PS-610

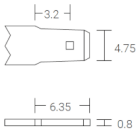
Rechargeable Sealed Lead Acid Battery
PS – General Purpose Series

Versatile sealed lead acid batteries specifically engineered for use in general purpose float and light cyclic applications including fire and security systems, emergency lighting, UPS, toys and medical devices.

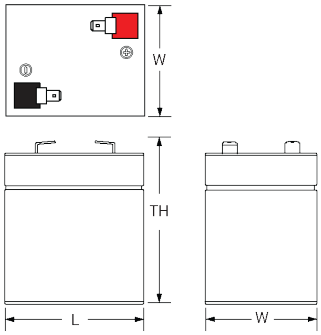
Available Terminals

1

F1
FASTON
0.187" x 0.032" quick disconnect tabs.



Engineering Drawing



L: 2.01in (51.0mm)
W: 1.65in (42.0mm)
H: 2.01in (51.0mm)
HT: 2.24in (57.0mm)

+/- 0.08 in. (+/- 2mm) for length, width, and height dimensions

Features

- AGM Technology
- Gas Recombination
- Power Volume Ratio
- SLA ABS Case
- SLA Maintenance Free

Performance Specs

Nominal Voltage	6.0V
Nominal Capacity	1.0Ah
20-hr Rate	1.0Ah
10-hr Rate	0.95Ah
5-hr Rate	0.9Ah
1-hr Rate	0.64Ah
Weight	0.25kg
Internal Resistance	60.0 milliohms
Max Discharge Current	15.0A
Charge Temp Range	?4°F (?20°C) to 104°F (40°C)
Discharge Temp Range	5°F (?15°C) to 122°F (50°C)
Case Material	ABS (UL94 HB or V-0 optional)

Available options

- PS-610 F1
- PS-610 F1

Applications


Emergency Lighting


Fire Security


General Purpose


Medical


Signaling (Air,Rail,Sea)


Solar


Telecomm


UPS


Utility


Wind

Constant Current Discharge Table

VoltageOverTime	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	3.63	2.14	1.69	1.32	0.964	0.71	0.642	0.468	0.37	0.269	0.216	0.183	0.156	0.123	0.097	0.051
1.65V/cell	3.46	2.09	1.66	1.3	0.949	0.695	0.632	0.461	0.365	0.266	0.213	0.181	0.155	0.122	0.096	0.051
1.67V/cell	3.43	2.06	1.64	1.29	0.939	0.693	0.628	0.459	0.363	0.264	0.212	0.18	0.154	0.121	0.096	0.051
1.70V/cell	3.31	2.0	1.6	1.26	0.922	0.682	0.618	0.453	0.359	0.262	0.21	0.179	0.153	0.12	0.096	0.05
1.75V/cell	3.16	1.92	1.55	1.22	0.9	0.667	0.607	0.445	0.354	0.258	0.207	0.176	0.151	0.119	0.095	0.05
1.80V/cell	3.0	1.85	1.5	1.19	0.877	0.653	0.595	0.437	0.347	0.254	0.205	0.174	0.149	0.118	0.094	0.049
1.85V/cell	2.79	1.74	1.43	1.14	0.85	0.636	0.581	0.428	0.341	0.25	0.202	0.172	0.147	0.116	0.092	0.049

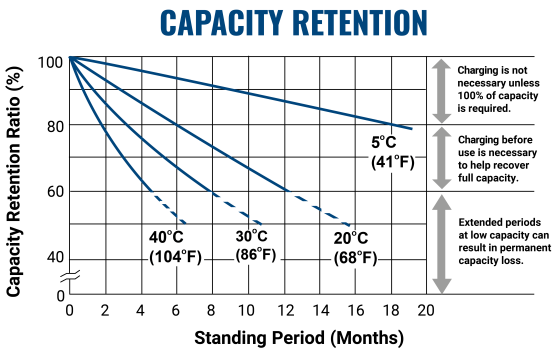
Constant Power Discharge Table

VoltageOverTime	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	6.49	3.92	3.15	2.49	1.83	1.35	1.23	0.901	0.715	0.523	0.422	0.359	0.307	0.242	0.193	0.103
1.65V/cell	6.31	3.85	3.1	2.44	1.8	1.34	1.22	0.891	0.709	0.518	0.418	0.356	0.305	0.24	0.192	0.102
1.67V/cell	6.24	3.81	3.07	2.43	1.79	1.33	1.21	0.886	0.704	0.515	0.416	0.354	0.304	0.239	0.191	0.102
1.70V/cell	6.08	3.73	3.0	2.39	1.76	1.31	1.19	0.877	0.697	0.511	0.412	0.352	0.301	0.237	0.189	0.101
1.75V/cell	5.86	3.61	2.92	2.33	1.72	1.28	1.17	0.864	0.689	0.504	0.407	0.347	0.298	0.235	0.188	0.1
1.80V/cell	5.62	3.5	2.85	2.28	1.69	1.26	1.15	0.851	0.679	0.498	0.403	0.343	0.295	0.233	0.186	0.099
1.85V/cell	5.28	3.32	2.73	2.21	1.64	1.23	1.13	0.836	0.668	0.491	0.398	0.339	0.291	0.23	0.184	0.098

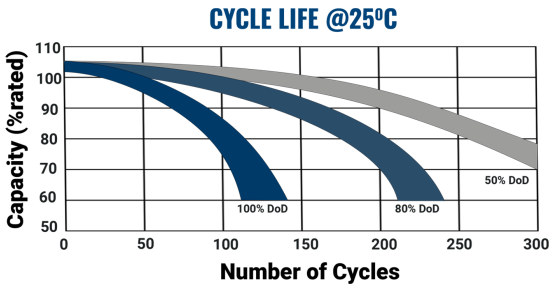
Phone: 1 (775) 824-6500
www.power-sonic.com

Graphs

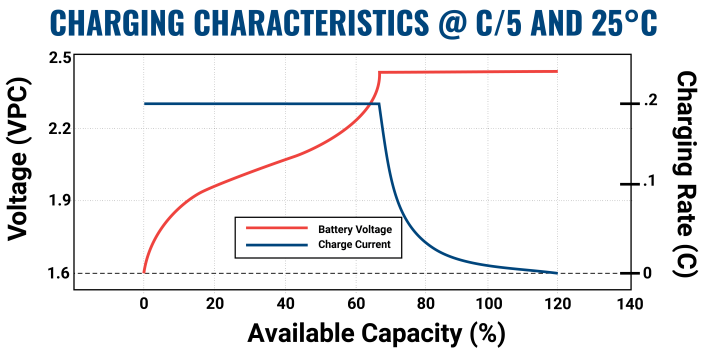
1. Capacity Retention SLA



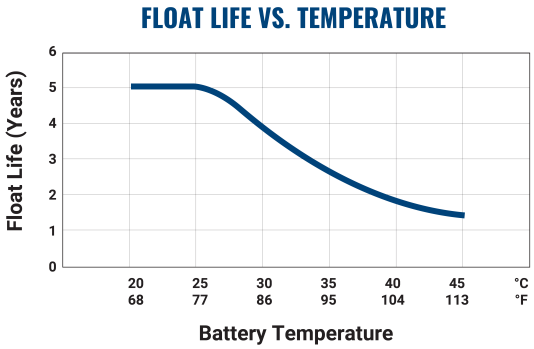
2. PS Cycle Life



3. SLA Charging



4. SLA Float Life 5YR



Charging

- Cycle Applications: Apply constant voltage charge at 2.35VPC – 2.45VPC (14.1 to 14.7 volts for 12V Monobloc) at 20°C. The initial charging current should be set at less than C/5 Amps. Switch to ? oat charge when the current falls to a 3% capacity rate to avoid overcharging. Stand-By or "Float" Service: Apply constant voltage charge of 2.25VPC – 2.30VPC (13.5 to 13.8 volts for 12V Monobloc) at 20°C. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition. Temperature Compensation: Charging voltage for both cyclic and stand-by applications should be regulated in relation to ambient temperature. As temperature rises, charging voltage should be reduced to prevent overcharge and increased as the temperature falls to avoid undercharge. For further charging information, including temperature compensation factors, see the Power-Sonic Technical Manual.

Approvals