

# Datasheet

## Sealed Lead-Acid Battery

### General Purpose Specification

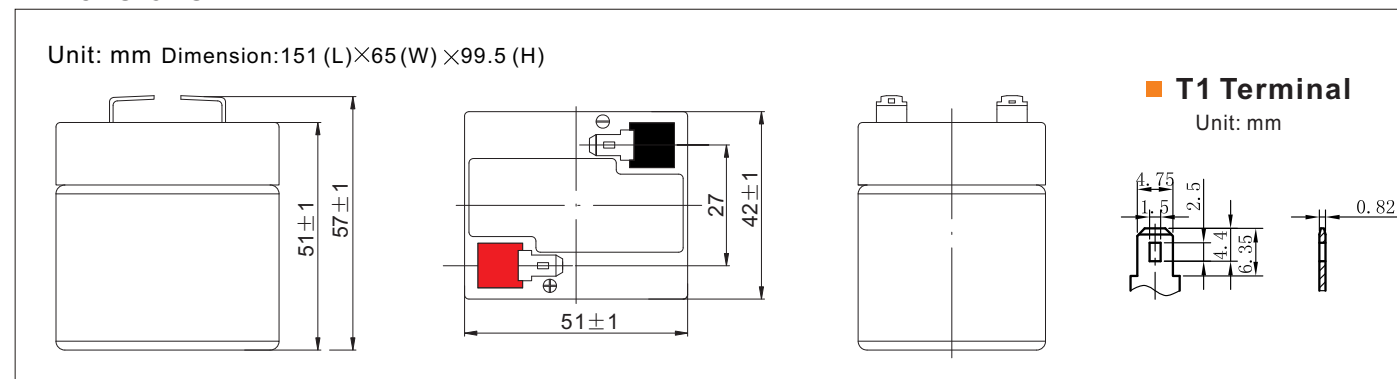
## 174-8855(6V1.0Ah)

Cells Per Unit	3
Voltage Per Unit	6
Capacity	1.0 Ah@20hr-rate to 1.80V per cell @25°C
Weight	Approx 0.25kg
Max. Discharge Current	15 A (5 sec)
Internal Resistance	Approx 75 mΩ
Operating Temp. Range	Discharge : -15~50°C (5~122°F) Charge : 0~40°C (32~104°F) Storage : -15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)
Float charging Voltage	6.75 to 6.9 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	0.3 A
Equalization and Cycle Service	7.2 to 7.5 VDC/unit Average at 25°C
Self Discharge	The batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	T1
Container Material	A.B.S. (UL94 -HB)

### Applications

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system

### Dimensions



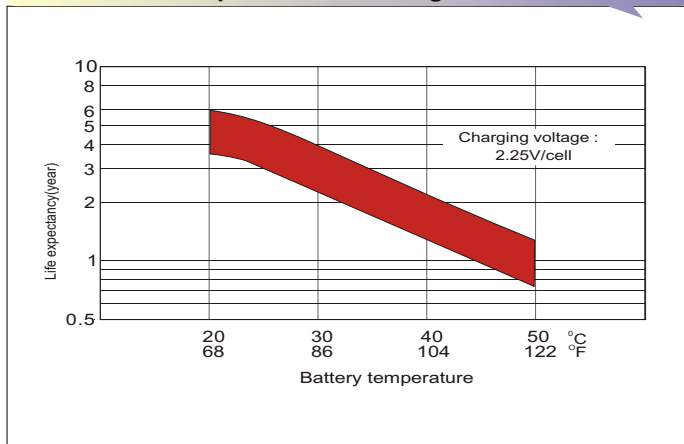
### Constant Current Discharge Characteristics : A (25 °C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	1.92	1.34	1.10	0.957	0.768	0.591	0.483	0.295	0.225	0.185	0.157	0.136	0.108	0.090	0.050
1.80V/cell	2.36	1.60	1.28	1.08	0.850	0.644	0.520	0.314	0.236	0.194	0.164	0.142	0.112	0.093	0.050
1.75V/cell	2.80	1.81	1.41	1.18	0.908	0.684	0.547	0.327	0.245	0.200	0.168	0.145	0.115	0.095	0.051
1.70V/cell	3.17	1.99	1.53	1.27	0.954	0.711	0.570	0.341	0.253	0.205	0.172	0.149	0.117	0.096	0.051
1.65V/cell	3.50	2.14	1.62	1.33	0.994	0.739	0.594	0.351	0.259	0.210	0.176	0.152	0.119	0.098	0.052
1.60V/cell	3.67	2.23	1.68	1.37	1.02	0.755	0.607	0.362	0.265	0.215	0.180	0.155	0.121	0.099	0.052

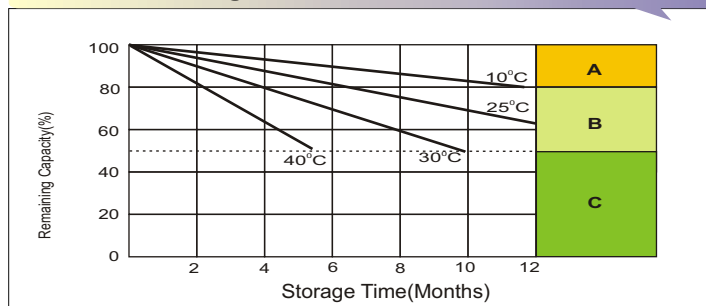
### Constant Power Discharge Characteristics : W (25 °C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	3.62	2.55	2.12	1.85	1.50	1.16	0.952	0.584	0.447	0.369	0.314	0.272	0.217	0.181	0.100
1.80V/cell	4.40	3.01	2.44	2.08	1.65	1.25	1.02	0.617	0.467	0.385	0.325	0.283	0.224	0.186	0.101
1.75V/cell	5.15	3.37	2.67	2.25	1.75	1.33	1.07	0.640	0.481	0.395	0.332	0.288	0.229	0.189	0.101
1.70V/cell	5.78	3.68	2.86	2.40	1.82	1.37	1.10	0.663	0.494	0.402	0.338	0.293	0.231	0.191	0.102
1.65V/cell	6.28	3.91	2.99	2.49	1.88	1.41	1.14	0.678	0.503	0.409	0.344	0.297	0.233	0.192	0.103
1.60V/cell	6.49	4.02	3.08	2.54	1.92	1.43	1.16	0.695	0.512	0.416	0.349	0.302	0.237	0.195	0.103

### Effect of Temperature on Long Term Float Life

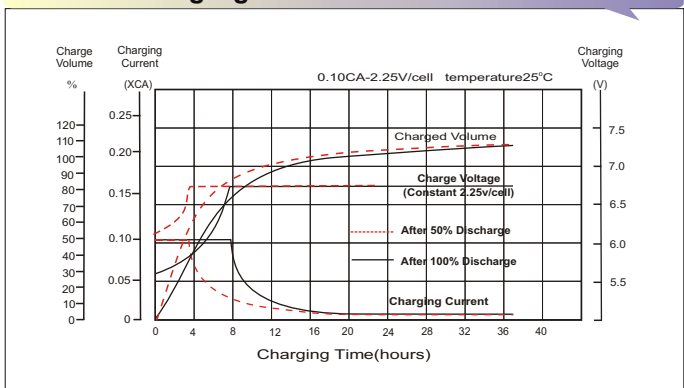


### Self Discharge Characteristics

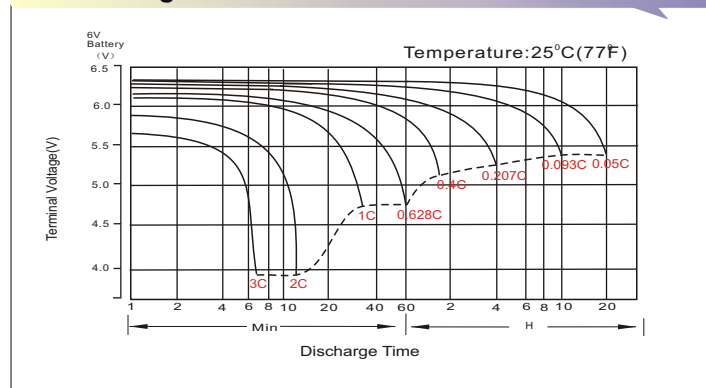


- A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
  1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
  2. Charged for above 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** Avoid this storage period unless regular Top charge. Supplementary charge may often fail to recover the full capacity

### Float Charging Characteristics



### Discharge Characteristics



### Available Capacity Subject to Temperature

Battery Type	-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
AGM Battery 6V&12V	46%	66%	86%	89%	93%	98%	100%	102%	103%	105%

### Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.80V	1.75V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

**Charge the batteries at least once every six months, if they are stored at 25°C.**

### Charging Method:

Constant Voltage	-0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.3CA
Constant Current	0.1C until the voltage reaching 7.2V, then 0.1Cx4h

### Maintenance & Cautions

<b>Float Service:</b>
◆ It is recommended to check battery/Float voltage each month.
<b>Equalisation charge:</b>
◆ Equalisation charging is recommended once every 3 to 6 months using.
◆ Discharge 100% rated capacity.
◆ Charge 2.35v/cell constant voltage, maximum 0.3CA 24hrs.