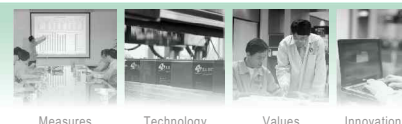




## VRLA Rechargeable Battery

# BP4.5-12



### FEATURES

- Maintenance free(no water topping-up required).
- No free acid(Non-spillable battery).
- Low self-discharge rate, lower than 3% capacity loss per month.
- Can be used in any orientation(excluding used inverted).
- Absorbent Glass Mat technology for efficient gas recombination.

### APPLICATION

- UPS
- Electronic Doorbells
- Toy-Cars
- Fans



### SPECIFICATIONS

|                             |                                                                                                         |
|-----------------------------|---------------------------------------------------------------------------------------------------------|
| Nominal Voltage             | 12 V                                                                                                    |
| Nominal Capacity            | 4.5Ah @ 20 hour rate F.V.(1.75V/cell)                                                                   |
| Approx. Weight              | 1840g(4.06lbs.)                                                                                         |
| Terminals                   | T1 (Faston Tab 187) T2 is optional                                                                      |
| Internal Resistance         | $\leq 42m\ \Omega$ (Fully Charged )                                                                     |
| Max. Discharge Current      | 67.5 A (5 sec.)                                                                                         |
| Max. Charge Current         | 1.35 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) BP4.5-12<br>Optional: Flame Retardant ABS(UL 94-V0) BP4.5-12FR                 |



- 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)<br><b>Width</b><br>70±1.5 (2.76±0.06)<br><b>Container Height</b><br>102±1.5 (4.02±0.06)<br><b>Total Height</b><br>106±2.0 (4.17±0.08) |                  | <div> <b>Terminal T1</b><br/> </div> <div> <b>Terminal T2</b><br/> </div> |

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

| Discharge Time<br>F.V.<br>(V/cell) | 5 Min | 10 Min | 15 Min | 30 Min | 1 Hr  | 3 Hr  | 5 Hr | 10 Hr | 20 Hr |
|------------------------------------|-------|--------|--------|--------|-------|-------|------|-------|-------|
| 1.80V                              | 162.7 | 119.8  | 96.0   | 57.1   | 32.75 | 13.12 | 9.04 | 5.054 | 2.660 |
| 1.75V                              | 188.3 | 129.8  | 100.4  | 59.3   | 33.73 | 13.38 | 9.18 | 5.130 | 2.700 |
| 1.70V                              | 200.1 | 134.4  | 103.5  | 60.6   | 34.34 | 13.50 | 9.23 | 5.156 | 2.712 |
| 1.65V                              | 209.1 | 137.6  | 105.9  | 61.5   | 34.75 | 13.59 | 9.26 | 5.171 | 2.724 |
| 1.60V                              | 216.0 | 140.4  | 108.0  | 62.1   | 35.10 | 13.68 | 9.29 | 5.171 | 2.724 |

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

| Discharge Time<br>F.V.<br>(V/cell) | 5 Min | 10 Min | 15 Min | 30 Min | 1 Hr | 3 Hr | 5 Hr  | 10 Hr | 20 Hr |
|------------------------------------|-------|--------|--------|--------|------|------|-------|-------|-------|
| 1.80V                              | 14.66 | 10.54  | 8.35   | 4.84   | 2.75 | 1.09 | 0.754 | 0.421 | 0.222 |
| 1.75V                              | 17.28 | 11.42  | 8.73   | 5.02   | 2.83 | 1.11 | 0.765 | 0.427 | 0.225 |
| 1.70V                              | 18.36 | 11.83  | 9.00   | 5.14   | 2.89 | 1.12 | 0.769 | 0.430 | 0.226 |
| 1.65V                              | 19.18 | 12.12  | 9.21   | 5.21   | 2.92 | 1.13 | 0.772 | 0.431 | 0.227 |
| 1.60V                              | 19.82 | 12.36  | 9.39   | 5.26   | 2.95 | 1.14 | 0.774 | 0.431 | 0.227 |

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