

**BXC SERIES**
**Load Life : 105°C 8000~12000 hours**

•For LED Lighting.

 RoHS  
compliance

**◆SPECIFICATIONS**

| Items                                             | Characteristics                                                                                                                          |      |                                            |      |      |                          |      |      |                 |                    |                       |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------|--------------------------------------------|------|------|--------------------------|------|------|-----------------|--------------------|-----------------------|
| Category Temperature Range                        | -25~+105℃                                                                                                                                |      |                                            |      |      |                          |      |      |                 |                    |                       |
| Rated Voltage Range                               | 160~500Vdc                                                                                                                               |      |                                            |      |      |                          |      |      |                 |                    |                       |
| Capacitance Tolerance                             | ±20%(20℃,120Hz)                                                                                                                          |      |                                            |      |      |                          |      |      |                 |                    |                       |
| Leakage Current(MAX)                              | CV≤1000                                                                                                                                  |      |                                            |      |      | CV>1000                  |      |      |                 |                    | I=Leakage Current(μA) |
|                                                   | I=0.1CV+40μA (1minute)                                                                                                                   |      |                                            |      |      | I=0.04CV+100μA (1minute) |      |      |                 |                    | C=Capacitance(μF)     |
|                                                   | I=0.03CV+15μA (5minutes)                                                                                                                 |      |                                            |      |      | I=0.02CV+25μA (5minutes) |      |      |                 |                    | V=Rated Voltage(Vdc)  |
| Dissipation Factor(MAX)<br>(tanδ)                 | Rated Voltage<br>(Vdc)                                                                                                                   | 160  | 200                                        | 250  | 350  | 400                      | 450  | 500  | (20℃,120Hz)     |                    |                       |
|                                                   | tanδ                                                                                                                                     | 0.15 | 0.15                                       | 0.15 | 0.20 | 0.20                     | 0.20 | 0.24 |                 |                    |                       |
| Endurance                                         | After applying rated voltage with rated ripple current for specified time at 105℃, the capacitors shall meet the following requirements. |      |                                            |      |      |                          |      |      |                 |                    |                       |
|                                                   | Capacitance Change                                                                                                                       |      | Within ±20% of the initial value.          |      |      |                          |      |      |                 |                    |                       |
|                                                   | Dissipation Factor                                                                                                                       |      | Not more than 200% of the specified value. |      |      |                          |      |      |                 |                    |                       |
|                                                   | Leakage Current                                                                                                                          |      | Not more than the specified value.         |      |      |                          |      |      |                 |                    |                       |
|                                                   |                                                                                                                                          |      |                                            |      |      |                          |      |      | Case Size       | Life Time<br>(hrs) |                       |
|                                                   |                                                                                                                                          |      |                                            |      |      |                          |      |      | 8×11.5, 10×12.5 | 8000               |                       |
|                                                   |                                                                                                                                          |      |                                            |      |      |                          |      |      | 10×16, 10×20    | 10000              |                       |
|                                                   |                                                                                                                                          |      |                                            |      |      |                          |      |      | φD≥12.5         | 12000              |                       |
|                                                   |                                                                                                                                          |      |                                            |      |      |                          |      |      |                 |                    | ※500Vdc:10000hrs      |
| Low Temperature Stability<br>Impedance Ratio(MAX) | Rated Voltage<br>(Vdc)                                                                                                                   | 160  | 200                                        | 250  | 350  | 400                      | 450  | 500  | (120Hz)         |                    |                       |
|                                                   | Z(-25℃)/Z(20℃)                                                                                                                           | 3    | 3                                          | 3    | 6    | 6                        | 6    | 6    |                 |                    |                       |

**◆MULTIPLIER FOR RIPPLE CURRENT**

| Frequency (Hz) |           | 120  | 1k   | 10k  | 100k ≤ |
|----------------|-----------|------|------|------|--------|
| Coefficient    | 1~5.6µF   | 0.20 | 0.40 | 0.80 | 1.00   |
|                | 6.8~18µF  | 0.30 | 0.60 | 0.90 | 1.00   |
|                | 22~82µF   | 0.40 | 0.70 | 0.90 | 1.00   |
|                | 100~220µF | 0.45 | 0.75 | 0.90 | 1.00   |

**◆OPTION**

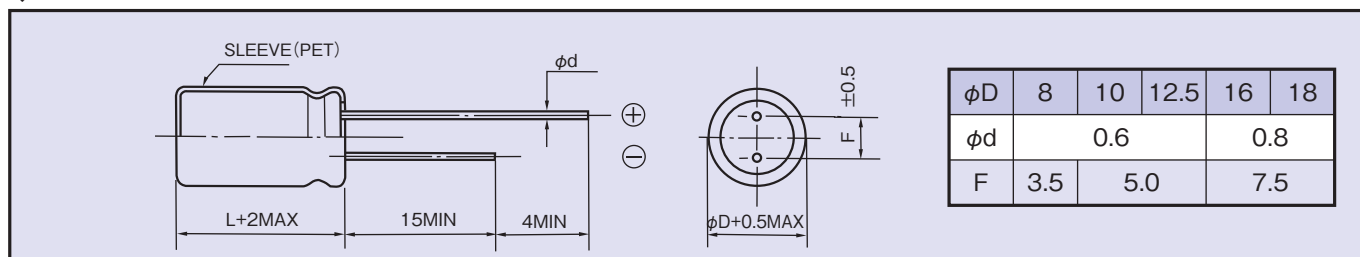
|            | Code |
|------------|------|
| PET Sleeve | EFC  |

**◆PART NUMBER**

|                      |                      |                      |                         |                      |                      |                      |
|----------------------|----------------------|----------------------|-------------------------|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/>    | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Rated Voltage        | BXC Series           | Capacitance          | M Capacitance Tolerance | Option               | Lead Forming         | D×L Case Size        |

◆ **DIMENSIONS**

(mm)



◆ **STANDARD SIZE**

Size  $\phi D \times L$  (mm), Rated Ripple Current (mA r.m.s./105°C, 100kHz)

| Vdc<br>Cap(μF) | 160              |        | 200              |        | 250                |              | 350     |        |
|----------------|------------------|--------|------------------|--------|--------------------|--------------|---------|--------|
|                | Size             | Ripple | Size             | Ripple | Size               | Ripple       | Size    | Ripple |
| 4.7            |                  |        |                  |        | 8×11.5             | 160          | 10×12.5 | 150    |
| 5.6            |                  |        |                  |        |                    |              | 10×12.5 | 180    |
| 6.8            |                  |        |                  |        | 10×12.5            | 250          | 10×16   | 280    |
| 10             | 10×16            | 320    | 10×16            | 320    | 10×16              | 320          | 10×20   | 350    |
| 18             |                  |        |                  |        |                    |              | 10×20   | 350    |
| 22             | 10×20            | 500    | 10×20            | 500    | 10×16<br>10×20     | 470<br>500   | 12.5×20 | 650    |
| 33             | 10×20            | 650    | 10×20            | 650    | 12.5×16<br>12.5×20 | 760<br>800   | 16×20   | 900    |
| 47             | 10×20            | 750    | 12.5×20          | 980    | 12.5×20            | 980          | 16×20   | 1080   |
| 56             |                  |        |                  |        | 12.5×20<br>18×16   | 1080<br>960  |         |        |
| 68             | 12.5×20          | 1180   | 12.5×25<br>16×20 | 1300   | 12.5×25<br>16×20   | 1300         | 18×25   | 1470   |
| 82             |                  |        | 16×20            | 1380   | 12.5×30<br>16×20   | 1500<br>1440 | 18×25   | 1530   |
| 100            | 12.5×25<br>16×20 | 1420   | 16×20            | 1420   | 16×25<br>18×20     | 1530<br>1440 |         |        |
| 120            |                  |        |                  |        | 18×20              | 1500         |         |        |
| 150            | 16×25            | 1890   | 16×25            | 1890   | 18×25              | 1960         |         |        |
| 220            | 18×25            | 2370   | 18×25            | 2370   |                    |              |         |        |

| Vdc<br>Cap(μF) | 400               |            | 450                         |                   | 500                       |        |
|----------------|-------------------|------------|-----------------------------|-------------------|---------------------------|--------|
|                | Size              | Ripple     | Size                        | Ripple            | Size                      | Ripple |
| 1              | 8×11.5<br>10×12.5 | 60<br>70   |                             |                   |                           |        |
| 1.5            | 8×11.5<br>10×12.5 | 90<br>100  |                             |                   |                           |        |
| 1.8            | 8×11.5<br>10×12.5 | 95<br>120  |                             |                   |                           |        |
| 2.2            | 8×11.5<br>10×12.5 | 95<br>140  |                             |                   |                           |        |
| 3.3            | 10×12.5<br>10×16  | 150<br>180 |                             |                   |                           |        |
| 4.7            | 10×16             | 220        | 10×16<br>10×20              | 180<br>220        |                           |        |
| 5.6            | 10×16             | 250        | 10×16<br>10×20              | 200<br>250        |                           |        |
| 6.8            | 10×16             | 280        | 10×16<br>10×20              | 230<br>280        |                           |        |
| 8.2            |                   |            | 10×20                       | 280               |                           |        |
| 10             | 10×20             | 350        | 10×20<br>12.5×16<br>12.5×20 | 330<br>360<br>450 | 12.5×20                   | 320    |
| 15             | 12.5×20           | 550        | 12.5×20<br>12.5×25<br>16×16 | 450<br>600        | 12.5×25<br>16×20          | 440    |
| 22             | 12.5×25<br>16×20  | 760        | 12.5×25<br>16×20            | 600<br>730        | 12.5×35<br>16×25<br>18×20 | 560    |
| 33             | 16×20             | 900        | 16×20<br>16×25<br>18×20     | 730<br>980<br>780 | 16×31.5<br>18×25          | 700    |
| 47             | 16×25<br>18×20    | 1180       | 18×25                       | 1200              | 18×31.5                   | 880    |
| 68             | 18×25             | 1470       |                             |                   |                           |        |