

## Tubular Gel Battery

2 Volt 350 AH @ 10-hr. rate

2 Volt 442.4 AH @ 100-hr. rate

Rechargeable Sealed Lead Acid Battery

Designed for Cyclic, Standby, and Solar Applications



# PSOPzV350 2v350AH



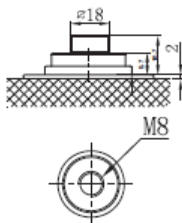
### Features

- Tubular plate and Gel electrolyte for increased performance, service life and reliability
- Gel electrolyte and spill proof construction allows safe operation and maintenance free
- Excellent cyclic performance
- Enhanced overcharge endurance
- Excellent recovery from over discharge situations
- Perfect for applications including
  - Solar / Wind energy storage
  - Telecommunications
  - UPS and critical power
  - Railway signaling
  - Utilities
- Rugged impact resistant ABS case
- Certified for transport by air, D.O.T., I.A.T.A., F.A.A. and C.A.B.
- 20 year design life in float applications

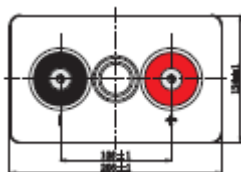
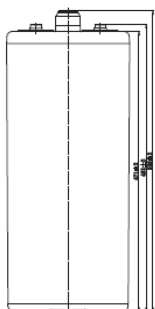
### Terminals

(mm)

- T11: Threaded insert  
8 mm stud fastener



### Physical Dimensions: in (mm)



L: 4.88 (124) W: 8.11 (206) H: 18.5 (471) TH: 19.9 (506)

Tolerances are +/- 0.11 in. (+/- 3mm) for all dimensions. All data subject to change without notice.

### Performance Specifications

**Nominal Voltage** ..... 2 volts

#### Nominal Capacity

|                            |          |
|----------------------------|----------|
| 100-hr. (1.80 volts) ..... | 442.4 AH |
| 20-hr. (1.80 volts) .....  | 374.2 AH |
| 10-hr. (1.80 volts).....   | 350.0 AH |
| 5-hr. (1.75 volts).....    | 305.0 AH |
| 3-hr. (1.75 volts).....    | 270.4 AH |
| 1-hr. (1.60 volts) .....   | 199.0 AH |

**Approximate Weight** ..... 63.9 lbs. (29.0 kg)

**Internal Resistance** (approx.) .....0.9 milliohms

**Max. Discharge Current** (approx.) ..... 2800A (5s)

**Shelf Life** ..... <2% per month at 68 °F (20 °C)

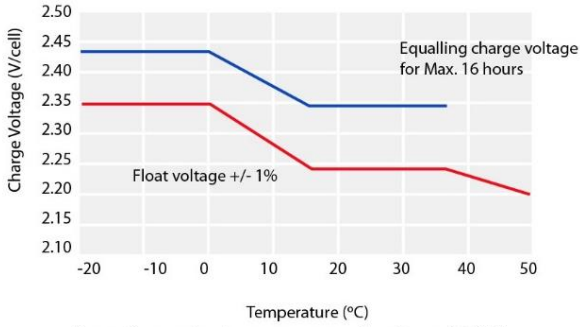
#### Operating Temperature Range

Charge ..... 32 °F (0 °C) to 104 °F (40 °C)

Discharge ..... -4 °F (-20 °C) to 131 °F (55 °C)

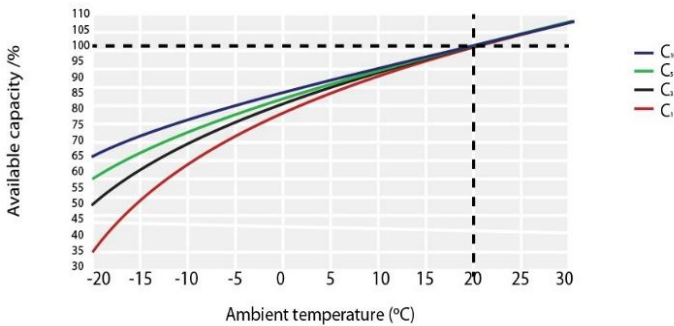
**Case** ..... ABS Plastic

**TEMPERATURE EFFECTS IN RELATION TO CHARGE VOLTAGE**

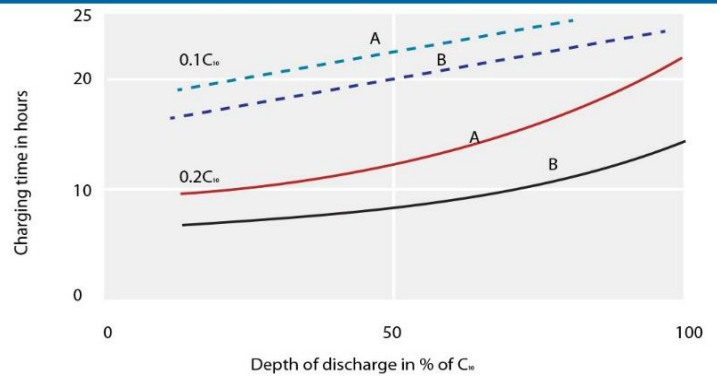


For continuous charging we recommend a voltage of 2.25 V  
The charging voltage must be compensated to the curve for a continuously different battery ambient temperature

**TEMPERATURE EFFECTS IN RELATION TO BATTERY CAPACITY**

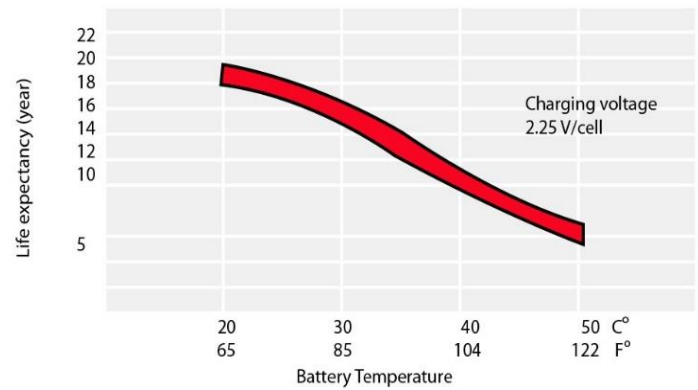


**CHARGING CHARACTERISTICS**



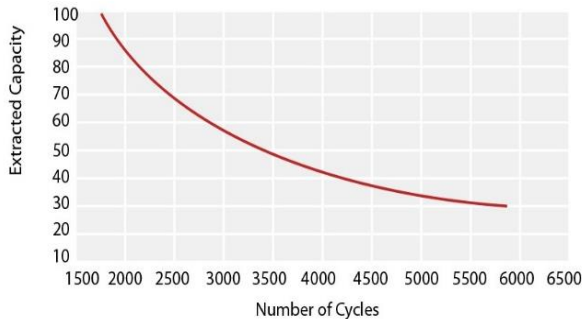
Charge voltage  
A - 2.25 V/cell      B - 2.40 V/cell  
--- State of charge 100%      — State of charge 90%

**EFFECT OF TEMPERATURE ON LONG TERM FLOAT LIFE**



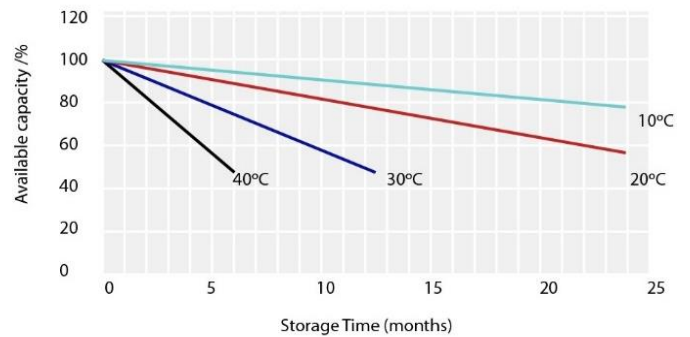
**CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE**

Acc. to IEC 896 (25°C/77°F)



**GENERAL RELATION OF CAPACITY VS STORAGE TIME**

Residual average capacity in % of C<sub>10</sub>



**Charging**

**Cycle Applications:** Limit initial current to less than 87.5A. Charge until battery voltage (under charge) reaches 2.40 to 2.50 volts at 68°F (20°C). Coefficient - 5mV/°C

**“Float” or “Stand-By” Service:** Hold battery across constant voltage source of 2.25 to 2.30 volts continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition.

**Note:** Due to the self-discharge characteristics of this type of battery, it is imperative that they be charged within 6 months of storage, otherwise permanent loss of capacity might occur as a result of sulfation.

**Chargers**

Power-Sonic offers a wide range of chargers suitable for batteries up to 100AH. Please refer to the Charger Selection Guide in our specification sheets for “C-Series Switch Mode Chargers” and “Transformer Type A and F Series”. Please contact our Technical department for advice if you have difficulty in locating suitable models.

**Further Information**

Please refer to our website [www.power-sonic.com](http://www.power-sonic.com) for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc.

**Contact Information**



**DOMESTIC SALES**  
Tel: (07) 3386 1102  
Fax: (07) 3102 9913  
[sales@spb.net.au](mailto:sales@spb.net.au)

[www.sealedperformance.com.au](http://www.sealedperformance.com.au)  
1 Ant Road, Yatala  
Brisbane QLD 4207

