

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates 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.

**Battery Construction**

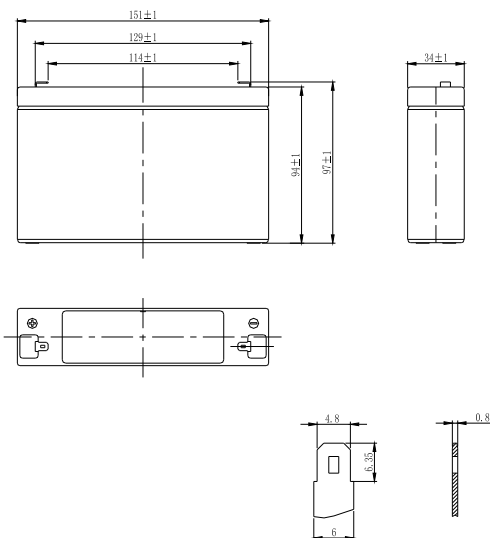
|              |                |                |           |       |              |          |            |               |
|--------------|----------------|----------------|-----------|-------|--------------|----------|------------|---------------|
| Component    | Positive plate | Negative plate | 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.

**Dimensions and Weight**

Length(mm / inch).....151 / 5.94  
 Width(mm / inch).....34 / 1.34  
 Height(mm / inch).....94 / 3.70  
 Total Height(mm / inch).....97 / 3.82  
 Approx. Weight(Kg / lbs).....1.34 / 2.95



**Performance Characteristics**

Nominal Voltage .....6V  
 Number of cell .....3  
 Design Life .....3-5 years  
 Nominal Capacity 77°F(25°C)  
     20 hour rate (0.385A, 5.25V)..... 7.7Ah  
     10 hour rate (0.72A, 5.25V)..... 7.2Ah  
     5 hour rate (1.25A, 5.25V)..... 6.25Ah  
     1 hour rate (5.12A, 4.8V)..... 5.12Ah  
 Internal Resistance  
     Fully Charged battery 77°F(25°C)..... 13mOhms  
 Self-Discharge  
     3% of capacity declined per month at 20°C(average)  
 Operating Temperature Range  
     Discharge ..... -20~60°C  
     Charge ..... -10~60°C  
     Storage ..... -20~60°C  
 Max. Discharge Current 77°F(25°C) .....115.5A(5s)  
 Short Circuit Current ..... 385A  
 Charge Methods: Constant Voltage Charge 77°F(25°C)  
     Cycle use ..... 7.25-7.45V  
     Maximum charging current ..... 3.08A  
     Temperature compensation ..... -15mV/°C  
     Standby use ..... 6.8-6.9V  
     Temperature compensation ..... -10mV/°C

**Discharge Constant Current (Amperes at 77°F25°C)**

| End Point Volts/Cell | 5min | 10min | 15min | 30min | 1h   | 3h   | 5h   | 10h  | 20h   |
|----------------------|------|-------|-------|-------|------|------|------|------|-------|
| 1.60V                | 30.6 | 18.9  | 15.3  | 8.77  | 5.12 | 1.98 | 1.30 | 0.73 | 0.390 |
| 1.65V                | 28.8 | 18.3  | 14.9  | 8.56  | 5.07 | 1.95 | 1.29 | 0.73 | 0.390 |
| 1.70V                | 27.8 | 17.9  | 14.6  | 8.39  | 4.98 | 1.91 | 1.27 | 0.73 | 0.385 |
| 1.75V                | 25.8 | 17.3  | 14.3  | 8.12  | 4.86 | 1.85 | 1.25 | 0.72 | 0.385 |
| 1.80V                | 23.1 | 16.8  | 13.4  | 7.63  | 4.69 | 1.79 | 1.24 | 0.72 | 0.385 |

**Discharge Constant Power (Watts at 77°F25°C)**

| End Point Volts/Cell | 5min | 10min | 15min | 30min | 45min | 1h    | 2h   | 3h   | 5h   |
|----------------------|------|-------|-------|-------|-------|-------|------|------|------|
| 1.60V                | 58.1 | 37.1  | 30.4  | 17.4  | 13.1  | 10.20 | 5.50 | 3.96 | 2.48 |
| 1.65V                | 56.2 | 36.3  | 29.9  | 17.0  | 13.0  | 10.10 | 5.45 | 3.92 | 2.45 |
| 1.70V                | 54.5 | 35.4  | 29.1  | 16.7  | 12.8  | 9.94  | 5.40 | 3.85 | 2.42 |
| 1.75V                | 50.7 | 34.2  | 28.3  | 16.1  | 12.4  | 9.66  | 5.34 | 3.72 | 2.39 |
| 1.80V                | 44.7 | 33.0  | 26.7  | 15.3  | 12.0  | 9.32  | 5.26 | 3.58 | 2.33 |

