

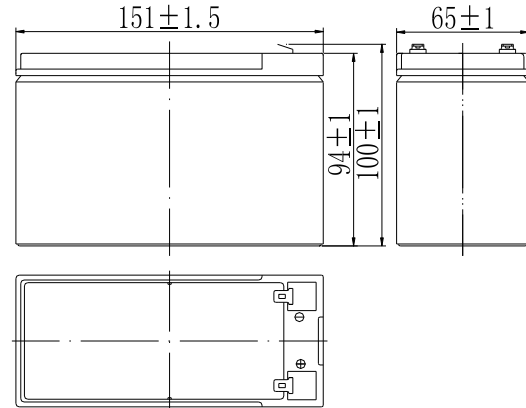
**BW 1270(12V7Ah)**

**SPECIFICATIONS**

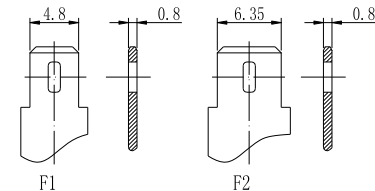
|  |              |   |
|--|--------------|---|
| <b>Nominal Voltage</b>                           |              | 12 V  |
| <b>Capacity (25°C)</b>                           | 20HR         | 7.0 Ah  |
|  | 10HR         | 6.5 Ah  |
|  | 1HR          | 4.5 Ah  |
| <b>Dimension</b>                                 | Length       | 151 ± 1.5mm (5.94inch)                                |
|  | Width        | 65 ± 1mm (2.56inch)                                   |
|  | Height       | 94 ± 1mm (3.70inch)                                   |
|  | Total Height | 100 ± 1mm (3.94inch)                                  |
| <b>Approx. Weight</b>                            |              | 1.9kg (4.18lbs) ± 5%                                  |
| <b>Terminal type</b>                             |              | F1 or F2  |
| <b>Internal resistance (Fully charged, 25°C)</b> |              | Approx. 30m Ω   |
| <b>Capacity affected by temperature (20HR)</b>   | 40°C         | 102%  |
|  | 25°C         | 100%  |
|  | 0°C          | 85%   |
|  | -15°C        | 65%   |
| <b>Self-discharge (25°C)</b>                     | 3 month      | Remaining Capacity: 91%                               |
|  | 6 month      | Remaining Capacity: 82%                               |
|  | 12 month     | Remaining Capacity: 65%                               |
| <b>Nominal operating temperature</b>             |              | 25°C ± 3°C (77°F ± 5°F)                               |
| <b>Operating temperature range</b>               | Discharge    | -15°C ~ 50°C (5°F ~ 122°F)                            |
|  | Charge       | -10°C ~ 50°C (14°F ~ 122°F)                           |
|  | Storage      | -20°C ~ 50°C (-4°F ~ 122°F)                           |
| <b>Float charging voltage(25°C)</b>              |              | 13.60 to 13.80V<br>Temperature compensation: -18mV/°C |
| <b>Cyclic charging voltage(25°C)</b>             |              | 14.50 to 15.00V<br>Temperature compensation: -30mV/°C |
| <b>Maximum charging current</b>                  |              | 2.1A  |
| <b>Maximum discharge current</b>                 |              | 105 A(5 sec.)   |
| <b>Designed floating life(20°C)</b>              |              | 5 years   |



**DIMENSIONS**



**TERMINAL**



**CONSTRUCTION**

|              |                |                |           |       |           |               |              |          |
|--------------|----------------|----------------|-----------|-------|-----------|---------------|--------------|----------|
| Component    | Positive plate | Negative plate | Container | Cover | Separator | Electrolyte   | Safety valve | Terminal |
| Raw material | Lead dioxide   | Lead           | ABS       | ABS   | AGM       | Sulfuric acid | Rubber       | Copper   |

**CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A, 25°C)**

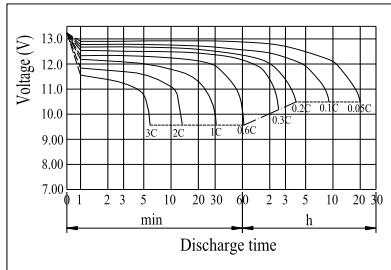
| F.V/TIME | 5min | 10min | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 10h  | 20h  |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 9.60V    | 26.7 | 16.9  | 13.2  | 7.46  | 4.59  | 2.51 | 1.74 | 1.44 | 1.22 | 0.66 | 0.36 |
| 9.90V    | 25.9 | 16.4  | 12.9  | 7.31  | 4.52  | 2.49 | 1.72 | 1.43 | 1.21 | 0.66 | 0.35 |
| 10.2V    | 24.9 | 15.8  | 12.4  | 7.08  | 4.40  | 2.47 | 1.71 | 1.42 | 1.21 | 0.66 | 0.35 |
| 10.5V    | 23.8 | 15.1  | 12.0  | 6.91  | 4.31  | 2.43 | 1.70 | 1.41 | 1.20 | 0.65 | 0.35 |
| 10.8V    | 22.5 | 14.2  | 11.4  | 6.66  | 4.18  | 2.37 | 1.65 | 1.36 | 1.16 | 0.64 | 0.34 |

**CONSTANT POWER DISCHARGE CHARACTERISTICS (WATT, 25°C)**

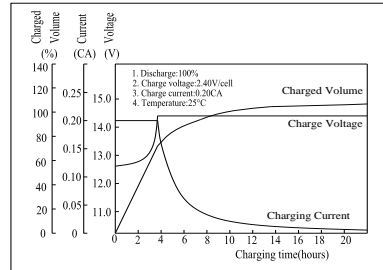
| F.V/TIME | 5min | 10min | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 10h  | 20h  |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 9.60V    | 298  | 191   | 151   | 85.4  | 53.1  | 29.3 | 20.6 | 17.1 | 14.6 | 7.95 | 4.26 |
| 9.90V    | 289  | 185   | 147   | 83.7  | 52.3  | 29.2 | 20.5 | 17.0 | 14.5 | 7.92 | 4.25 |
| 10.2V    | 278  | 178   | 142   | 81.2  | 51.0  | 28.9 | 20.3 | 16.9 | 14.4 | 7.88 | 4.23 |
| 10.5V    | 266  | 170   | 137   | 79.2  | 50.0  | 28.5 | 20.2 | 16.8 | 14.3 | 7.84 | 4.20 |
| 10.8V    | 251  | 161   | 130   | 76.3  | 48.4  | 27.8 | 19.6 | 16.3 | 13.9 | 7.68 | 4.12 |

Note: The above characteristics data can be obtained within three charge/discharge cycles.

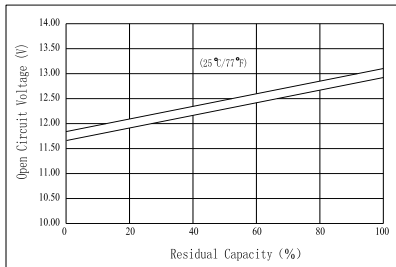
**Discharge Characteristics (25°C)**



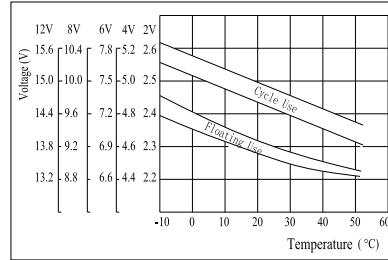
**Charging Characteristics (25°C)**



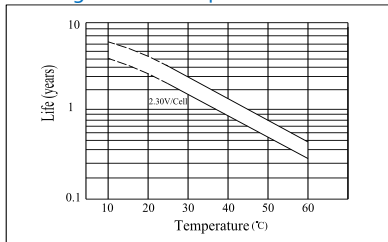
**The Relationship for Open Circuit Voltage and Residual Capacity (25°C)**



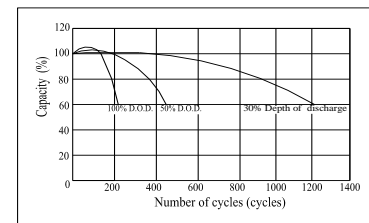
**The Relationship for Charging Voltage and Temperature**



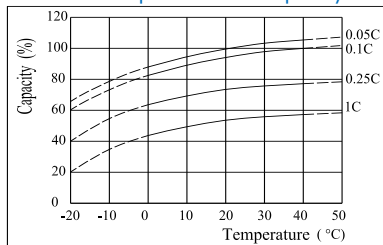
**Floating Life on Temperature**



**Cycle Life on D.O.D (25°C)**



**Effect of Temperature on Capacity**



**Self-discharge Characteristics**

