



BXF Series

• 105°C 2,000Hrs assured.

- Solvent proof.
- Ultra low ESR.
- For STB, Tuner.
- RoHS compliant.
- Halogen-free capacitors are also available.

• AEC-Q200 compliant : Please contact us for more details, test data, information.

Solvent-proof

BJX

Low ESR

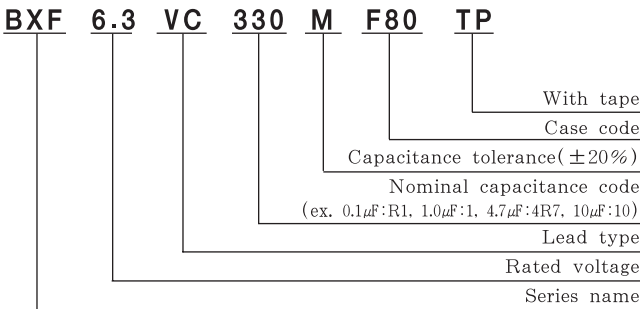
BXF



SPECIFICATIONS

| Item                                                  | Characteristics                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |      |      |      |      |    |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------|------|------|----|---------------------------------|-----|----|----|----|----|----|-----------------|------|------|------|------|------|------|-----------------|---|---|---|---|---|---|
| Rated Voltage Range                                   | 6.3 ~ 50 V <sub>DC</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |      |      |      |      |    |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
| Operating Temperature Range                           | -55 ~ + 105℃                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |      |      |      |      |    |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
| Capacitance Tolerance                                 | ± 20 % (M) (at 20℃, 120Hz)                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |      |      |      |      |    |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
| Leakage Current                                       | I = 0.01CV(μA) or 3μA, whichever is greater.<br>Where, I:Max. Leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(V <sub>DC</sub> )<br>(at 20℃, 2 minutes)                                                                                                                                                                                                                                                                                                  |      |      |      |      |      |    |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
| Dissipation Factor(Tanδ)                              | <table><tr><td>Rated Voltage(V<sub>DC</sub>)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>Tanδ (Max.)</td><td>0.26</td><td>0.19</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.12</td></tr></table>                                                                                                                                                                                                                            |      |      |      |      |      |    | Rated Voltage(V <sub>DC</sub> ) | 6.3 | 10 | 16 | 25 | 35 | 50 | Tanδ (Max.)     | 0.26 | 0.19 | 0.16 | 0.14 | 0.12 | 0.12 |                 |   |   |   |   |   |   |
|                                                       | Rated Voltage(V <sub>DC</sub> )                                                                                                                                                                                                                                                                                                                                                                                                                                         | 6.3  | 10   | 16   | 25   | 35   | 50 |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
| Tanδ (Max.)                                           | 0.26                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.19 | 0.16 | 0.14 | 0.12 | 0.12 |    |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
| (at 20℃, 120Hz)                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |      |      |      |      |    |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
| Temperature Characteristics<br>(Max. Impedance ratio) | <table><tr><td>Rated voltage(V<sub>DC</sub>)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>Z(-25℃)/Z(+20℃)</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z(-55℃)/Z(+20℃)</td><td>4</td><td>4</td><td>4</td><td>3</td><td>3</td><td>3</td></tr></table>                                                                                                                                             |      |      |      |      |      |    | Rated voltage(V <sub>DC</sub> ) | 6.3 | 10 | 16 | 25 | 35 | 50 | Z(-25℃)/Z(+20℃) | 2    | 2    | 2    | 2    | 2    | 2    | Z(-55℃)/Z(+20℃) | 4 | 4 | 4 | 3 | 3 | 3 |
|                                                       | Rated voltage(V <sub>DC</sub> )                                                                                                                                                                                                                                                                                                                                                                                                                                         | 6.3  | 10   | 16   | 25   | 35   | 50 |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
|                                                       | Z(-25℃)/Z(+20℃)                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2    | 2    | 2    | 2    | 2    | 2  |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
| Z(-55℃)/Z(+20℃)                                       | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 4    | 4    | 3    | 3    | 3    |    |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
| (at 120Hz)                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |      |      |      |      |    |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
| Load Life                                             | The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied at 105℃ for 2,000hours.<br>Capacitance change ≤ ±30 % of the initial value<br>Tanδ ≤ 300 % of the initial specified value<br>Leakage current ≤ The initial specified value                                                                                                                                                                   |      |      |      |      |      |    |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
| Shelf Life                                            | The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements.<br>Capacitance change ≤ ±30 % of the initial value<br>Tanδ ≤ 300 % of the initial specified value<br>Leakage current ≤ The initial specified value |      |      |      |      |      |    |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |
| Others                                                | Satisfied characteristics KS C IEC 60384-4                                                                                                                                                                                                                                                                                                                                                                                                                              |      |      |      |      |      |    |                                 |     |    |    |    |    |    |                 |      |      |      |      |      |      |                 |   |   |   |   |   |   |

PART NUMBERING SYSTEM



RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

| Cap.(μF)    | Freq.(Hz) | 120  | 1K   | 10K  | 100K |
|-------------|-----------|------|------|------|------|
| 68 ~ 100    |           | 0.40 | 0.75 | 0.90 | 1.00 |
| 220 ~ 560   |           | 0.50 | 0.85 | 0.94 | 1.00 |
| 680 ~ 1,500 |           | 0.60 | 0.87 | 0.95 | 1.00 |

## DIMENSIONS OF BXF Series

Unit(mm)

### DIMENSIONS

◀ Size code : F80~J10 ▶

◀ Size code : H10~J10 ▶

Top view dimensions: B±0.2, A±0.2, W, P, C±0.2.

### MARKING

Note 1 : L±0.5 for 8×10(H10)~10×10(J10)  
 Note 2 : 6.3WV is marked by 6V.

| Case code | φD  | L   | A    | B    | C    | W       | P   | a   | b   | c   | a   | b   | c   |
|-----------|-----|-----|------|------|------|---------|-----|-----|-----|-----|-----|-----|-----|
| F80       | 6.3 | 7.7 | 6.6  | 6.6  | 7.2  | 0.5~0.8 | 1.9 | 1.9 | 3.5 | 1.6 |     |     |     |
| H10       | 8   | 10  | 8.3  | 8.3  | 9.0  | 0.7~1.1 | 3.1 | 3.1 | 4.2 | 2.2 | 3.1 | 4.2 | 3.5 |
| J10       | 10  | 10  | 10.3 | 10.3 | 11.0 | 0.7~1.1 | 4.5 | 4.5 | 4.4 | 2.2 | 4.5 | 4.4 | 3.5 |

Recommended solder land on PC board

■ : Solder land on PC board

● Vibration Resistance

## RATINGS OF BXF Series

| $\mu F$ \ V <sub>DC</sub> | 6.3 |      |       | 10  |      |       | 16  |      |       | 25  |      |       | 35  |      |       | 50  |      |     |
|---------------------------|-----|------|-------|-----|------|-------|-----|------|-------|-----|------|-------|-----|------|-------|-----|------|-----|
| 68                        |     |      |       |     |      |       |     |      |       |     |      |       | F80 | 0.16 | 600   |     |      |     |
| 100                       |     |      |       |     |      |       |     |      |       | F80 | 0.16 | 600   | F80 | 0.16 | 600   | H10 | 0.34 | 350 |
| 150                       |     |      |       |     |      |       | F80 | 0.16 | 600   | H10 | 0.08 | 850   | H10 | 0.08 | 850   | J10 | 0.18 | 670 |
| 220                       |     |      |       | F80 | 0.16 | 600   | F80 | 0.16 | 600   | H10 | 0.08 | 850   | H10 | 0.09 | 850   | J10 | 0.18 | 670 |
| 330                       | F80 | 0.16 | 600   | H10 | 0.08 | 850   | H10 | 0.08 | 850   | H10 | 0.08 | 850   | J10 | 0.06 | 1,190 |     |      |     |
| 470                       | H10 | 0.08 | 850   | H10 | 0.08 | 850   | H10 | 0.08 | 850   | J10 | 0.06 | 1,190 |     |      |       |     |      |     |
| 560                       | H10 | 0.08 | 850   | H10 | 0.08 | 850   | J10 | 0.06 | 1,190 | J10 | 0.06 | 1,190 |     |      |       |     |      |     |
| 680                       | H10 | 0.08 | 850   | H10 | 0.08 | 850   | J10 | 0.06 | 1,190 |     |      |       |     |      |       |     |      |     |
| 820                       | H10 | 0.08 | 850   | J10 | 0.06 | 1,190 | J10 | 0.06 | 1,190 |     |      |       |     |      |       |     |      |     |
| 1,000                     | H10 | 0.08 | 850   | J10 | 0.06 | 1,190 |     |      |       |     |      |       |     |      |       |     |      |     |
| 1,500                     | J10 | 0.06 | 1,190 |     |      |       |     |      |       |     |      |       |     |      |       |     |      |     |

↑ Rated Ripple Current (mA rms/105°C, 100kHz)  
 ↑ ESR (Ω max./20°C, 100kHz)  
 ↑ Case code