

## Rechargeable Sealed Lead-Acid Battery

### PS-612



Power-Sonic rechargeable batteries are lead-lead dioxide systems. The dilute sulphuric acid electrolyte is suspended and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free and leak proof.

PS-612 is air transport approved, and meets all current requirements set forth by the D.O.T., I.A.T.A., F.A.A., and C.A.B.

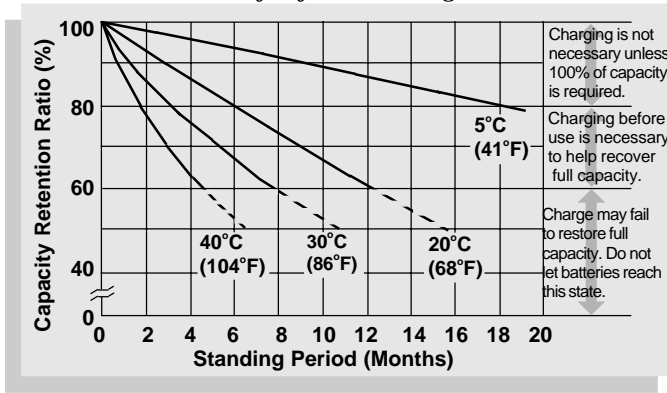
U.L. recognizes model PS-612 under file number MH 14328.



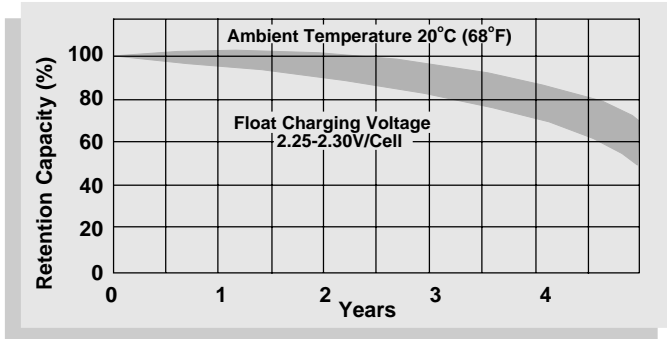
#### PERFORMANCE SPECIFICATIONS

<b>Nominal Voltage</b> .....	6 volts (3 cells in series)
<b>Nominal Capacity</b>	
20 hour rate (65mA to 5.25 volts) .....	1.30 A.H.
10 hour rate (120mA to 5.25 volts) .....	1.20 A.H.
5 hour rate (210mA to 5.10 volts) .....	1.05 A.H.
1 hour rate (720mA to 4.50 volts) .....	0.72 A.H.
<b>Approximate Weight</b> .....	0.6 pounds (0.3 kg)
<b>Energy Density (20 hour rate)</b> .....	1.09 Watt-hours/cubic inch (65.7 Watt-hours/l)
<b>Specific Energy (20 hour rate)</b> .....	13.0 Watt-hours/pound (26.0 Watt-hours/kg)
<b>Internal Resistance (Fully Charged Battery)</b> .....	70 milliohms (approximately)
<b>Maximum Discharge Current ( ≤ 7 Min.)</b> .....	3.9 amperes
<b>Maximum Short-Duration Discharge Current ( ≤ 10 Sec.)</b> .....	13 amperes
<b>Terminal configurations</b> .....	Quick disconnect tabs, 0.187" x 0.032" Mate with AMP. INC. FASTON "187" series
<b>Vibration Test (2000 cycles/minute, 0.10 inch excursion, 2 hours)</b> .....	No loss in capacity or performance
<b>Shelf Life — % of nominal capacity at 68° F (20° C)</b>	
1 Month.....	97%
3 Months.....	91%
6 Months.....	83%
<b>Operating Temperature Range</b>	
<b>Charge</b> .....	-4°F (-20°C) to 122°F (50°C)
<b>Discharge</b> .....	-4°F (-20°C) to 140°F (60°C)
<b>Case</b> .....	ABS Plastic

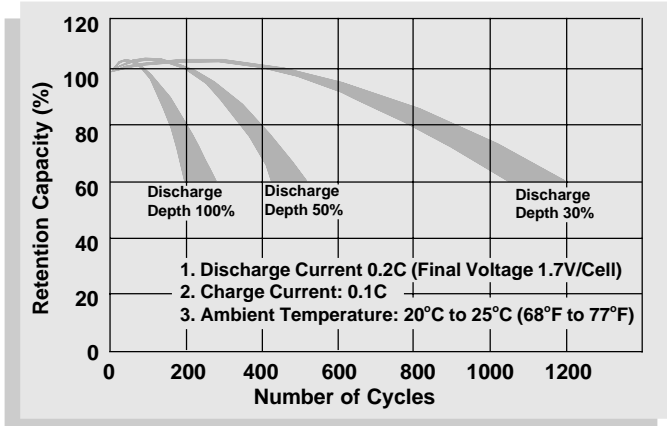
**Shelf Life and Storage**



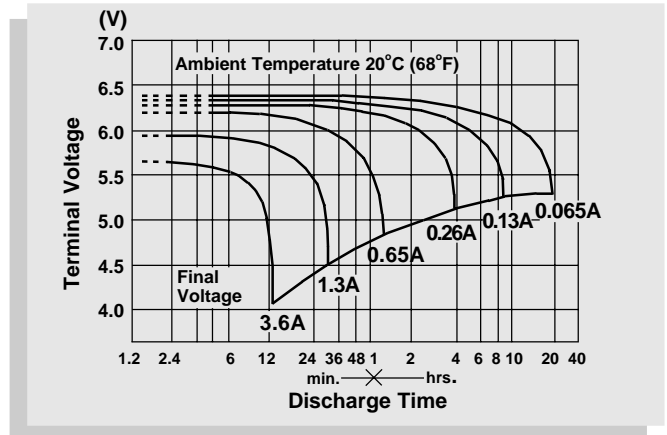
**Life Characteristics in Stand-By Use**



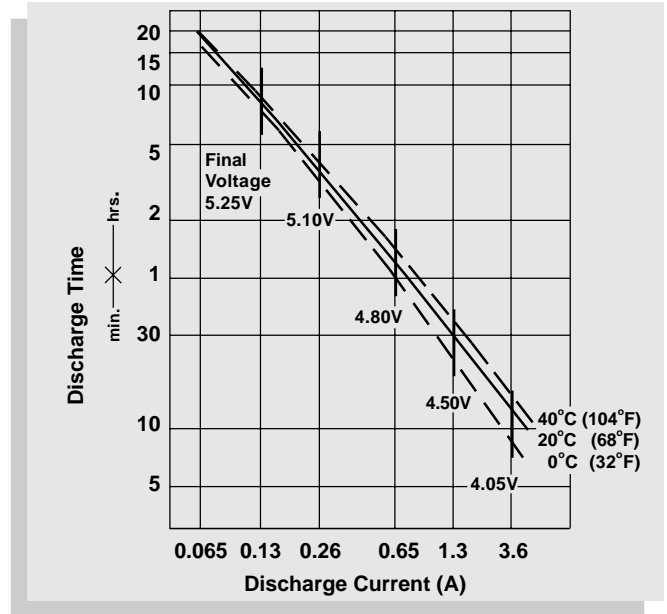
**Life Characteristics in Cyclic Use**



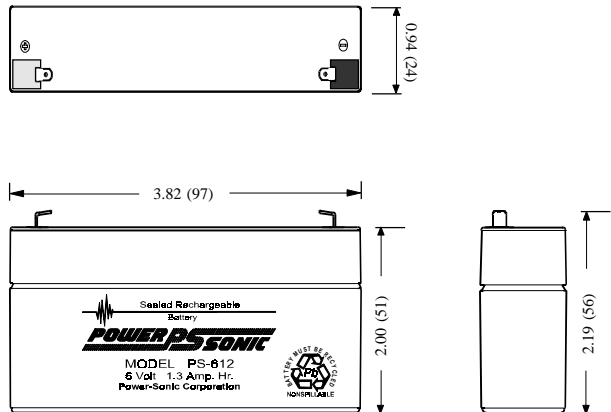
**Discharge Characteristics**



**Discharge Time vs. Discharge Current**



Physical Dimensions: in. (mm)



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

**CHARGING**

**Cycle Applications:** Limit initial current to 260 mA. Charge until battery voltage (under charge) reaches 14.40 to 14.70 volts at 68°F (20°C). Hold at 14.40 to 14.70 volts until current drops to approximately 13 mA. Battery is fully charged under these conditions, and charger should either be disconnected or switched to "float" voltage.

**"Float" or "Stand-By" Service:** Hold battery across constant voltage source of 13.50 to 13.80 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 after 6-9 months of storage, otherwise permanent loss of capacity might occur as a result of sulfation.



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**FM39171**

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