

### Surface Mount Type

Series: FK Type : V

#### ■ Features

Endurance: 2000 to 5000h at 105°C  
 Low impedance (40 to 60% less than FC series)  
 Miniaturization (30 to 50% less than FC series)  
 Vibration-proof product is available upon request. ( $\phi 8 \leq$ )

Country of Origin

Japan



#### ■ Specifications

|                                    |                                                                                                                                                                                                                           |                                                         |    |    |    |    |    |    |    |     |                             |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|----|----|----|----|----|----|----|-----|-----------------------------|
| Category temp. range               | -55 to +105°C                                                                                                                                                                                                             |                                                         |    |    |    |    |    |    |    |     |                             |
| Rated W.V. Range                   | 6.3 to 100V .DC                                                                                                                                                                                                           |                                                         |    |    |    |    |    |    |    |     |                             |
| Nominal Cap. Range                 | 3.3 to 6800 μ F                                                                                                                                                                                                           |                                                         |    |    |    |    |    |    |    |     |                             |
| Capacitance Tolerance              | ±20 % (120Hz/+20°C)                                                                                                                                                                                                       |                                                         |    |    |    |    |    |    |    |     |                             |
| DC Leakage Current                 | I ≤ 0.01CV or 3(μA) After 2 minutes application of rated working voltage at +20°C. (Whichever is greater)                                                                                                                 |                                                         |    |    |    |    |    |    |    |     |                             |
| tan δ                              | Please see the attached standard products list                                                                                                                                                                            |                                                         |    |    |    |    |    |    |    |     |                             |
| Characteristics at Low Temperature | W.V. (V)                                                                                                                                                                                                                  | 6.3                                                     | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | (Impedance ratio at 120 Hz) |
|                                    | Z(-25°C) / Z(+20°C)                                                                                                                                                                                                       | 2                                                       | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2   |                             |
|                                    | Z(-40°C)/ Z(+20°C)                                                                                                                                                                                                        | 3                                                       | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3   |                             |
|                                    | Z(-55°C)/ Z(+20°C)                                                                                                                                                                                                        | 4                                                       | 4  | 4  | 3  | 3  | 3  | 3  | 3  | 3   |                             |
| Endurance                          | After the life with DC rated working voltage at +105±2°C for 2000 hours ( ≥ dia.12.5 and suffix “G” in dia.8 to 10mm are 5000 hours)the capacitors shall meet the limits specified below. post-test requirement at +20°C. |                                                         |    |    |    |    |    |    |    |     |                             |
|                                    | Capacitance change                                                                                                                                                                                                        | ±30% of initial measured value (Suffix “G” is 35%)      |    |    |    |    |    |    |    |     |                             |
|                                    | tan δ                                                                                                                                                                                                                     | ≤ 200 % of initial specified value (Suffix “G” is 300%) |    |    |    |    |    |    |    |     |                             |
|                                    | DC leakage current                                                                                                                                                                                                        | ≤ initial specified value                               |    |    |    |    |    |    |    |     |                             |
| Shelf Life                         | After storage for 1000hours at +105±2 °C with no voltage applied and then being stabilized at +20°C, capacitors shall meet the limits specified in Endurance.(With voltage treatment)                                     |                                                         |    |    |    |    |    |    |    |     |                             |
| Resistance to Soldering Heat       | After reflow soldering ( Refer to the "Application Guide" for recommended temperature profile.) and then being stabilized at +20°C, capacitor shall meet the following limits.                                            |                                                         |    |    |    |    |    |    |    |     |                             |
|                                    | Capacitance change                                                                                                                                                                                                        | ±10% of initial measured value                          |    |    |    |    |    |    |    |     |                             |
|                                    | D.F. tan δ                                                                                                                                                                                                                | ≤initial specified value                                |    |    |    |    |    |    |    |     |                             |
|                                    | DC leakage current                                                                                                                                                                                                        | ≤initial specified value                                |    |    |    |    |    |    |    |     |                             |

#### ■ Marking

Example. 16V10 $\mu$ F  
 Marking color : BLACK

W.V. code

Negative polarity marking

Capacitance ( $\mu$ F)

Series identification

Lot number

( $\geq \phi 12.5$ )

W.V. code

Negative polarity marking

Capacitance ( $\mu$ F)

Series identification

Lot number

W.V. code

|      |     |    |    |    |    |
|------|-----|----|----|----|----|
| V    | 6.3 | 10 | 16 | 25 | 35 |
| Code | j   | A  | C  | E  | V  |

|      |    |    |    |     |
|------|----|----|----|-----|
| V    | 50 | 63 | 80 | 100 |
| Code | H  | J  | K  | 2A  |

#### ■ Dimensions in mm (not to scale)

( ) reference size

| Size code | D    | L    | A,B  | H max. | I   | W              | P   | K                   |
|-----------|------|------|------|--------|-----|----------------|-----|---------------------|
| B         | 4.0  | 5.8  | 4.3  | 5.5    | 1.8 | 0.65 $\pm$ 0.1 | 1.0 | 0.35 -0.20 to +0.15 |
| C         | 5.0  | 5.8  | 5.3  | 6.5    | 2.2 | 0.65 $\pm$ 0.1 | 1.5 | 0.35 -0.20 to +0.15 |
| D         | 6.3  | 5.8  | 6.6  | 7.8    | 2.6 | 0.65 $\pm$ 0.1 | 1.8 | 0.35 -0.20 to +0.15 |
| D8        | 6.3  | 7.7  | 6.6  | 7.8    | 2.6 | 0.65 $\pm$ 0.1 | 1.8 | 0.35 -0.20 to +0.15 |
| E         | 8.0  | 6.2  | 8.3  | 9.5    | 3.4 | 0.65 $\pm$ 0.1 | 2.2 | 0.35 -0.20 to +0.15 |
| F         | 8.0  | 10.2 | 8.3  | 10.0   | 3.4 | 0.90 $\pm$ 0.2 | 3.1 | 0.70 $\pm$ 0.20     |
| G         | 10.0 | 10.2 | 10.3 | 12.0   | 3.5 | 0.90 $\pm$ 0.2 | 4.6 | 0.70 $\pm$ 0.20     |
| H13       | 12.5 | 13.5 | 13.5 | 15.0   | 4.7 | 0.90 $\pm$ 0.3 | 4.4 | 0.70 $\pm$ 0.30     |
| J16       | 16.0 | 16.5 | 17.0 | 19.0   | 5.5 | 1.20 $\pm$ 0.3 | 6.7 | 0.70 $\pm$ 0.30     |
| K16       | 18.0 | 16.5 | 19.0 | 21.0   | 6.7 | 1.20 $\pm$ 0.3 | 6.7 | 0.70 $\pm$ 0.30     |

### ■ Case size VS Capacitance, Impedance and Ripple current

Impedance;( $\Omega$ /100kHz,+20°C),  
Ripple current;(mA r.m.s./100kHz+105°C)

| Capacitance<br>( $\mu$ F) | W.V. | 6.3  |           |                | 10   |           |                | 16   |           |                |
|---------------------------|------|------|-----------|----------------|------|-----------|----------------|------|-----------|----------------|
|                           |      | Size | Impedance | Ripple current | Size | Impedance | Ripple current | Size | Impedance | Ripple current |
| 10                        |      |      |           |                |      |           |                | B    | 1.35      | 90             |
| 22                        |      | B    | 1.35      | 90             | B    | 1.35      | 90             | C(B) | 0.7(1.35) | 160(90)        |
| 33                        |      |      |           |                | C(B) | 0.7(1.35) | 160(90)        |      |           |                |
| 47                        |      | C(B) | 0.7(1.35) | 160(90)        |      |           |                | D(C) | 0.36(0.7) | 240(160)       |
| 68                        |      |      |           |                |      |           |                | D    | 0.36      | 240            |
| 100                       |      | D(C) | 0.36(0.7) | 240(160)       |      |           |                | D    | 0.36      | 240            |
| 150                       |      |      |           |                | D    | 0.36      | 240            | D8   | 0.34      | 280            |
| 220                       |      | D    | 0.36      | 240            | D8   | 0.34      | 280            | D8   | 0.34      | 280            |
|                           |      |      |           |                | E    | 0.26      | 300            | E    | 0.26      | 300            |
| 330                       |      | D8   | 0.34      | 280            | ⊙F   | 0.16      | 600            | ⊙F   | 0.16      | 600            |
|                           |      | E    | 0.26      | 300            |      |           |                |      |           |                |
| 470                       |      | ⊙F   | 0.16      | 600            | ⊙F   | 0.16      | 600            | ⊙F   | 0.16      | 600            |
| 680                       |      |      |           |                | ⊙F   | 0.16      | 600            | ⊙G   | 0.08      | 850            |
| 1000                      |      | ⊙F   | 0.16      | 600            | ⊙G   | 0.08      | 850            |      |           |                |
| 1500                      |      | ⊙G   | 0.08      | 850            |      |           |                | H13  | 0.06      | 1100           |
| 2200                      |      |      |           |                | H13  | 0.06      | 1100           |      |           |                |
| 3300                      |      | H13  | 0.06      | 1100           |      |           |                | J16  | 0.035     | 1800           |
| 4700                      |      |      |           |                | J16  | 0.035     | 1800           | K16  | 0.033     | 2060           |
| 6800                      |      | J16  | 0.035     | 1800           | K16  | 0.033     | 2060           |      |           |                |

| Capacitance<br>( $\mu$ F) | W.V. | 25   |           |                | 35   |           |                | 50    |            |                |
|---------------------------|------|------|-----------|----------------|------|-----------|----------------|-------|------------|----------------|
|                           |      | Size | Impedance | Ripple current | Size | Impedance | Ripple current | Size  | Impedance  | Ripple current |
| 4.7                       |      |      |           |                | B    | 1.35      | 90             | B     | 2.9        | 60             |
| 10                        |      | B    | 1.35      | 90             | C(B) | 0.7(1.35) | 160(90)        | D(C)  | 0.88(1.52) | 165(85)        |
| 22                        |      | C    | 0.7       | 160            | C    | 0.7       | 160            | D     | 0.88       | 165            |
| 33                        |      | D(C) | 0.36(0.7) | 240(160)       | D    | 0.36      | 240            | D8    | 0.68       | 195            |
|                           |      |      |           |                |      |           |                | E     | 0.68       | 195            |
| 47                        |      | D    | 0.36      | 240            | D    | 0.36      | 240            | E(D8) | 0.68       | 195            |
| 68                        |      | D    | 0.36      | 240            | D8   | 0.34      | 280            |       |            |                |
| 100                       |      | D8   | 0.34      | 280            | D8   | 0.34      | 280            | ⊙F    | 0.34       | 350            |
|                           |      | E    | 0.26      | 300            | ⊙F   | 0.16      | 600            |       |            |                |
| 150                       |      | ⊙F   | 0.16      | 600            | ⊙F   | 0.16      | 600            | ⊙G    | 0.18       | 670            |
| 220                       |      | ⊙F   | 0.16      | 600            | ⊙F   | 0.16      | 600            | ⊙G    | 0.18       | 670            |
| 330                       |      | ⊙F   | 0.16      | 600            | ⊙G   | 0.08      | 850            | H13   | 0.12       | 900            |
| 390                       |      |      |           |                |      |           |                | H13   | 0.12       | 900            |
| 470                       |      | ⊙G   | 0.08      | 850            | H13  | 0.06      | 1100           | J16   | 0.073      | 1610           |
| 680                       |      |      |           |                | H13  | 0.06      | 1100           | J16   | 0.073      | 1610           |
| 1000                      |      | H13  | 0.06      | 1100           | J16  | 0.035     | 1800           | J16   | 0.073      | 1610           |
| 1500                      |      |      |           |                | J16  | 0.035     | 1800           |       |            |                |
| 2200                      |      | J16  | 0.035     | 1800           |      |           |                |       |            |                |
| 3300                      |      | K16  | 0.033     | 2060           |      |           |                |       |            |                |

| Capacitance<br>( $\mu$ F) | W.V. | 63   |           |                | 80   |           |                | 100  |           |                |
|---------------------------|------|------|-----------|----------------|------|-----------|----------------|------|-----------|----------------|
|                           |      | Size | Impedance | Ripple current | Size | Impedance | Ripple current | Size | Impedance | Ripple current |
| 3.3                       |      |      |           |                | C    | 5         | 25             |      |           |                |
| 4.7                       |      | C    | 3         | 50             | D    | 3         | 40             |      |           |                |
| 10                        |      | D    | 1.5       | 80             | D8   | 2.4       | 60             |      |           |                |
|                           |      |      |           |                | E    | 2.4       | 60             |      |           |                |
| 22                        |      | D8   | 1.2       | 120            | F    | 1.3       | 130            | F    | 1.3       | 130            |
|                           |      | E    | 1.2       | 120            | F    | 1.3       | 130            |      |           |                |
| 33                        |      | F    | 0.65      | 250            | F    | 1.3       | 130            | G    | 0.7       | 200            |
| 47                        |      | F    | 0.65      | 250            | G    | 0.7       | 200            | H13  | 0.32      | 500            |
| 68                        |      | F    | 0.65      | 250            | H13  | 0.32      | 500            | H13  | 0.32      | 500            |
| 100                       |      | G    | 0.35      | 400            | H13  | 0.32      | 500            | J16  | 0.17      | 793            |
| 150                       |      | H13  | 0.16      | 800            | H13  | 0.32      | 500            | J16  | 0.17      | 793            |
| 220                       |      | H13  | 0.16      | 800            |      |           |                | K16  | 0.153     | 917            |
| 330                       |      |      |           |                | J16  | 0.17      | 793            | K16  | 0.153     | 917            |
| 470                       |      | J16  | 0.082     | 1410           | K16  | 0.153     | 917            |      |           |                |
| 680                       |      | K16  | 0.080     | 1690           |      |           |                |      |           |                |

( );Miniaturization type ⊙Life time 5000h available upon request(suffix : G)

Design and specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use.  
Whenever a doubt about safety arises from this product, please contact us immediately for technical consultation.

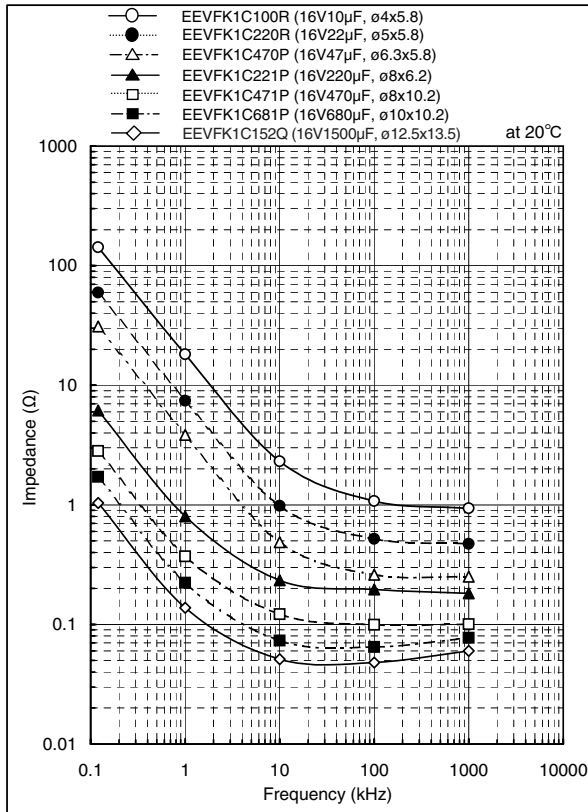
| W.V.<br>[V.DC] | Cap.<br>[μF] | Part No.     | tan δ | R.C.<br>[mA rms] | Imp./ESR<br>[Ω] | Size |      |
|----------------|--------------|--------------|-------|------------------|-----------------|------|------|
|                |              |              |       |                  |                 | D    | L    |
| 6.3            | 22           | EEVFK0J220R  | 0.26  | 90               | 1.35            | 4    | 5.8  |
|                | 47           | EEVFK0J470UR | 0.26  | 90               | 1.35            | 4    | 5.8  |
|                | 47           | EEVFK0J470R  | 0.26  | 160              | 0.70            | 5    | 5.8  |
|                | 100          | EEVFK0J101UR | 0.26  | 160              | 0.70            | 5    | 5.8  |
|                | 100          | EEVFK0J101P  | 0.26  | 240              | 0.36            | 6.3  | 5.8  |
|                | 220          | EEVFK0J221P  | 0.26  | 240              | 0.36            | 6.3  | 5.8  |
|                | 330          | EEVFK0J331XP | 0.26  | 280              | 0.34            | 6.3  | 7.7  |
|                | 330          | EEVFK0J331P  | 0.26  | 300              | 0.26            | 8    | 6.2  |
|                | 470          | EEVFK0J471P  | 0.26  | 600              | 0.16            | 8    | 10.2 |
|                | 1000         | EEVFK0J102P  | 0.26  | 600              | 0.16            | 8    | 10.2 |
|                | 1500         | EEVFK0J152P  | 0.26  | 850              | 0.080           | 10   | 10.2 |
|                | 3300         | EEVFK0J332Q  | 0.30  | 1100             | 0.060           | 12.5 | 13.5 |
|                | 6800         | EEVFK0J682M  | 0.36  | 1800             | 0.035           | 16   | 16.5 |
| 10             | 22           | EEVFK1A220R  | 0.19  | 90               | 1.35            | 4    | 5.8  |
|                | 33           | EEVFK1A330UR | 0.19  | 90               | 1.35            | 4    | 5.8  |
|                | 33           | EEVFK1A330R  | 0.19  | 160              | 0.70            | 5    | 5.8  |
|                | 150          | EEVFK1A151P  | 0.19  | 240              | 0.36            | 6.3  | 5.8  |
|                | 220          | EEVFK1A221XP | 0.19  | 280              | 0.34            | 6.3  | 7.7  |
|                | 220          | EEVFK1A221P  | 0.19  | 300              | 0.26            | 8    | 6.2  |
|                | 330          | EEVFK1A331P  | 0.19  | 600              | 0.16            | 8    | 10.2 |
|                | 470          | EEVFK1A471P  | 0.19  | 600              | 0.16            | 8    | 10.2 |
|                | 680          | EEVFK1A681P  | 0.49  | 600              | 0.16            | 8    | 10.2 |
|                | 1000         | EEVFK1A102P  | 0.19  | 850              | 0.080           | 10   | 10.2 |
|                | 2200         | EEVFK1A222Q  | 0.21  | 1100             | 0.060           | 12.5 | 13.5 |
|                | 4700         | EEVFK1A472M  | 0.25  | 1800             | 0.035           | 16   | 16.5 |
|                | 6800         | EEVFK1A682M  | 0.29  | 2060             | 0.033           | 18   | 16.5 |
| 16             | 10           | EEVFK1C100R  | 0.16  | 90               | 1.35            | 4    | 5.8  |
|                | 22           | EEVFK1C220UR | 0.16  | 90               | 1.35            | 4    | 5.8  |
|                | 22           | EEVFK1C220R  | 0.16  | 160              | 0.70            | 5    | 5.8  |
|                | 47           | EEVFK1C470UR | 0.16  | 160              | 0.70            | 5    | 5.8  |
|                | 47           | EEVFK1C470P  | 0.16  | 240              | 0.36            | 6.3  | 5.8  |
|                | 68           | EEVFK1C680P  | 0.16  | 240              | 0.36            | 6.3  | 5.8  |
|                | 100          | EEVFK1C101P  | 0.16  | 240              | 0.36            | 6.3  | 5.8  |
|                | 150          | EEVFK1C151XP | 0.16  | 280              | 0.34            | 6.3  | 7.7  |
|                | 220          | EEVFK1C221XP | 0.16  | 280              | 0.34            | 6.3  | 7.7  |
|                | 220          | EEVFK1C221P  | 0.16  | 300              | 0.26            | 8    | 6.2  |
|                | 330          | EEVFK1C331P  | 0.16  | 600              | 0.16            | 8    | 10.2 |
|                | 470          | EEVFK1C471P  | 0.16  | 600              | 0.16            | 8    | 10.2 |
|                | 680          | EEVFK1C681P  | 0.16  | 850              | 0.08            | 10   | 10.2 |
| 25             | 1500         | EEVFK1C152Q  | 0.16  | 1100             | 0.060           | 12.5 | 13.5 |
|                | 3300         | EEVFK1C332M  | 0.20  | 1800             | 0.035           | 16   | 16.5 |
|                | 4700         | EEVFK1C472M  | 0.22  | 2060             | 0.033           | 18   | 16.5 |
|                | 10           | EEVFK1E100R  | 0.14  | 90               | 1.35            | 4    | 5.8  |
|                | 22           | EEVFK1E220R  | 0.14  | 160              | 0.70            | 5    | 5.8  |
|                | 33           | EEVFK1E330UR | 0.14  | 160              | 0.70            | 5    | 5.8  |
|                | 33           | EEVFK1E330P  | 0.14  | 240              | 0.36            | 6.3  | 5.8  |
|                | 47           | EEVFK1E470P  | 0.14  | 240              | 0.36            | 6.3  | 5.8  |
|                | 68           | EEVFK1E680P  | 0.14  | 240              | 0.36            | 6.3  | 5.8  |
|                | 100          | EEVFK1E101XP | 0.14  | 280              | 0.34            | 6.3  | 7.7  |
|                | 100          | EEVFK1E101P  | 0.14  | 300              | 0.26            | 8    | 6.2  |
|                | 150          | EEVFK1E151P  | 0.14  | 600              | 0.16            | 8    | 10.2 |
|                | 220          | EEVFK1E221P  | 0.14  | 600              | 0.16            | 8    | 10.2 |
|                | 330          | EEVFK1E331P  | 0.14  | 600              | 0.16            | 8    | 10.2 |
|                | 470          | EEVFK1E471P  | 0.14  | 850              | 0.080           | 10   | 10.2 |
|                | 1000         | EEVFK1E102Q  | 0.14  | 1100             | 0.060           | 12.5 | 13.5 |
|                | 2200         | EEVFK1E222M  | 0.16  | 1800             | 0.035           | 16   | 16.5 |
|                | 3300         | EEVFK1E332M  | 0.18  | 2060             | 0.033           | 18   | 16.5 |

| W.V.<br>[V.DC] | Cap.<br>[μF] | Part No.     | tan δ | R.C.<br>[mA rms] | Imp./ESR<br>[Ω] | Size |      |
|----------------|--------------|--------------|-------|------------------|-----------------|------|------|
|                |              |              |       |                  |                 | D    | L    |
| 35             | 4.7          | EEVFK1V4R7R  | 0.12  | 90               | 1.35            | 4    | 5.8  |
|                | 10           | EEVFK1V100UR | 0.12  | 90               | 1.35            | 4    | 5.8  |
|                | 10           | EEVFK1V100R  | 0.12  | 160              | 0.70            | 5    | 5.8  |
|                | 22           | EEVFK1V220R  | 0.12  | 160              | 0.70            | 5    | 5.8  |
|                | 33           | EEVFK1V330P  | 0.12  | 240              | 0.36            | 6.3  | 5.8  |
|                | 47           | EEVFK1V470P  | 0.12  | 240              | 0.36            | 6.3  | 5.8  |
|                | 68           | EEVFK1V680XP | 0.12  | 280              | 0.34            | 6.3  | 7.7  |
|                | 100          | EEVFK1V101XP | 0.12  | 280              | 0.34            | 6.3  | 7.7  |
|                | 100          | EEVFK1V101P  | 0.12  | 600              | 0.16            | 8    | 10.2 |
|                | 150          | EEVFK1V151P  | 0.12  | 600              | 0.16            | 8    | 10.2 |
|                | 220          | EEVFK1V221P  | 0.12  | 600              | 0.16            | 8    | 10.2 |
|                | 330          | EEVFK1V331P  | 0.12  | 850              | 0.080           | 10   | 10.2 |
|                | 470          | EEVFK1V471Q  | 0.12  | 1100             | 0.060           | 12.5 | 13.5 |
| 50             | 680          | EEVFK1V681Q  | 0.12  | 1100             | 0.060           | 12.5 | 13.5 |
|                | 1000         | EEVFK1V102M  | 0.12  | 1800             | 0.035           | 16   | 16.5 |
|                | 1500         | EEVFK1V152M  | 0.12  | 1800             | 0.035           | 16   | 16.5 |
|                | 4.7          | EEVFK1H4R7R  | 0.10  | 60               | 2.90            | 4    | 5.8  |
|                | 10           | EEVFK1H100UR | 0.10  | 85               | 1.52            | 5    | 5.8  |
|                | 10           | EEVFK1H100P  | 0.10  | 165              | 0.88            | 6.3  | 5.8  |
|                | 22           | EEVFK1H220P  | 0.10  | 165              | 0.88            | 6.3  | 5.8  |
|                | 33           | EEVFK1H330XP | 0.10  | 195              | 0.68            | 6.3  | 7.7  |
|                | 33           | EEVFK1H330P  | 0.10  | 195              | 0.68            | 8    | 6.2  |
|                | 47           | EEVFK1H470XP | 0.10  | 195              | 0.68            | 6.3  | 7.7  |
|                | 47           | EEVFK1H470P  | 0.10  | 195              | 0.68            | 8    | 6.2  |
|                | 100          | EEVFK1H101P  | 0.10  | 350              | 0.34            | 8    | 10.2 |
| 63             | 150          | EEVFK1H151P  | 0.10  | 670              | 0.18            | 10   | 10.2 |
|                | 220          | EEVFK1H221P  | 0.10  | 670              | 0.18            | 10   | 10.2 |
|                | 330          | EEVFK1H331Q  | 0.10  | 900              | 0.12            | 12.5 | 13.5 |
|                | 680          | EEVFK1H681M  | 0.10  | 1610             | 0.073           | 16   | 16.5 |
|                | 1000         | EEVFK1H102M  | 0.10  | 1610             | 0.073           | 16   | 16.5 |
|                | 4.7          | EEVFK1J4R7R  | 0.08  | 50               | 3.00            | 5    | 5.8  |
|                | 10           | EEVFK1J100P  | 0.08  | 80               | 1.50            | 6.3  | 5.8  |
|                | 22           | EEVFK1J220XP | 0.08  | 120              | 1.20            | 6.3  | 7.7  |
|                | 22           | EEVFK1J220P  | 0.08  | 120              | 1.20            | 8    | 6.2  |
|                | 33           | EEVFK1J330P  | 0.08  | 250              | 0.65            | 8    | 10.2 |
|                | 47           | EEVFK1J470P  | 0.08  | 250              | 0.65            | 8    | 10.2 |
|                | 68           | EEVFK1J680P  | 0.08  | 400              | 0.35            | 10   | 10.2 |
| 80             | 100          | EEVFK1J101P  | 0.08  | 400              | 0.35            | 10   | 10.2 |
|                | 150          | EEVFK1J151Q  | 0.08  | 800              | 0.16            | 12.5 | 13.5 |
|                | 220          | EEVFK1J221Q  | 0.08  | 800              | 0.16            | 12.5 | 13.5 |
|                | 470          | EEVFK1J471M  | 0.08  | 1410             | 0.082           | 16   | 16.5 |
|                | 680          | EEVFK1J681M  | 0.08  | 1690             | 0.080           | 18   | 16.5 |
|                | 3.3          | EEVFK1K3R3R  | 0.08  | 25               | 5.00            | 5    | 5.8  |
|                | 4.7          | EEVFK1K4R7P  | 0.08  | 40               | 3.00            | 6.3  | 5.8  |
|                | 10           | EEVFK1K100XP | 0.08  | 60               | 2.40            | 6.3  | 7.7  |
|                | 10           | EEVFK1K100P  | 0.08  | 60               | 2.40            | 8    | 6.2  |
|                | 22           | EEVFK1K220P  | 0.08  | 130              | 1.30            | 8    | 10.2 |
|                | 33           | EEVFK1K330P  | 0.08  | 130              | 1.30            | 8    | 10.2 |
|                | 47           | EEVFK1K470P  | 0.08  | 200              | 0.70            | 10   | 10.2 |
| 100            | 68           | EEVFK1K680Q  | 0.08  | 500              | 0.32            | 12.5 | 13.5 |
|                | 100          | EEVFK1K101Q  | 0.08  | 500              | 0.32            | 12.5 | 13.5 |
|                | 150          | EEVFK1K151Q  | 0.08  | 500              | 0.32            | 12.5 | 13.5 |
|                | 330          | EEVFK1K331M  | 0.08  | 793              | 0.17            | 16   | 16.5 |
|                | 470          | EEVFK1K471M  | 0.08  | 917              | 0.153           | 18   | 16.5 |
|                | 22           | EEVFK2A220P  | 0.07  | 130              | 1.30            | 8    | 10.2 |
|                | 33           | EEVFK2A330P  | 0.07  | 200              | 0.70            | 10   | 10.2 |
|                | 47           | EEVFK2A470Q  | 0.07  | 500              | 0.32            | 12.5 | 13.5 |
|                | 68           | EEVFK2A680Q  | 0.07  | 500              | 0.32            | 12.5 | 13.5 |
|                | 100          | EEVFK2A101M  | 0.07  | 793              | 0.17            | 16   | 16.5 |
|                | 150          | EEVFK2A151M  | 0.07  | 793              | 0.17            | 16   | 16.5 |
|                | 220          | EEVFK2A221M  | 0.07  | 917              | 0.153           | 18   | 16.5 |
|                | 330          | EEVFK2A331M  | 0.07  | 917              | 0.153           | 18   | 16.5 |

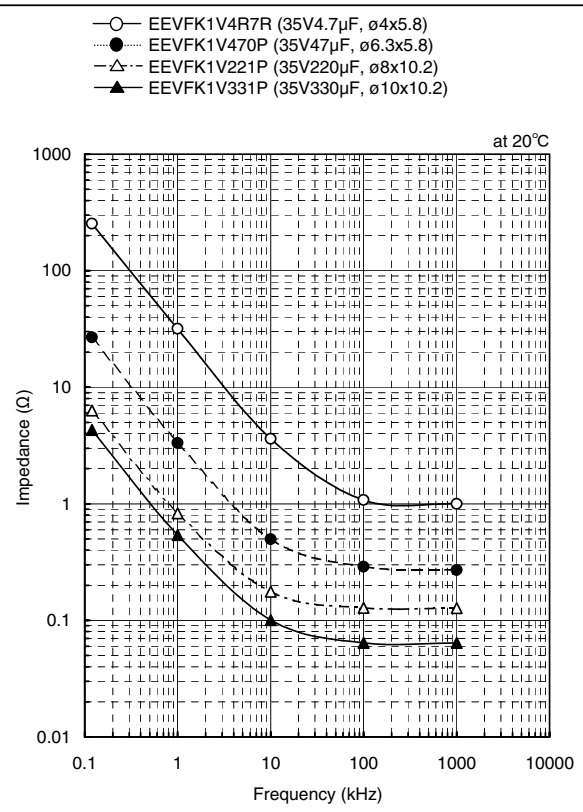
Tan δ = at 120Hz/+20°C  
Ripple current = at 100kHz/+105°C  
Impedance/ESR = at 100kHz/+20°C

### ■ Frequency Characteristics (Impedance)

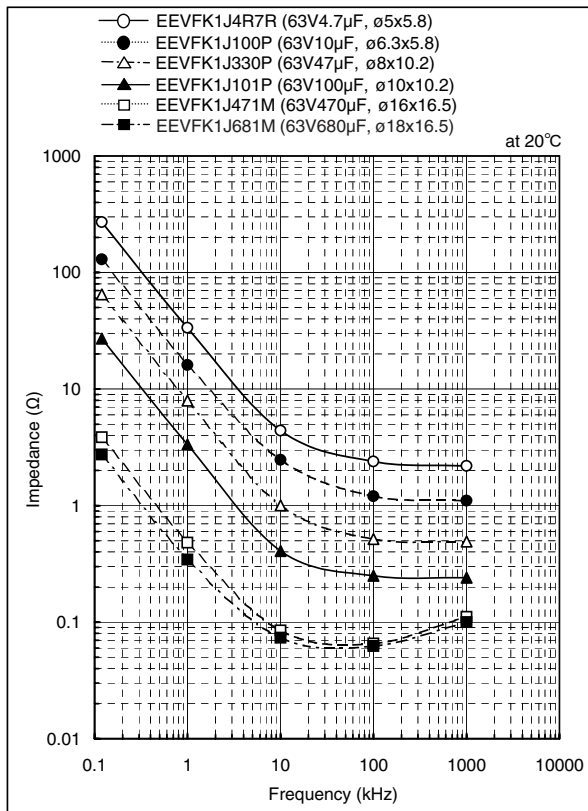
● 16VV



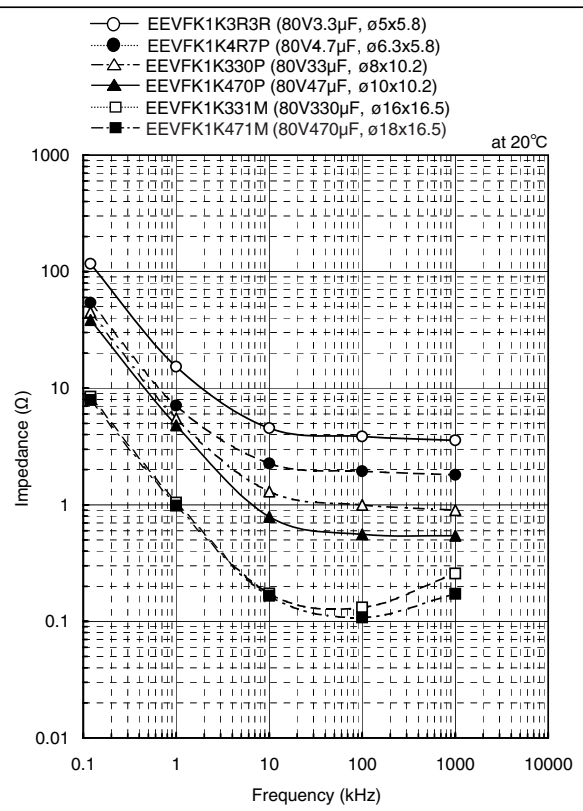
● 35VV



● 63VV

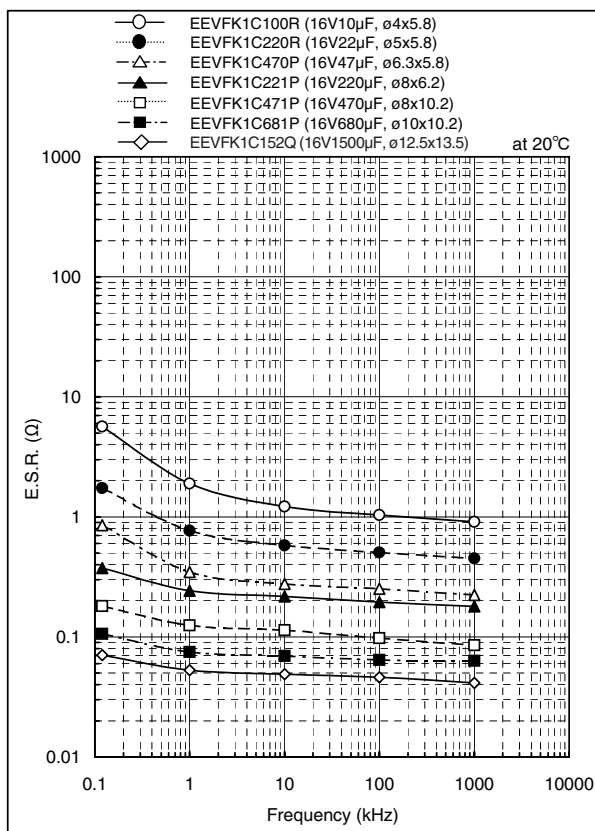


● 80VV

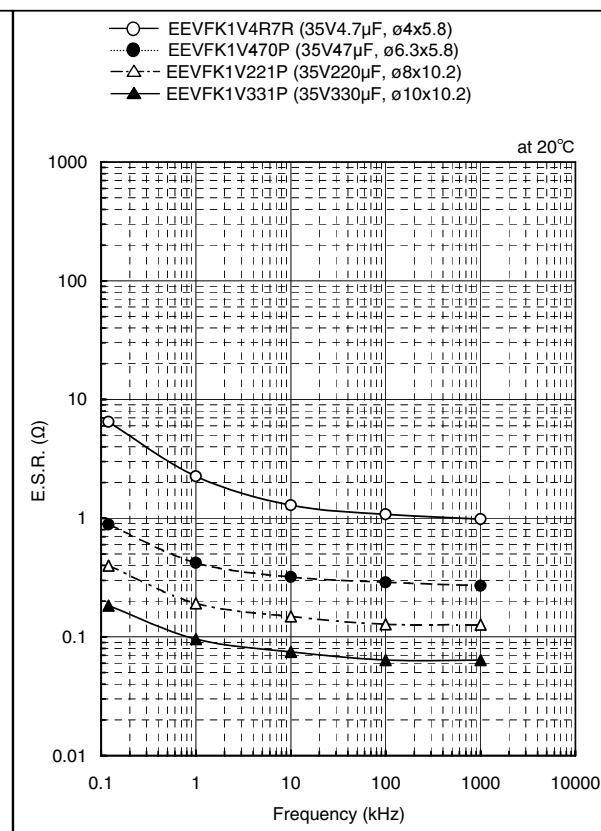


## Frequency Characteristics (ESR)

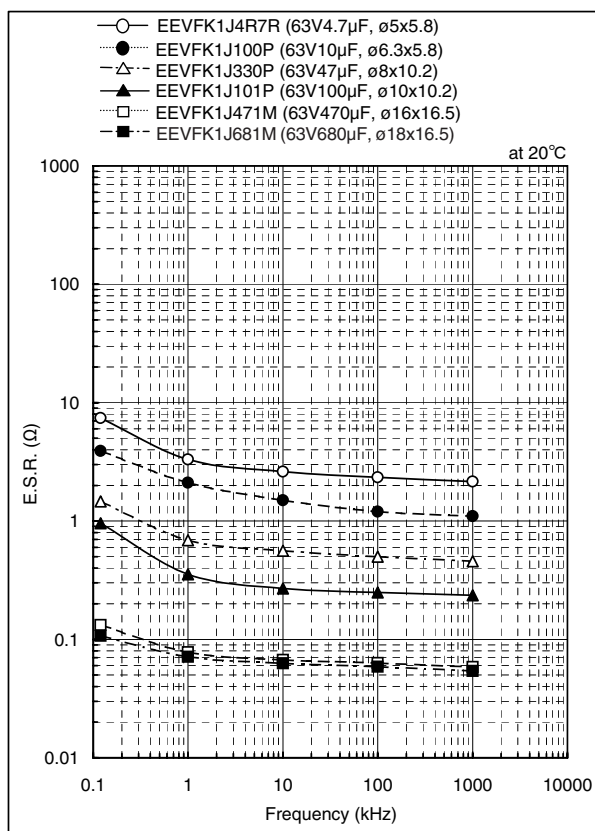
● 16VV



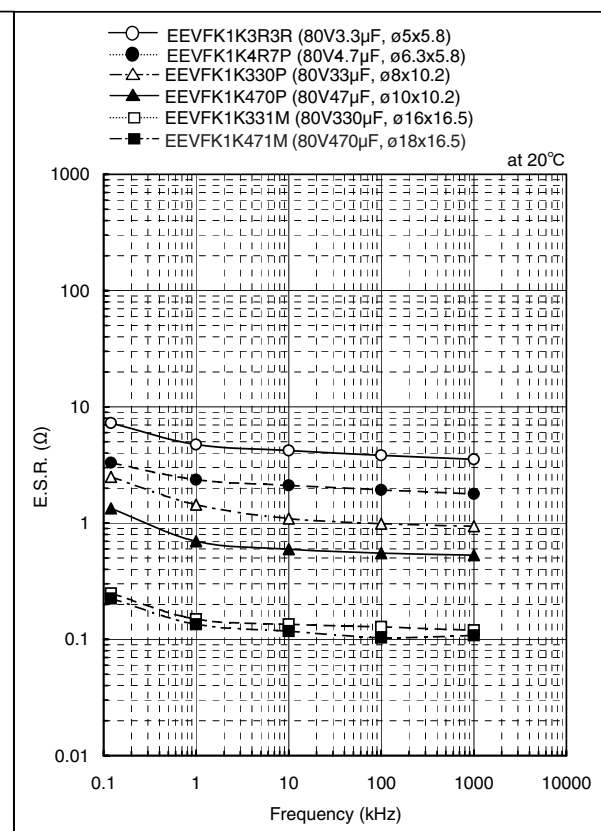
● 35VV



● 63VV

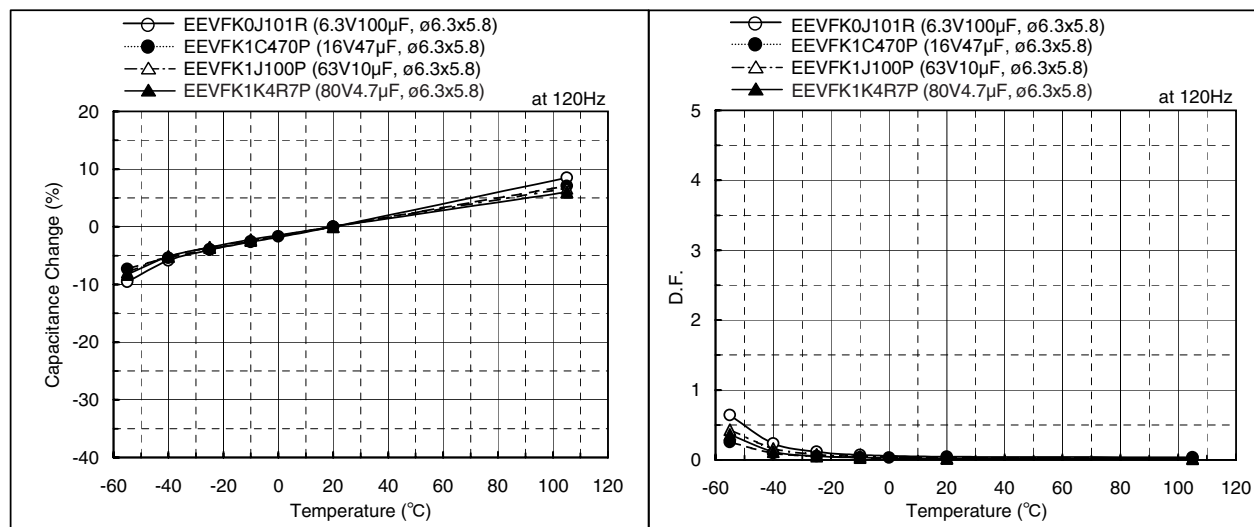


● 80VV

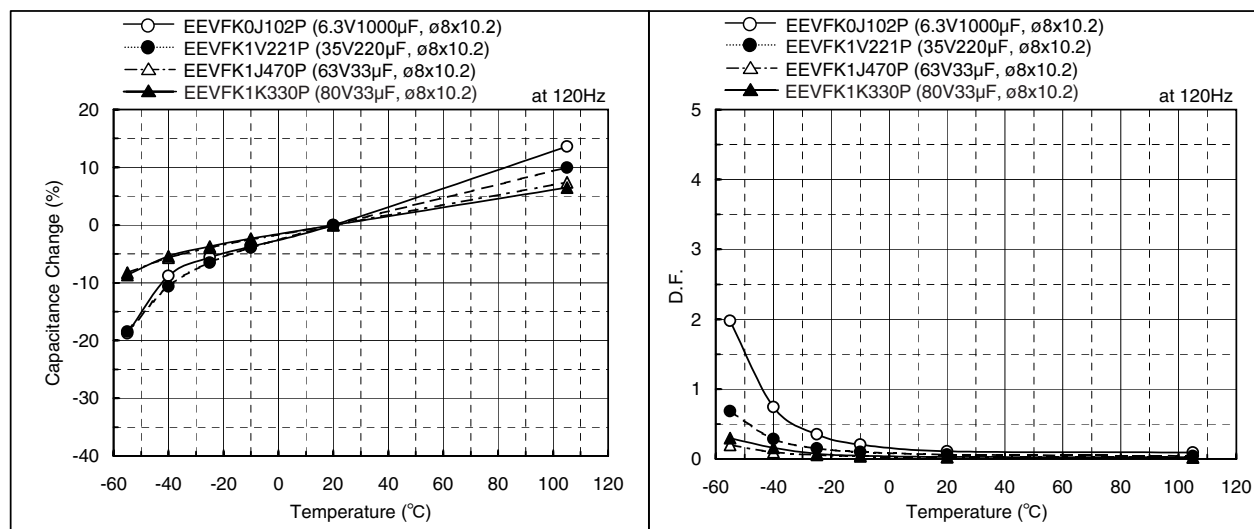


### ■ Temperature Characteristics

#### ● $\phi 6.3 \times 5.8$



#### ● $\phi 8 \times 10.2$



### ■ Load Life

