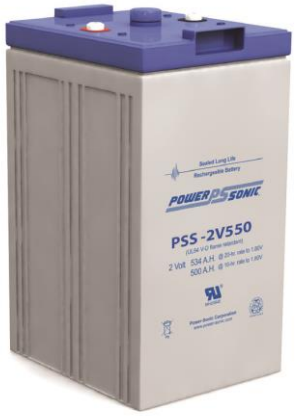
PSS-2V550, 2 Volt 575 AH @ 100-hr. rate 536 AH @ 20-hr. rate

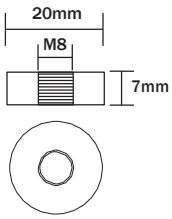
Rechargeable Sealed Lead Acid Solar Battery



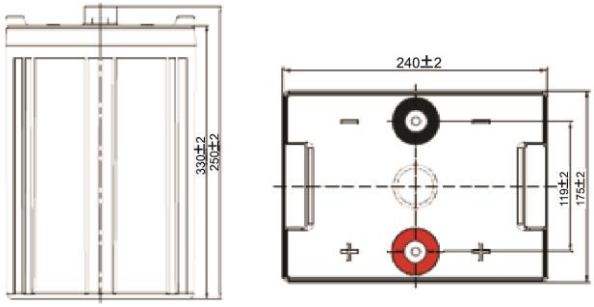
*Case colour may vary depending on quantity

Terminals (mm)

- T11: Threaded insert 8 mm stud fastener



Physical Dimensions: in (mm)



L: 9.45 (240) **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.

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

Performance Specifications

Nominal Voltage ..... 2 volts

Nominal Capacity

100-hr. (5.75A to 1.80 volts) ..... 575.0 AH

20-hr. (26.8A to 1.80 volts) ..... 536.0 AH

10-hr. (50.0A to 1.80 volts)..... 500.0 AH

5-hr. (87.9A to 1.75 volts) ..... 439.5 AH

1-hr. (294.0A to 1.60 volts)..... 294.0 AH

Max. Discharge Current..... 4000A (5s)

Approximate Weight ..... 66.2 lbs. (30.0kg)

Internal Resistance (approx.) ..... 0.6 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)

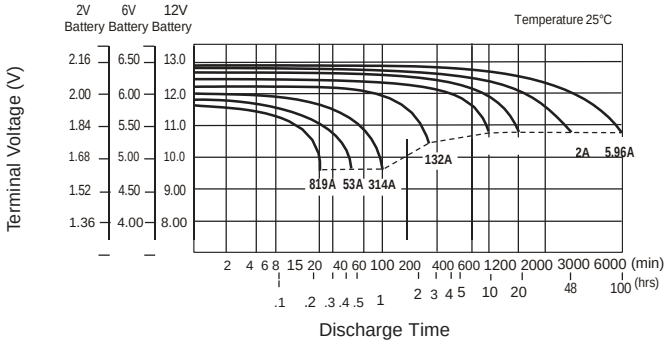
Discharge..... 5°F (-15°C) to 122°F (50°C)

Storage..... 5°F (-15°C) to 104°F (40°C)

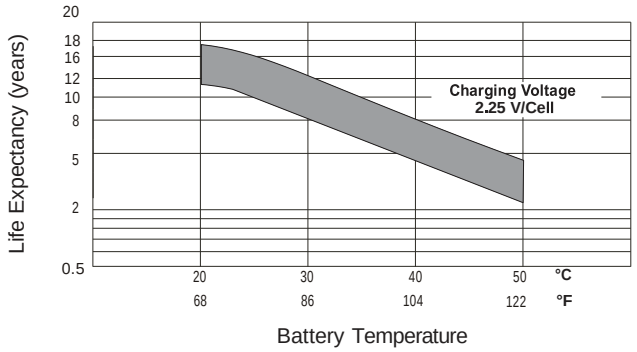
Case – 2V550 ..... ABS Plastic

Case – 2V550FR ..... ABS Plastic (UL94 V-0 flame retardant)

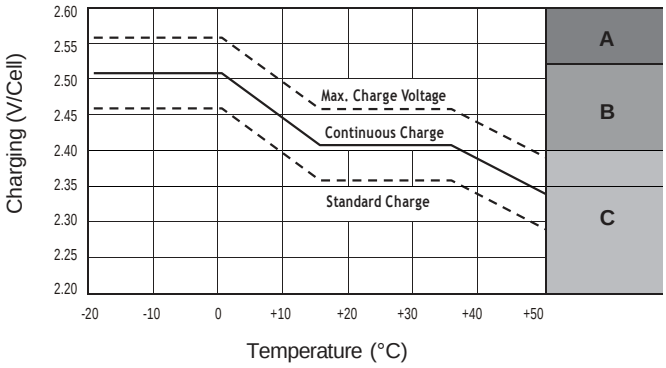
Discharge Characteristics



Float Charging Characteristics

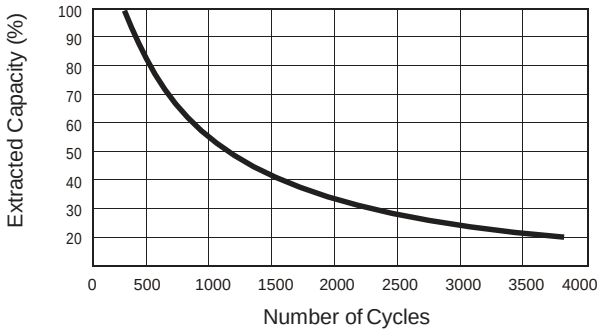


Charge Mode

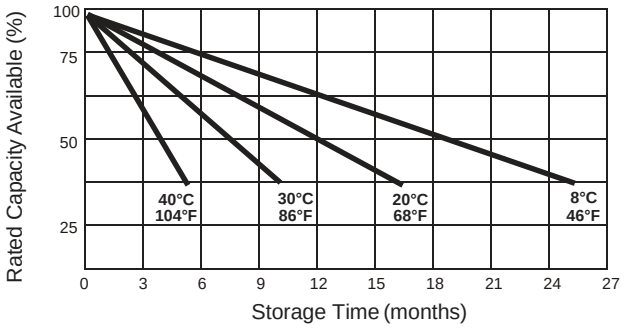


A	With switch regulator (two-step controller) charge on curve max. Charge voltage for max 2 hrs/day, then switch to continuous charge
B	Standard charge without switching
C	Boost charge (equalizing charge with external generator) charge on curve continuous charge for max. 5 hrs/month, then switch over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

Cycle Service Life



Self-Discharge Characteristics



Charging

Cycle Applications: Limit initial current to less than 150.0A. 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.