

**PDC-12140** 12 Volt 13.9 AH @ 20-hr. rate  
13.0 AH @ 10-hr. rate

Rechargeable Sealed Lead Acid Battery  
PDC SERIES AGM DEEP CYCLE



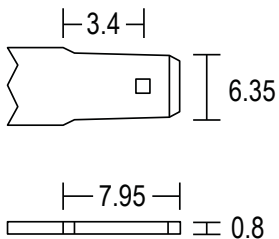
## Features

- Absorbent Glass Mat (AGM) technology for superior performance
- Valve regulated, spill proof construction allows safe operation in any position
- Oversize negative plates and a specialized paste formulation provide true deep cycle performance.
- Special additives in the paste ensure superior performance in deep discharge situations.
- Power/volume ratio yielding unrivaled energy density
- Rugged impact resistant ABS case and cover (UL94-HB)
- Approved for transport by air. D.O.T., I.A.T.A., F.A.A. and C.A.B. certified
- U.L. recognized under file number MH 20845

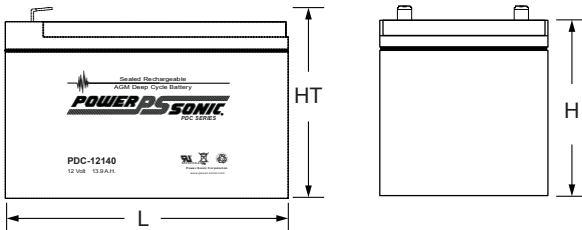
## Terminals

(mm)

- F2 - Quick disconnect tabs, 0.250" x 0.032"
- Mate with AMP. INC FASTON "250" series



## Physical Dimensions: in (mm)



L: 5.95 (151) W: 3.86 (98) H: 3.74 (95) HT: 3.98 (101)

Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

## Performance Specifications

|                                    |                    |
|------------------------------------|--------------------|
| <b>Nominal Voltage</b> .....       | 12 volts (6 cells) |
| <b>Nominal Capacity</b>            |                    |
| 20-hr. (695mA to 10.50 volts)..... | 13.90 AH           |
| 10-hr. (1.3A to 10.50 volts) ..... | 13.00 AH           |
| 8-hr. (1.59A to 10.50 volts).....  | 12.72 AH           |
| 5-hr. (2.28A to 10.20 volts).....  | 11.40 AH           |
| 1-hr. (8.40A to 9.00 volts) .....  | 8.40 AH            |
| 15-min. (25.7A to 9.00 volts)..... | 6.43 AH            |

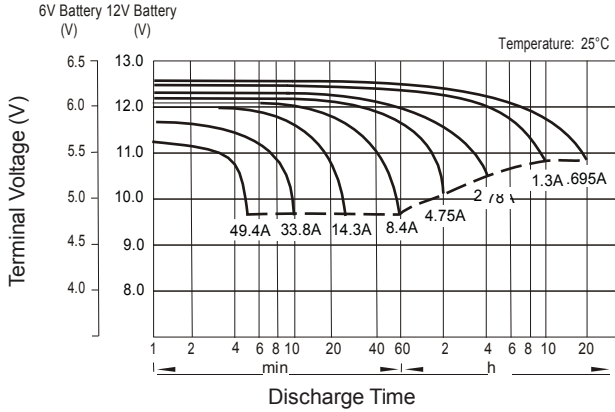
|  |   |
|--|---|
| <b>Approximate Weight</b> .....                            | 9.26 lbs. (4.20 kg)                     |
| <b>Energy Density</b> (20-hr. rate) .....                  | 1.82 W-h/in <sup>3</sup> (110.83 W-h/l) |
| <b>Specific Energy</b> (20-hr. rate) .....                 | 16.85 W-h/lb (37.14 W-h/kg)             |
| <b>Internal Resistance</b> (approx.) .....                 | 14.0 milliohms                          |
| <b>Max Discharge Current</b> (7 Min.) .....                | 39 amperes                              |
| <b>Max Short-Duration Discharge Current</b> (10 Sec.)..... | 130 amperes                             |
| <b>Shelf Life</b> (% of nominal capacity at 68° F (20° C)) |   |
| 1 Month .....  | 97%                                     |
| 3 Months.....  | 91%                                     |
| 6 Months .....   | 83%                                     |

## Operating Temperature Range

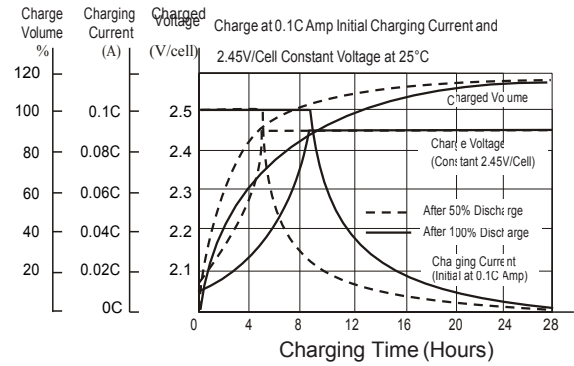
|                |                                   |
|----------------|-----------------------------------|
| Charge.. ..... | -4° F (-20° C) to 122° F (50° C)  |
| Discharge..... | -40° F (-40° C) to 140° F (60° C) |

|                                   |               |
|-----------------------------------|---------------|
| <b>Case</b> .....                 | ABS Plastic   |
| <b>Power-Sonic Chargers</b> ..... | PSC-122000A-C |

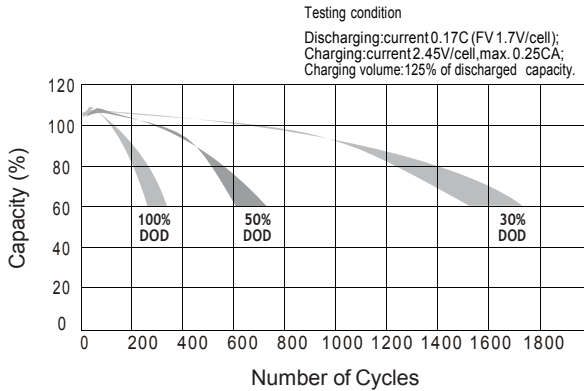
**Discharge Characteristics**



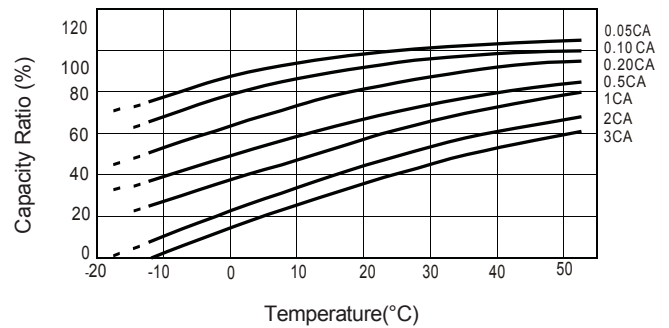
**Charging Characteristics (Cycle Use)**



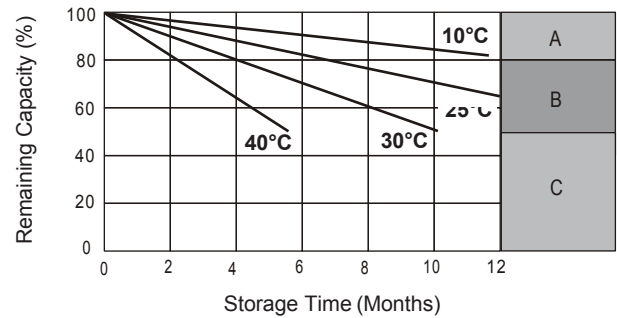
**Cycle Life in Relation to Depth of Discharge**



**Temperature Effects in Relation to Battery Capacity**



**Self Discharge Characteristics**



- A** No supplementary charge required  
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:  
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.  
3. Charged for 8~10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached

**Charging**

**Cycle Applications:** Limit initial current to 3.9A. Charge until battery voltage (under charge) reaches 14.4 to 14.7 volts at 68°F (20°C). Hold at 14.4 to 14.7 volts until current drops to under 139mA. Battery is fully charged under these conditions, and charger should be disconnected or switched to “float” voltage.

**“Float” or “Stand-By” Service:** Hold battery across constant voltage source of 13.5 to 13.8 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..

