

**PDC-12480** 12 Volt 48.0 AH @ 20-hr. rate  
45.0 AH @ 10-hr. rate

Rechargeable Sealed Lead Acid Battery  
PDC SERIES AGM DEEP CYCLE



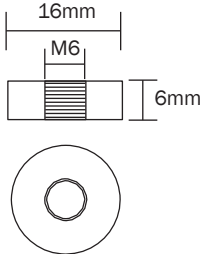
## Features

- 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

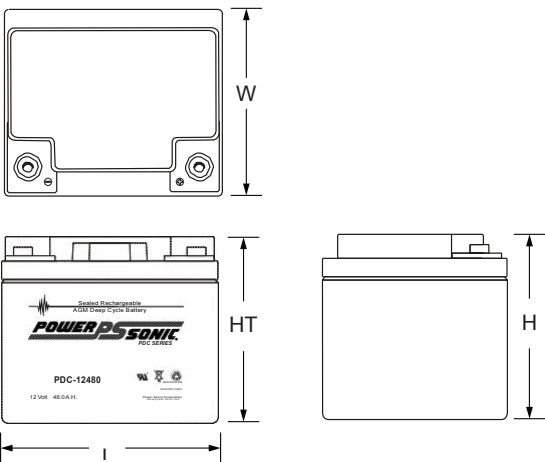
## Terminals

(mm)

- T6: Threaded insert w. 6 mm stud fastener



## Physical Dimensions: in (mm)



L: 7.76 (197) W: 6.50 (165) H: 6.69 (170) HT: 6.69 (170)

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

## Performance Specifications

**Nominal Voltage** ..... 12 volts (6 cells)

### Nominal Capacity

20-hr. (2.40A to 10.50 volts) .....	48.0 AH
10-hr. (4.5A to 10.50 volts) .....	45.0 AH
8-hr. (5.27A to 10.50 volts) .....	42.2 AH
5-hr. (7.74A to 10.20 volts) .....	38.7 AH
1-hr. (27.5A to 9.00 volts) .....	27.5 AH
15-min. (82.5A to 9.00 volts) .....	20.6 AH

**Approximate Weight** ..... 32.0 lbs. (14.5 kg)

**Energy Density** (20-hr. rate) ..... 1.60 W-h/in<sup>3</sup> (97.78W-h/l)

**Specific Energy** (20-hr. rate) ..... 16.88 W-h/lb (37.20W-h/kg)

**Internal Resistance** (approx.) ..... 9.0 milliohms

**Max Discharge Current** (7 Min.) ..... 135 amperes

**Max Short-Duration Discharge Current** (10 Sec.)..... 450 amperes

**Shelf Life** (% of nominal capacity at 68° F (20° C))

1 Month .....	97%
3 Months.....	91%
6 Months .....	83%

### Operating Temperature Range

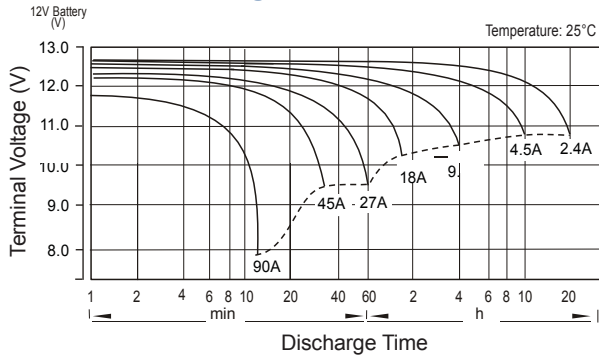
Charge.. ..... -4° F (-20° C) to 122° F (50° C)

Discharge..... -40° F (-40° C) to 140° F (60° C)

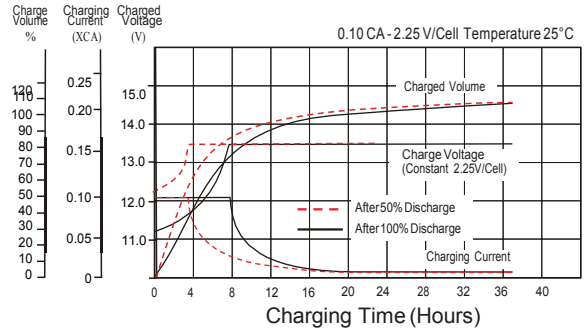
**Case** ..... ABS Plastic

**Power-Sonic Chargers** ..... PSC-124000A-C

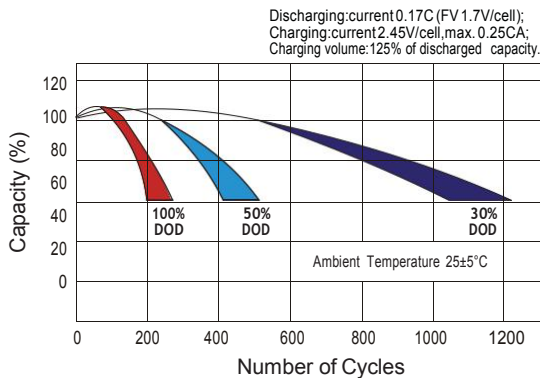
**Discharge Characteristics**



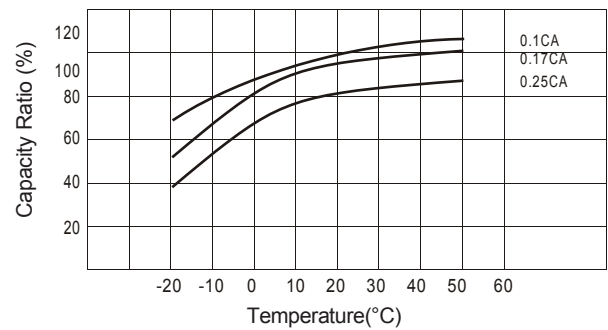
**Charging Characteristics (Cycle Use)**



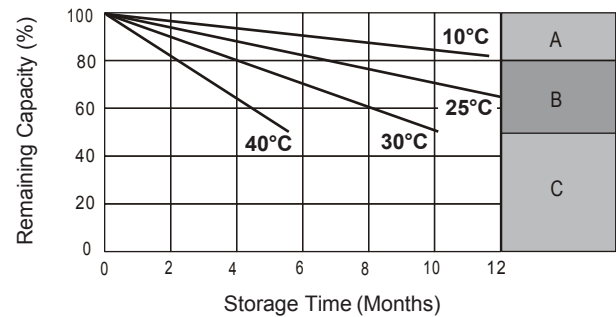
**Cycle Life in Relation to Depth of Discharge**



**Temperature Effects in Relation to Battery Capacity**



**Self Discharge Characteristics**



**Charging**

**Cycle Applications:** Limit initial current to 13.5A. 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 450mA. 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.

- 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

**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**



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