



# VRLA Rechargeable Battery

## SHR7-12



### FEATURES

- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Can be used in any orientation(excluding used inverted)
- The battery is designed for high rate usage
- Absorbent Glass Mat technology for efficient gas recombination
- The power density at 2 min~15min discharging rate is 50% higher than BP series

### APPLICATION

- UPS
- Fishing Lights
- Power Packs
- Emergency Lights
- Toy-Cars



### SPECIFICATIONS

|                             |   |
|-----------------------------|---|
| Nominal Voltage             | 12 V  |
| Nominal Capacity            | 15 Min Rate (27W, 1.60V/Cell)   |
| Approx. Weight              | 1840g(4.06lbs.)   |
| Terminals                   | T2 (Faston Tab 250) T1 is optional  |
| Internal Resistance         | ≤20mΩ (Fully Charged )  |
| Max. Discharge Current      | 90 A (5 sec.)   |
| Max. Charge Current         | 1.80 A  |
| Operating Temperature Range | Charge : 0°C~40°C(32°F~104°F)<br>Discharge : -20°C~50°C(-4°F~122°F)<br>Storage : -20°C~40°C(-4°F~104°F) |
| Container Material          | Standard: ABS( UL 94-HB) SHR7-12<br>Optional: Flame Retardant ABS(UL 94-V0) SHR7-12FR                   |

- IEC 61056-1
- JIS C 8702-1
- GB/T 19639.1

| DIMENSION(mm/inch)                             | OUTER DIMENSIONS | TERMINAL TYPE |
|--|------------------|---------------|
| <b>Length</b><br>90±1.5 (3.54±0.06)            |                  |               |
| <b>Width</b><br>70±1.5 (2.76±0.06)             |                  |               |
| <b>Container Height</b><br>102±1.5 (4.02±0.06) |                  |               |
| <b>Total Height</b><br>106±2.0 (4.17±0.08)     |                  |               |

### Constant power discharge characteristics at 25 °C/77 °F Unit: W

| F.V. (V/cell) | Discharge Time | 2 Min | 3 Min | 5 Min | 10 Min | 15 Min | 20 Min | 30 Min | 40 Min | 50 Min | 60 Min | 120 Min |
|---------------|----------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|---------|
| 1.80V         |                | 484   | 408   | 307   | 196    | 153    | 119    | 88.4   | 68.7   | 58.3   | 51.4   | 27.5    |
| 1.75V         |                | 519   | 438   | 330   | 208    | 157    | 122    | 90.4   | 70.6   | 59.9   | 52.1   | 27.9    |
| 1.70V         |                | 545   | 459   | 343   | 212    | 159    | 124    | 91.3   | 71.4   | 60.4   | 52.4   | 28.1    |
| 1.67V         |                | 557   | 473   | 355   | 217    | 161    | 125    | 92.1   | 72.2   | 60.9   | 52.6   | 28.3    |
| 1.60V         |                | 568   | 486   | 368   | 221    | 162    | 126    | 92.9   | 73.0   | 61.3   | 52.8   | 28.5    |
| 1.50V         |                | 579   | 496   | 372   | 224    | 163    | 127    | 93.7   | 73.8   | 62.0   | 53.0   | 28.7    |

### Constant current discharge characteristics at 25 °C/77 °F Unit: A

| F.V. (V/cell) | Discharge Time | 2 Min | 3 Min | 5 Min | 10 Min | 15 Min | 20 Min | 30 Min | 40 Min | 50 Min | 60 Min | 120 Min |
|---------------|----------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|---------|
| 1.80V         |                | 44.5  | 37.4  | 27.6  | 17.1   | 13.2   | 10.17  | 7.50   | 5.83   | 4.91   | 4.31   | 2.29    |
| 1.75V         |                | 47.9  | 40.4  | 29.8  | 18.2   | 13.5   | 10.46  | 7.71   | 6.00   | 5.05   | 4.39   | 2.33    |
| 1.70V         |                | 50.5  | 42.4  | 31.0  | 18.7   | 13.7   | 10.62  | 7.78   | 6.07   | 5.09   | 4.41   | 2.34    |
| 1.67V         |                | 51.6  | 43.7  | 32.2  | 19.2   | 13.9   | 10.74  | 7.86   | 6.15   | 5.14   | 4.43   | 2.36    |
| 1.60V         |                | 52.7  | 44.9  | 33.4  | 19.5   | 14.1   | 10.85  | 7.93   | 6.22   | 5.18   | 4.45   | 2.38    |
| 1.50V         |                | 53.8  | 45.9  | 33.9  | 19.8   | 14.3   | 10.94  | 8.03   | 6.30   | 5.25   | 4.48   | 2.40    |

All data and artworks shall be changed without prior notice, BB reserves the right to explain and update the information contained hereinto.

For operation, please refer to the instruction from technical manual.

A/0 REV. Apr. 2014

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