 330                                       | 10 $\times$ 12.5                               | 0.12          | 1056                                           | 16                                  | 4750                                         | 1520                                           | RHT1C331MDN1□□ | FP-016RE331M-HT□□ |
| 20<br>(1D)                     | 23.0                    | 150                                       | 10 $\times$ 12.5                               | 0.12          | 600                                            | 20                                  | 4350                                         | 1390                                           | RHT1D151MDN1□□ | FP-020RE151M-HT□□ |
| 35<br>(1V)                     | 40.2                    | 100                                       | 10 $\times$ 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.