

## **SLA Battery**

| Capacity (25°C)                      | 20HR (0.065A, 5.25V) = 1.30AH<br>10HR (0.12A, 5.25V) = 1.20AH<br>5HR (0.21A, 5.25V) = 1.05AH<br>1HR (0.78A, 5.25V) = 0.78AH |
|--------------------------------------|---|
| Operating<br>Temperature Range       | Charge = -15°C to +50°C<br>Discharge = -20°C to +60°C<br>Storage = -20°C to +60°C   |
| Approx. Weight                       | 0.29Kg  |
| Internal Resistance                  | Fully charged at 25°C : ≤ 45mΩ  |
| Self Discharge                       | 3% per month at (25°C)  |
| Capacity Affected<br>by Temp. (20HR) | 40°C = 102%<br>25°C = 100%<br>0°C = 85%<br>-15°C = 65%  |
| Charge Voltage<br>(25°C)             | Cycle Use = 7.2-7.35V(-30/mV/°C) Max Current = 0.39A Float Use = 6.75-6.9V(-20mV/°C)  |
| Dimensions<br>(Nominal)              | Length: 97mm (3.82 in.)<br>Width: 24mm (0.94 in.)<br>Height: 51mm (2.01 in.)<br>Total Height: 55mm (2.17 in.)               |

- Completely sealed, maintenance-free, low self-discharge
- State of the art AGM and grid alloy formula technology
- Non-spillable, stable quality and high reliability with excellent re-charging performance
- Floating and standby use up to: 5 years
- Cycle use: Up to 260 cycles at 100% DoD
- Cycle use: Up to 500 Cycles at 50% DoD
- Container and Cover Material –
   ABS UL94-HB (optional UL94-V0)
- Transportation D.O.T., I.A.T.A. & F.A.A.





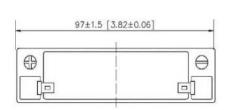


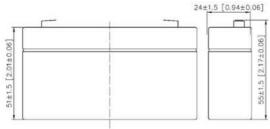




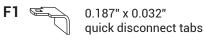
## APPLICATIONS

MultipurposeAlarm & Security SystemDC Power SupplyTelecommunicationsComm. Power SupplyAuto Control SystemUPSElec. Power System (EPS)Traffic Control SignalingMedical EquipmentEmergency Backup PowerEmergency Lighting

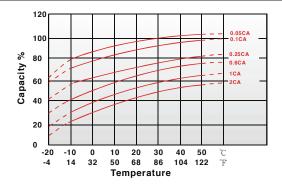




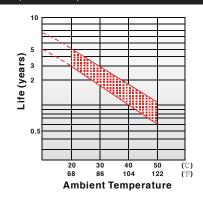
# **Terminal Type**



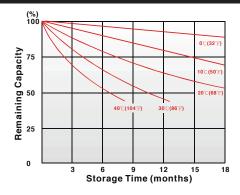
#### Effect of Temperature on Capacity 25°C (77°F)



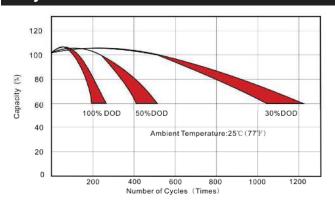
## Trickle (or Float) Service Life



### Capacity Retention Characteristic



#### Cycle Service Life



#### Regular Charge / Float Charge / Storage

- Charging voltage temperature compensation needs to be applied when temperature is below 0°C and above +45°C.
- Charging in temperatures below 0°C, the charge current should not exceed 0.1C as the core battery temperature can increase rapidly
  and damage the battery.
- During floating charge or when in storage, the life of the battery is cut in half for every 8°C temperature rise over 25°C.

#### **Discharge**

- · Discharging at elevated temperatures improves performance of the battery yet shortens its life due to accelerated aging.
- Low temperature affects the battery internal resistance and lowers its capacity. The battery provides 100% specified capacity at 25°C. It will deliver 50% of its stated capacity at -20°C with 0.1C discharge current and 20% with 2C discharge current.

| Constant Current Discharge (A) at 25°C (77°F) |      |       |       |       |      |      |      |      |      |      |      |      |
|---|------|-------|-------|-------|------|------|------|------|------|------|------|------|
| F.V/Time                                      | 5min | 10min | 15min | 30min | 1h   | 2h   | 3h   | 4h   | 5h   | 6h   | 10h  | 20h  |
| 1.80V/cell                                    | 3.42 | 2.52  | 2.02  | 1.26  | 0.77 | 0.49 | 0.31 | 0.25 | 0.21 | 0.19 | 0.11 | 0.06 |
| 1.75V/cell                                    | 3.83 | 2.70  | 2.14  | 1.29  | 0.78 | 0.50 | 0.31 | 0.26 | 0.21 | 0.19 | 0.12 | 0.07 |
| 1.70V/cell                                    | 4.23 | 2.89  | 2.26  | 1.32  | 0.79 | 0.51 | 0.31 | 0.26 | 0.21 | 0.20 | 0.12 | 0.07 |
| 1.67V/cell                                    | 4.48 | 2.98  | 2.31  | 1.33  | 0.80 | 0.51 | 0.32 | 0.26 | 0.21 | 0.20 | 0.12 | 0.07 |
| 1.60V/cell                                    | 4.78 | 3.20  | 2.46  | 1.35  | 0.80 | 0.51 | 0.32 | 0.26 | 0.21 | 0.20 | 0.12 | 0.07 |

| Constant Power Discharge (W) at 25°C (77°F) |      |       |       |       |      |      |      |      |      |      |      |      |
|---|------|-------|-------|-------|------|------|------|------|------|------|------|------|
| F.V/Time                                    | 5min | 10min | 15min | 30min | 1h   | 2h   | 3h   | 4h   | 5h   | 6h   | 10h  | 20h  |
| 1.80V/cell                                  | 7.23 | 5.30  | 4.28  | 2.67  | 1.63 | 1.04 | 0.65 | 0.53 | 0.46 | 0.39 | 0.24 | 0.12 |
| 1.75V/cell                                  | 8.10 | 5.67  | 4.53  | 2.73  | 1.65 | 1.06 | 0.66 | 0.54 | 0.46 | 0.40 | 0.24 | 0.13 |
| 1.70V/cell                                  | 8.96 | 5.91  | 4.77  | 2.79  | 1.68 | 1.07 | 0.66 | 0.54 | 0.47 | 0.41 | 0.25 | 0.14 |
| 1.67V/cell                                  | 9.14 | 6.09  | 4.89  | 2.81  | 1.69 | 1.08 | 0.66 | 0.54 | 0.47 | 0.41 | 0.25 | 0.14 |
| 1.60V/cell                                  | 9.75 | 6.34  | 5.15  | 2.86  | 1.69 | 1.08 | 0.67 | 0.55 | 0.47 | 0.41 | 0.25 | 0.14 |

REV V3