



**450HFG820MBN35X80**  
RUBYCON

[Buy Now](#)



Looking for a discount?

[Check out our current promotions!](#)

Give us a call

**1-855-837-4225**

International: 1-415-281-3866

## Email Us

Sales and New Orders: [sales@verical.com](mailto:sales@verical.com)

Order Support: [support@verical.com](mailto:support@verical.com)

Suppliers: [Visit our seller page](#)

## Company Address

Arrow Electronics, Inc  
9201 East Dry Creek Road  
Centennial, CO 80112

**HFG SERIES**

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

\*Load Life : 105°C 5000 hours.

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( $\mu$ A) $C$ =Capacitance( $\mu$ F) $V$ =Rated Voltage(Vdc)  |                     |                                   |                    |  |                 |                                    |
| Dissipation Factor(MAX) (tan $\delta$ )        | 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 $\leq$ |
|----------------|--------|----------|------|------|------|------------|
| Coefficient    | 0.80   | 1.00     | 1.15 | 1.20 | 1.25 | 1.40       |

◆OPTION

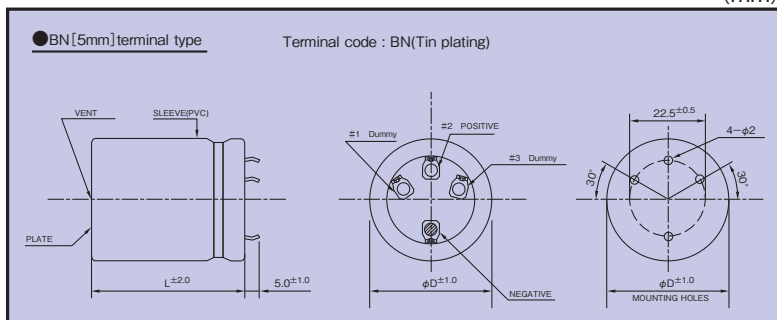
|                       | Code  |
|-----------------------|-------|
| PVC Sleeve with plate | Blank |

◆PART NUMBER

□□□ / HFG / □□□□□ / M / □□□ / BN / DxL  
 Rated Voltage      Series      Capacitance      Capacitance Tolerance      Option      Terminal Code      Case Size

◆DIMENSIONS

(mm)



**◆ STANDARD SIZE**

| Cap(μF) | Vdc |  | 350   |       |      |             |
|---------|-----|--|-------|-------|------|-------------|
|         | φD  |  | φ35   | φ40   | φ45  |             |
| 560     |     |  | 35×50 |       |      |             |
| 680     |     |  | 35×55 |       |      |             |
| 820     |     |  | 35×60 | 40×50 | 3.46 |             |
| 1000    |     |  | 35×70 | 40×60 | 4.05 | 45×50 3.71  |
| 1200    |     |  | 35×80 | 40×65 | 4.33 | 45×55 4.01  |
| 1500    |     |  | 35×95 | 40×80 | 5.11 | 45×65 4.62  |
| 1800    |     |  |       | 40×90 | 5.59 | 45×75 5.19  |
| 2200    |     |  |       |       |      | 45×85 5.69  |
| 2700    |     |  |       |       |      | 45×100 6.43 |

| Cap(μF) | Vdc |  | 400   |       |      |             |
|---------|-----|--|-------|-------|------|-------------|
|         | φD  |  | φ35   | φ40   | φ45  |             |
| 560     |     |  | 35×50 |       |      |             |
| 680     |     |  | 35×60 | 40×50 | 3.38 |             |
| 820     |     |  | 35×65 | 40×55 | 3.69 |             |
| 1000    |     |  | 35×75 | 40×65 | 4.24 | 45×50 3.61  |
| 1200    |     |  | 35×95 | 40×75 | 4.75 | 45×60 4.26  |
| 1500    |     |  |       | 40×90 | 5.40 | 45×70 4.83  |
| 1800    |     |  |       |       |      | 45×80 5.36  |
| 2200    |     |  |       |       |      | 45×100 6.30 |

| Cap(μF) | Vdc |  | 420    |       |      |            |
|---------|-----|--|--------|-------|------|------------|
|         | φD  |  | φ35    | φ40   | φ45  |            |
| 470     |     |  | 35×50  |       |      |            |
| 560     |     |  | 35×55  | 40×50 | 3.22 |            |
| 680     |     |  | 35×65  | 40×55 | 3.52 |            |
| 820     |     |  | 35×75  | 40×60 | 3.81 | 45×50 3.52 |
| 1000    |     |  | 35×85  | 40×70 | 4.32 | 45×60 4.13 |
| 1200    |     |  | 35×100 | 40×80 | 4.80 | 45×65 4.40 |
| 1500    |     |  |        | 40×95 | 5.48 | 45×80 5.21 |
| 1800    |     |  |        |       |      | 45×90 5.70 |

| Cap(μF) | Vdc |  | 450   |       |      |             |
|---------|-----|--|-------|-------|------|-------------|
|         | φD  |  | φ35   | φ40   | φ45  |             |
| 390     |     |  | 35×50 |       |      |             |
| 470     |     |  | 35×55 |       |      |             |
| 560     |     |  | 35×60 | 40×50 | 3.14 |             |
| 680     |     |  | 35×70 | 40×60 | 3.66 | 45×50 3.41  |
| 820     |     |  | 35×80 | 40×70 | 4.18 | 45×55 3.71  |
| 1000    |     |  | 35×95 | 40×75 | 4.47 | 45×65 4.34  |
| 1200    |     |  |       | 40×90 | 5.12 | 45×70 4.59  |
| 1500    |     |  |       |       |      | 45×85 5.36  |
| 1800    |     |  |       |       |      | 45×100 6.08 |

↑  
Ripple Current (A r.m.s./120Hz, 105°C)

↑  
Case Size φD×L(mm)