

PSS-2V900, 2 Volt 920 AH @ 100-hr. rate
856 AH @ 20-hr. rate

Rechargeable Sealed Lead Acid Solar Battery



*Case colour may vary depending on quantity

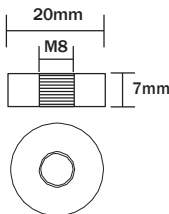
Features

- Absorbent Glass Mat (AGM) technology for superior performance
- Valve regulated, spill proof construction allows safe operation in any position
- Superior cyclic performance
- Enhanced overcharge endurance
- Excellent recovery from over discharge situations
- Lower acid density, increased electrolyte volume and greater distance between the plates help keep the battery at lower temperatures and improve plate grid life
- Rugged impact resistant ABS case

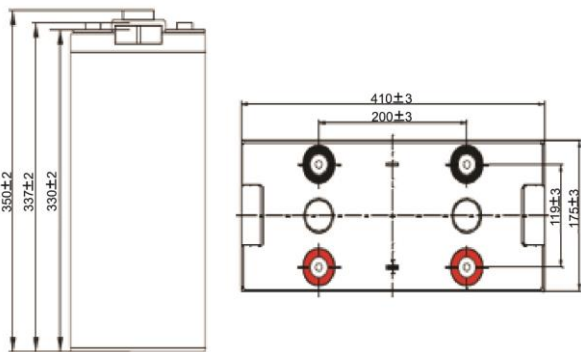
Terminals

(mm)

- T11: Threaded insert
8 mm stud fastener



Physical Dimensions: in (mm)



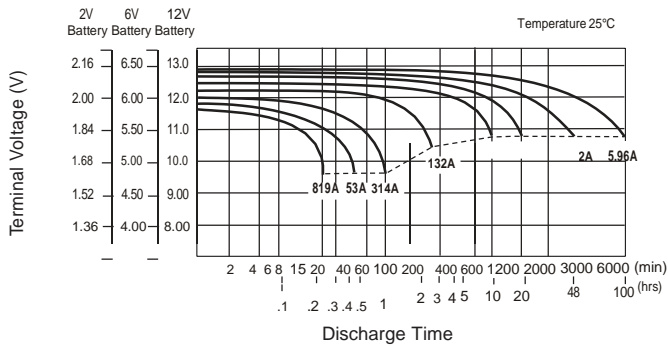
L: 16.14 (410) W: 6.89 (175) H: 12.99 (330) HT: 13.78 (350)

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

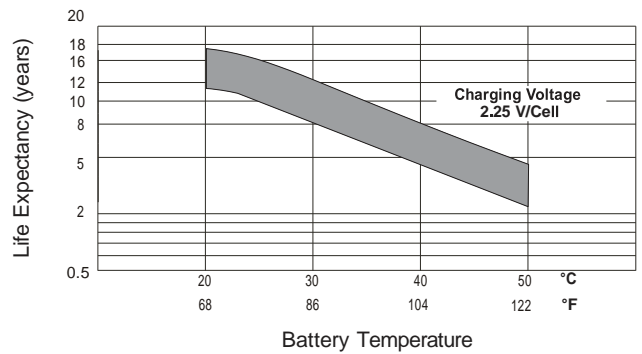
Performance Specifications

Nominal Voltage	2 volts
Nominal Capacity	
100-hr. (9.2A to 1.80 volts)	920.0 AH
20-hr. (42.8A to 1.80 volts)	856.0 AH
10-hr. (80.0A to 1.80 volts).....	800.0 AH
5-hr. (140.6A to 1.75 volts)	703.5 AH
1-hr. (470.4A to 1.60 volts).....	470.0 AH
Max. Discharge Current.....	6400A (5s)
Approximate Weight	111.0 lbs. (50.4kg)
Internal Resistance (approx.)	0.50 milliohms
Shelf Life (% of nominal capacity at 68° F (20° C))	
1 Month	97%
3 Months	91%
6 Months	83%
Operating Temperature Range	
Charge.....	32° F (0° C) to 104° F (40° C)
Discharge.....	5° F (-15° C) to 122° F (50° C)
Storage.....	5° F (-15° C) to 104° F (40° C)
Case - 2V900	ABS Plastic
Case - 2V900FR	ABS Plastic (UL94 V-O flame retardant)

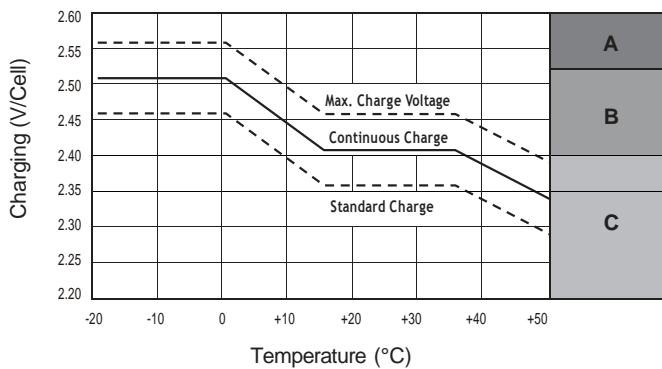
Discharge Characteristics



Float Charging Characteristics

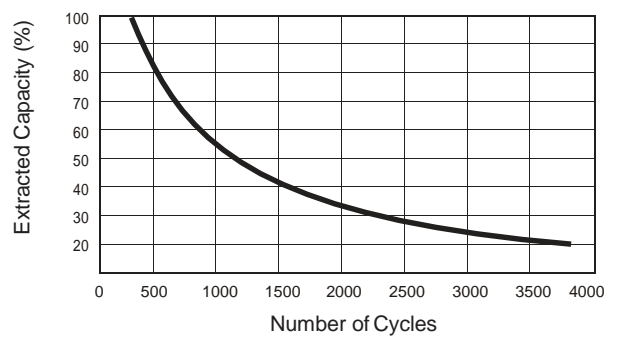


Charge Mode

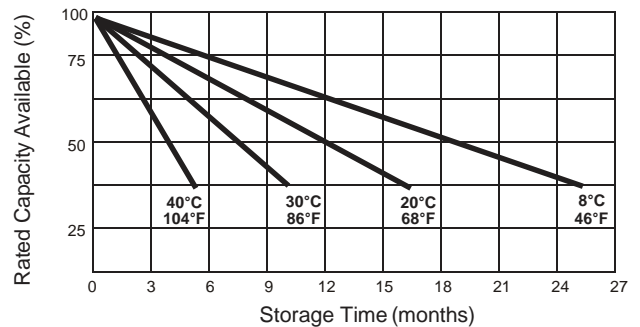


- A** With switch regulator (two-step controller) charge on curve max. Charge voltage for max 2hrs/day, then switch to continuous charge
- B** Standard charge without switching
- C** Boost charge (equalizing charge with external generator) charge on curve continuous charge for max. 5 hrs/month, then switch over to standard charge

Cycle Service Life



Self-Discharge Characteristics



Charging

Cycle Applications: Limit initial current to less than 240.0A. Charge until battery Voltage (under charge) reaches 2.40 to 2.50 volts at 77 °F (25 °C). Coefficient -5mV/°C

“Float” or “Stand-By” Service: Hold battery across constant voltage source of 2.25 to 2.3 volts at 77 °F (25 °C) continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition. Coefficient -3mV/°C

Note: Due to the self-discharge characteristics of this type of battery, it is imperative that they be charged within 6 months of storage at 77 °F (25 °C) (shorter time frame at higher temp) otherwise permanent loss of capacity can occur.

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 for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc.