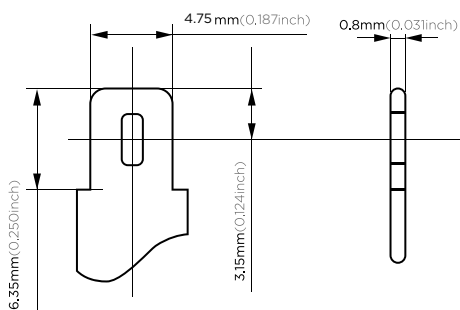




Your Replacement Battery Source

## Rechargeable Sealed Lead Acid Battery

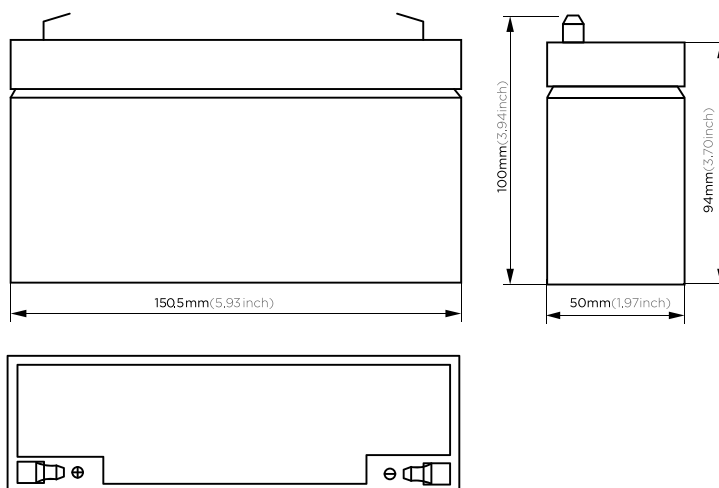
**BC-6100F1****(6V 12Ah)**

Terminal Dimensions

These rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

**Application**

- Alarm System
- Cable Television
- Communication Equipment
- Control Equipment
- Security System
- Medical Equipment
- UPS
- Power tools
- Emergency Power System
- Toys

**Battery Construction**

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

**General Features**

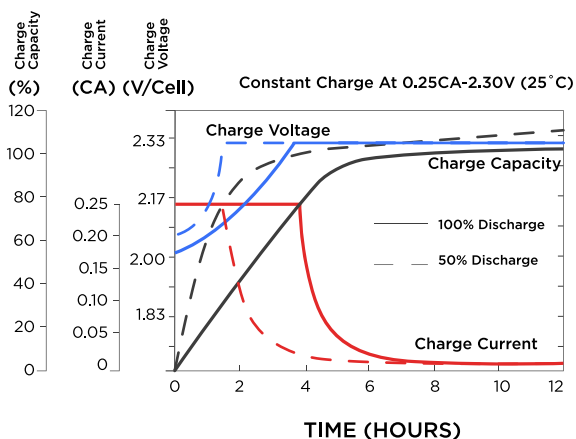
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.

**Performance Characteristics**

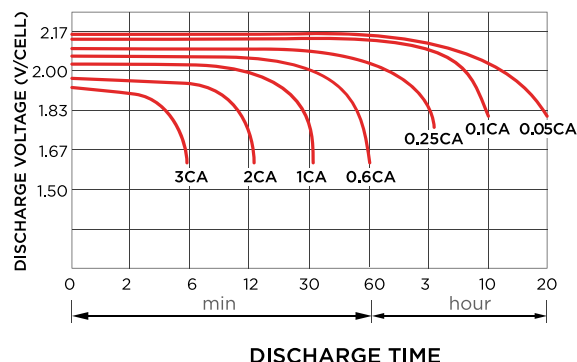
|                                          |                                             |                   |                    |                 |
|------------------------------------------|---------------------------------------------|-------------------|--------------------|-----------------|
| <b>Designed Floating Life</b>            | 5 Years                                     |                   |                    |                 |
| <b>Capacity (25°C)</b>                   | 20HR(0.6A,1.75V)                            | 10HR(1.15A,1.75V) | 5HR(2.04A,1.75V)   | 1HR(7.8A,1.75V) |
|                                          | 12AH                                        | 11.5AH            | 10.2AH             | 7.8AH           |
| <b>Dimensions</b>                        | Length                                      | Width             | Height             | Total Height    |
|                                          | 150.5mm(5.93inch)                           | 50mm(1.97inch)    | 94mm(3.70inch)     | 100mm(3.94inch) |
| <b>Approx. Weight</b>                    | 2.0Kg (4.41lbs)                             |                   |                    |                 |
| <b>Internal Resistance</b>               | Full charged at 25°C: 0.010 Ohm             |                   |                    |                 |
| <b>Self Discharge</b>                    | 3% of capacity declined per month at (25°C) |                   |                    |                 |
| <b>Capacity Affected by Temp. (20HR)</b> | 40°C                                        | 25°C              | 0°C                | -15°C           |
|                                          | 102%                                        | 100%              | 85%                | 65%             |
| <b>Charge Voltage (25°C)</b>             | Cycle use                                   |                   | Float use          |                 |
|                                          | 7.2-7.5V(-15mV/°C), max. Current: 3.6A      |                   | 6.8-6.9V(-10mV/°C) |                 |

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

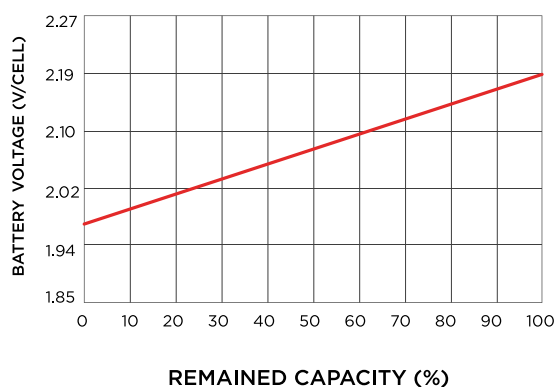
## Charge characteristic



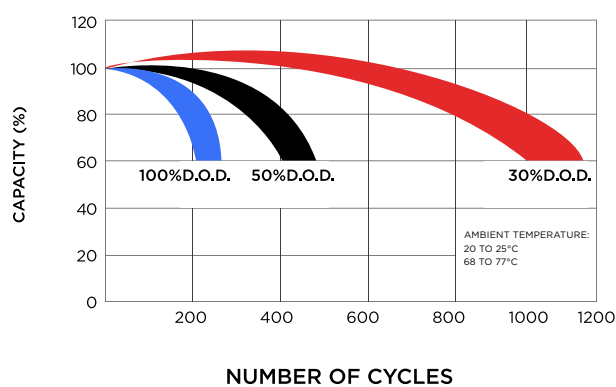
## Discharge characteristic (25°C)



## Relationship of OCV and state of charge



## Cycle service life



## Constant current discharge ratings-amperes at 77°F 25°C

| F. V / T i m e | 5 min | 10 min | 15 min | 30 min | 1HR  | 3HR  | 5HR  | 10HR | 20HR |
|----------------|-------|--------|--------|--------|------|------|------|------|------|
| 1.60V          | 46.9  | 29.2   | 22.0   | 13.4   | 8.53 | 3.74 | 2.29 | 1.28 | 0.67 |
| 1.67V          | 44.0  | 27.7   | 21.2   | 12.8   | 8.42 | 3.60 | 2.24 | 1.27 | 0.65 |
| 1.70V          | 40.3  | 26.7   | 20.7   | 11.7   | 8.16 | 3.36 | 2.19 | 1.26 | 0.64 |
| 1.75V          | 39.5  | 25.8   | 20.0   | 11.1   | 7.78 | 3.25 | 2.14 | 1.25 | 0.62 |
| 1.80V          | 35.4  | 24.7   | 18.2   | 10.3   | 7.28 | 3.12 | 2.02 | 1.23 | 0.61 |
| 1.85V          | 31.2  | 23.5   | 16.3   | 9.45   | 6.78 | 3.01 | 1.89 | 1.21 | 0.59 |

## Constant power discharge ratings-watts at 77°F 25°C

| F. V / T i m e | 5 min | 10 min | 15 min | 30 min | 1HR  | 3HR  | 5HR  | 10HR | 20HR |
|----------------|-------|--------|--------|--------|------|------|------|------|------|
| 1.60V          | 82.2  | 52.7   | 40.2   | 24.2   | 15.4 | 6.64 | 3.87 | 2.56 | 1.34 |
| 1.67V          | 79.4  | 51.3   | 39.7   | 23.7   | 15.3 | 6.43 | 3.85 | 2.54 | 1.30 |
| 1.70V          | 74.7  | 50.8   | 39.3   | 22.2   | 15.0 | 6.14 | 3.80 | 2.53 | 1.28 |
| 1.75V          | 75.2  | 50.7   | 39.0   | 21.5   | 14.8 | 6.00 | 3.77 | 2.50 | 1.25 |
| 1.80V          | 68.8  | 49.9   | 36.2   | 20.5   | 13.9 | 5.82 | 3.65 | 2.46 | 1.22 |
| 1.85V          | 62.4  | 47.4   | 32.8   | 19.2   | 13.1 | 5.65 | 3.53 | 2.43 | 1.17 |