## Deep Cycle SLA Battery

#### **DC SERIES**

bosfa

DC (Deep cycle) Series batteries are designed for deep discharge application, with special chemical formula for plates active paste material, slightly stronger electrolyte and low temperature design, which can withstand repeated deep cyclic application, such as Solar Energy System, Golf Trolley, Electric vehicle, etc.

**VRLA Battery** 

#### **Application**

- Solar Energy System
- Golf Cars and Buggies
- Electric Powered Vehicles
- · Wheel Chairs

- Power Tools
- Electric Powered Toys
- Control System
- Vacuum Cleaners
- Medical Equipments

#### **General Features**

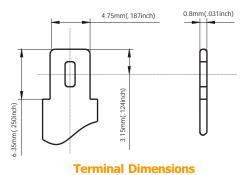
- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexibility design for multiple install positions.

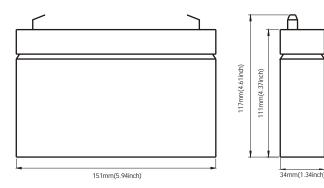
#### **Construction**

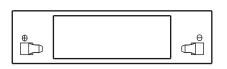
| • | Componer  | nt | Raw  | material |
|---|-----------|----|------|----------|
| • | Positive  |    | Lead | dioxide  |
| • | Negative  |    | Lead |          |
| • | Container |    | ABS  |          |
| • | Cover     |    | ABS  |          |

- Sealant ......Epoxy Resin
- Safety valve ....EPDR
- Terminal ......Copper
- Separator ......Fibre glass • Electrolyte .....Sulfuric acid





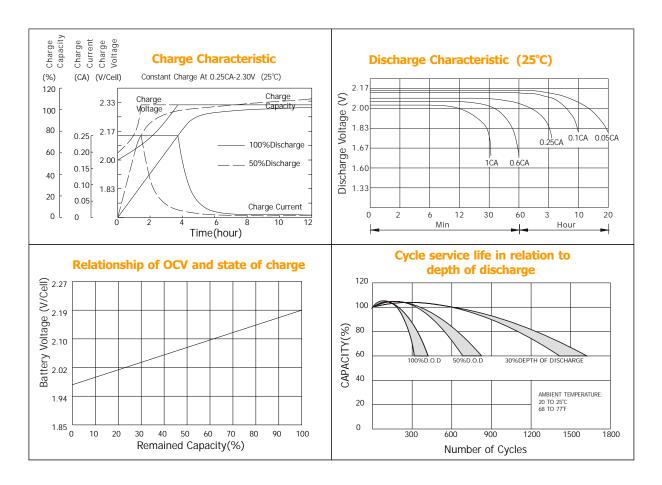




| Battery Model        | DC 6-7.5                        |                        |                              |                  |  |  |  |
|----------------------|---------------------------------|------------------------|------------------------------|------------------|--|--|--|
| Designed Cycle Life  | > 350 cycles @ -0.5CA to 4.8V   |                        |                              |                  |  |  |  |
| Capacity(25°C)       | 20HR(0.375A,1.75V)              | 10HR(0.71A,1.75V)      | 5HR(1.28A,1.75V)             | 1HR(4.88A,1.75V) |  |  |  |
| Capacity(25 C)       | 7.5AH                           | 7.1AH                  | 6.38AH                       | 4.88AH           |  |  |  |
| Dimensions           | Length                          | Width                  | Height                       | Total Height     |  |  |  |
| Dimensions           | 151mm(5.94inch)                 | 34mm(1.34inch)         | 94mm(3.7 inch)               | 100mm(3.94inch)  |  |  |  |
| Approx. Weight       | 1.3Kg (2.87 lbs)                |                        |                              |                  |  |  |  |
| Internal Resistance  | Full charged at 25°C: 0.013 Ohm |                        |                              |                  |  |  |  |
| Self Discharge       |                                 | 3% of capacity decline | declined per month at (25°C) |                  |  |  |  |
| Capacity Affected    | 40°C                            | 25°C                   | 0°C                          | -15°C            |  |  |  |
| by Temp.(20HR)       | 102%                            | 100%                   | 85%                          | 65%              |  |  |  |
| Charge Voltage(25°C) | Cycle                           | use use                | Float use                    |                  |  |  |  |
| Charge voltage(25 C) | 7.2-7.5V(-15mV/ °C),            | max. Current: 2.25A    | 6.8-6.9V(-10mV/ °C)          |                  |  |  |  |

**VRLA Battery** 

# Deep Cycle SLA Battery



#### Constant current discharge ratings-amperes at 25°C

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR  | 3HR  | 5HR  | 10HR | 20HR |
|----------|------|-------|-------|-------|------|------|------|------|------|
| 1.60V    | 36.3 | 22.6  | 17.0  | 10.4  | 5.29 | 2.32 | 1.42 | 0.77 | 0.41 |
| 1.67V    | 34.0 | 21.4  | 16.4  | 9.93  | 5.22 | 2.23 | 1.39 | 0.77 | 0.40 |
| 1.70V    | 31.2 | 20.6  | 16.0  | 9.03  | 5.06 | 2.08 | 1.36 | 0.76 | 0.39 |
| 1.75V    | 30.6 | 20.0  | 15.5  | 8.58  | 4.82 | 2.01 | 1.33 | 0.76 | 0.38 |
| 1.80V    | 27.4 | 19.1  | 14.1  | 7.94  | 4.51 | 1.93 | 1.25 | 0.74 | 0.37 |
| 1.85V    | 24.1 | 18.2  | 12.6  | 7.31  | 4.21 | 1.87 | 1.17 | 0.73 | 0.36 |

### Constant power discharge ratings-watts at 25°C

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR  | 3HR  | 5HR  | 10HR | 20HR |
|----------|------|-------|-------|-------|------|------|------|------|------|
| 1.60V    | 63.6 | 40.8  | 31.1  | 18.7  | 9.54 | 4.12 | 2.40 | 1.59 | 0.83 |
| 1.67V    | 61.4 | 39.7  | 30.7  | 18.3  | 9.48 | 3.99 | 2.39 | 1.58 | 0.80 |
| 1.70V    | 57.8 | 39.3  | 30.4  | 17.2  | 9.31 | 3.81 | 2.36 | 1.57 | 0.79 |
| 1.75V    | 58.2 | 39.2  | 30.2  | 16.6  | 9.15 | 3.72 | 2.34 | 1.55 | 0.77 |
| 1.80V    | 53.2 | 38.6  | 28.0  | 15.9  | 8.62 | 3.61 | 2.26 | 1.53 | 0.75 |
| 1.85V    | 48.3 | 36.6  | 25.4  | 14.9  | 8.11 | 3.50 | 2.19 | 1.51 | 0.72 |



COPYRIGHT BOSFA INDUSTRIAL BATTERY CO.,LTD.