

## Solar and UPS Battery

Solar and UPS Battery are designed with AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for common power backup system.  
Solar and UPS Battery are the general purpose batteries with 5 years floating design life at 25 °C  
Meet with IEC, BS, JIS and Eurobat standard. UL(MH62092), CE approved.



## Application

- \* Emergency Power System
- \* Communication equipment
- \* Telecommunication systems
- \* Uninterruptible power supplies
- \* Electric toy car and wheelchairs, etc.
- \* Power tools
- \* Alarm system
- \* Marine equipment
- \* Medical equipment
- \* Fire and Security System

## General Features

- \* Heavy Duty Grid
- \* Mechanized assembly
- \* Non-spillable construction
- \* High Reliability and Stability
- \* Sealed and Maintenance-free
- \* Long Life and low self-discharge design

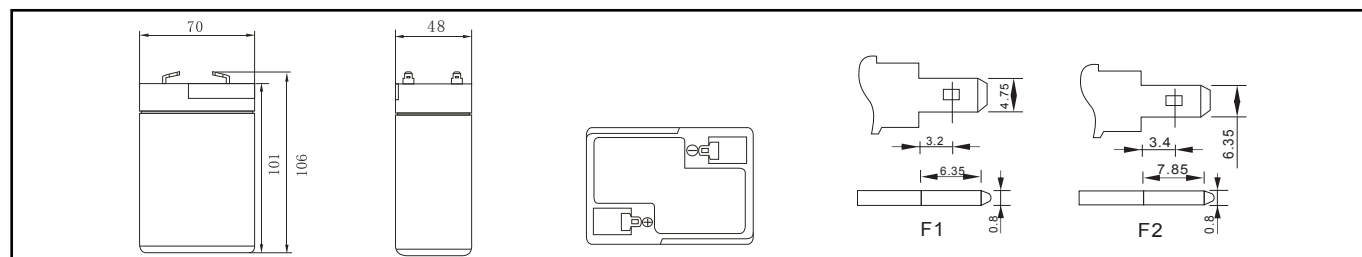
## Construction

- \* Positive ..... Lead dioxide
- \* Electrolyte ..... Sulfuric acid
- \* Separator ..... Fiber glass
- \* Container ..... ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- \* Negative ..... Lead
- \* Safety Valve ..... EPDR
- \* Terminal ..... Copper

## Specification

Battery Model	Nominal Voltage			6V
	Rated capacity (20 Hour rate)			4.5Ah
	Cells Per battery			3
Dimension	Length	Width	Height	Total Height
	70mm (2.75 inches)	47mm (1.85 inches)	100mm (3.93 inches)	105mm (4.13 inches)
Approx Weight	0.68kg (1.49lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour rate(0.225A,10.5V)	10 hour rate(0.443A,10.8V)	5 hour rate(0.77A,10.5V)	1 hour rate(2.55A,9.6V)
	4.5Ah	4.43Ah	3.85Ah	2.55Ah
Max. discharge current	67.5A (5 Sec.)			
Internal Resistance	Full charged at 25°C (77°F) : Approx 21mΩ			
Capacity affected by Temp.(20 HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Self Discharge @25°C (77°F)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method @25°C (77°F)	Cycle Use			Float Use
	7.20-7.50V (Initial charging current less than 1.35A)			6.80-6.90V

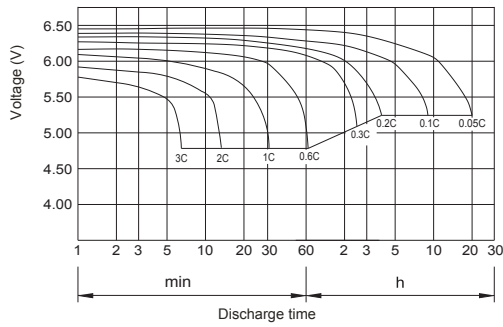
## Outer dimension (mm)



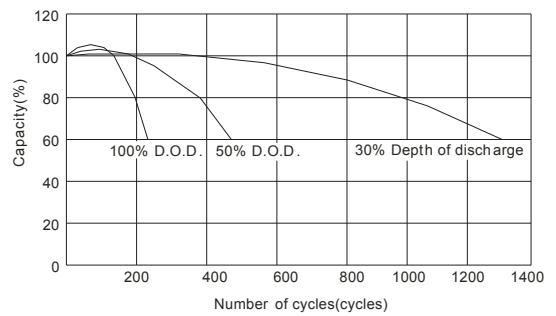
## Terminal Type (mm)

Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)												
F.V/time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	15.192	10.709	8.100	4.870	2.550	1.866	1.609	1.146	0.782	0.573	0.467	0.247
	28.098	20.443	15.633	9.701	5.087	3.726	3.219	2.293	1.565	1.147	0.934	0.495
1.67V	13.487	9.994	7.679	4.766	2.532	1.848	1.601	1.140	0.778	0.569	0.460	0.235
	24.941	19.075	14.832	9.499	5.051	3.690	3.206	2.285	1.559	1.140	0.922	0.471
1.70V	12.767	9.636	7.490	4.724	2.513	1.846	1.597	1.137	0.778	0.563	0.454	0.229
	23.615	18.404	14.478	9.416	5.020	3.688	3.199	2.280	1.559	1.129	0.910	0.459
1.75V	11.555	9.068	7.174	4.641	2.476	1.822	1.587	1.130	0.773	0.561	0.450	0.225
	21.374	17.323	13.882	9.257	4.958	3.644	3.178	2.267	1.552	1.127	0.903	0.452
1.80V	10.324	8.458	6.880	4.537	2.458	1.809	1.577	1.124	0.771	0.556	0.443	0.218
	19.100	16.164	13.333	9.053	4.928	3.627	3.159	2.256	1.548	1.118	0.889	0.437
1.85V	9.092	7.848	6.522	4.412	2.421	1.789	1.563	1.114	0.767	0.549	0.435	0.210
	16.827	15.004	12.653	8.810	4.861	3.595	3.132	2.238	1.541	1.104	0.876	0.423

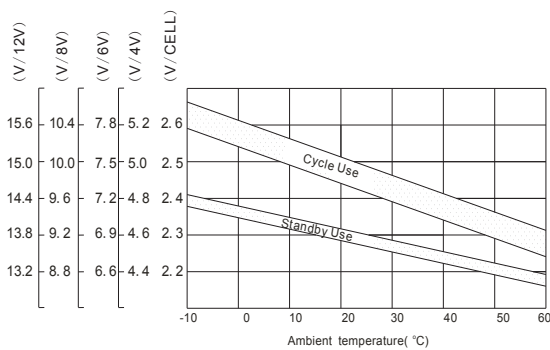
### Discharge characteristic Curve



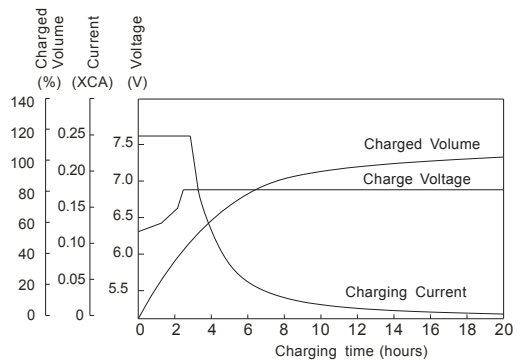
### Cycle service life in relation to depth of discharge



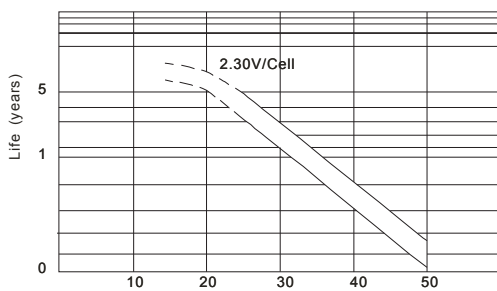
### Relationship between charging voltage and temperature



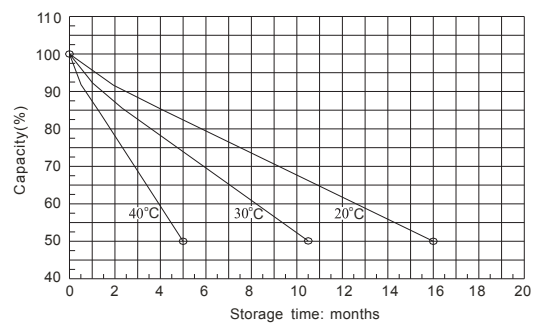
### Constant voltage charging characteristic (0.25CA, at 25°C)



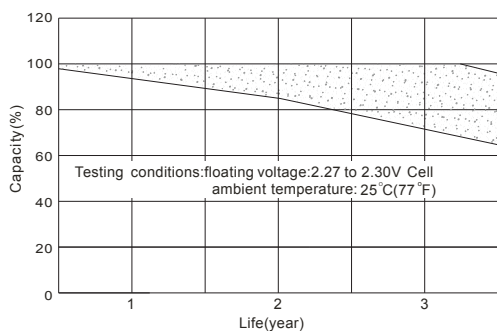
### Temperature effects on float life



### Self-discharge characteristic



### Life characteristics of standby use



### Charge characteristic Curve for standby use

