

HFG SERIES

NEW

105°C High Capacitance, High Ripple Current, 4-pin Snap-in Terminal Type

◆FEATURES

- Load Life : 105°C 5000 hours.
- Higher capacitance and longer lifetime than HXG series.
- RoHS compliance.



◆SPECIFICATIONS

| Items  | Characteristics   |                     |                                   |                    |  |                 |                                    |
|--|---|---------------------|-----------------------------------|--------------------|--|-----------------|------------------------------------|
| Category Temperature Range                     | -25~+105°C  |                     |                                   |                    |  |                 |                                    |
| Rated Voltage Range                            | 350~450Vdc  |                     |                                   |                    |  |                 |                                    |
| Capacitance Tolerance                          | ±20% (20°C, 120Hz)  |                     |                                   |                    |  |                 |                                    |
| Leakage Current(MAX)                           | $I=3\sqrt{CV}$ (After 5 minutes application of rated voltage)<br>$I$ =Leakage Current(μA) $C$ =Capacitance(μF) $V$ =Rated Voltage(Vdc)  |                     |                                   |                    |  |                 |                                    |
| (tanδ) Dissipation Factor(MAX)                 | 0.2 (20°C, 120Hz)   |                     |                                   |                    |  |                 |                                    |
| Endurance                                      | After applying rated voltage with rated ripple current for 5000 hours at 105°C, the capacitors shall meet the following requirements. <table border="1" style="margin-left: 20px;"> <tr> <td>Capacitance Change</td> <td>Within ±20% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </table> | 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. |
| 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.  |                     |                                   |                    |  |                 |                                    |
| Low Temperature Stability Impedance Ratio(MAX) | <table border="1" style="margin-left: 20px;"> <tr> <td>Rated Voltage (Vdc)</td> <td>350~450</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>8</td> <td></td> </tr> </table>  | Rated Voltage (Vdc) | 350~450                           | (120Hz)            | Z(-25°C)/Z(20°C)                           | 8               |                                    |
| Rated Voltage (Vdc)                            | 350~450   | (120Hz)             |                                   |                    |  |                 |                                    |
| Z(-25°C)/Z(20°C)                               | 8   |                     |                                   |                    |  |                 |                                    |

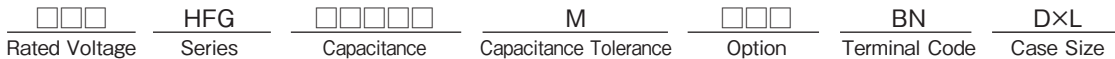
◆MULTIPLIER FOR RIPPLE CURRENT

| Frequency (Hz) | 60(50) | 120(100) | 300  | 500  | 1k   | 10k≤ |
|----------------|--------|----------|------|------|------|------|
| Coefficient    | 0.80   | 1.00     | 1.15 | 1.20 | 1.25 | 1.40 |

◆OPTION

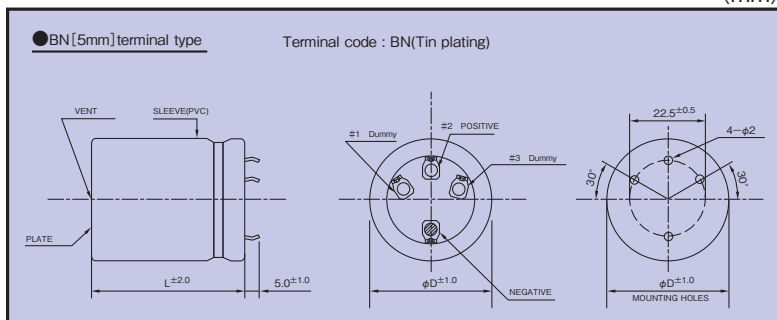
| Option                | Code  |
|-----------------------|-------|
| PVC Sleeve with plate | Blank |

◆PART NUMBER



◆DIMENSIONS

(mm)



**◆ STANDARD SIZE**

| Cap(μF) | Vdc |  | 350   |      |       |        |
|---------|-----|--|-------|------|-------|--------|
|         | φD  |  | φ35   |      | φ45   |        |
| 560     |     |  | 35×50 | 3.05 |       |        |
| 680     |     |  | 35×55 | 3.35 |       |        |
| 820     |     |  | 35×60 | 3.64 | 40×50 | 3.46   |
| 1000    |     |  | 35×70 | 4.12 | 40×60 | 4.05   |
| 1200    |     |  | 35×80 | 4.58 | 40×65 | 4.33   |
| 1500    |     |  | 35×95 | 5.22 | 40×80 | 5.11   |
| 1800    |     |  |       |      | 40×90 | 5.59   |
| 2200    |     |  |       |      |       | 45×75  |
| 2700    |     |  |       |      |       | 45×85  |
|         |     |  |       |      |       | 45×100 |
|         |     |  |       |      |       | 6.43   |

| Cap(μF) | Vdc |  | 400   |      |       |        |
|---------|-----|--|-------|------|-------|--------|
|         | φD  |  | φ35   |      | φ45   |        |
| 560     |     |  | 35×50 | 3.03 |       |        |
| 680     |     |  | 35×60 | 3.50 | 40×50 | 3.38   |
| 820     |     |  | 35×65 | 3.78 | 40×55 | 3.69   |
| 1000    |     |  | 35×75 | 4.25 | 40×65 | 4.24   |
| 1200    |     |  | 35×95 | 4.97 | 40×75 | 4.75   |
| 1500    |     |  |       |      | 40×90 | 5.40   |
| 1800    |     |  |       |      |       | 45×70  |
| 2200    |     |  |       |      |       | 45×80  |
|         |     |  |       |      |       | 45×100 |
|         |     |  |       |      |       | 6.30   |

| Cap(μF) | Vdc |  | 420    |      |       |       |
|---------|-----|--|--------|------|-------|-------|
|         | φD  |  | φ35    |      | φ45   |       |
| 470     |     |  | 35×50  | 2.85 |       |       |
| 560     |     |  | 35×55  | 3.12 | 40×50 | 3.22  |
| 680     |     |  | 35×65  | 3.57 | 40×55 | 3.52  |
| 820     |     |  | 35×75  | 4.00 | 40×60 | 3.81  |
| 1000    |     |  | 35×85  | 4.44 | 40×70 | 4.32  |
| 1200    |     |  | 35×100 | 5.00 | 40×80 | 4.80  |
| 1500    |     |  |        |      | 40×95 | 5.48  |
| 1800    |     |  |        |      |       | 45×80 |
|         |     |  |        |      |       | 45×90 |
|         |     |  |        |      |       | 5.70  |

| Cap(μF) | Vdc |  | 450   |      |       |        |
|---------|-----|--|-------|------|-------|--------|
|         | φD  |  | φ35   |      | φ45   |        |
| 390     |     |  | 35×50 | 2.76 |       |        |
| 470     |     |  | 35×55 | 3.03 |       |        |
| 560     |     |  | 35×60 | 3.30 | 40×50 | 3.14   |
| 680     |     |  | 35×70 | 3.76 | 40×60 | 3.66   |
| 820     |     |  | 35×80 | 4.20 | 40×70 | 4.18   |
| 1000    |     |  | 35×95 | 4.78 | 40×75 | 4.47   |
| 1200    |     |  |       |      | 40×90 | 5.12   |
| 1500    |     |  |       |      |       | 45×70  |
| 1800    |     |  |       |      |       | 45×85  |
|         |     |  |       |      |       | 45×100 |
|         |     |  |       |      |       | 6.08   |

↑ ↑  
 Ripple Current (A r.m.s./120Hz, 105°C)  
 Case Size φD×L(mm)