

## 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

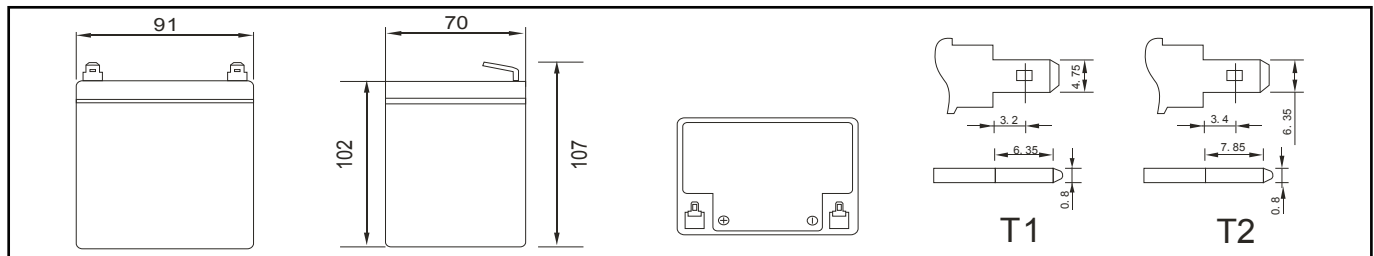
## Construction

- \* 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		12V	
	Rated capacity (20 Hour rate)		5.0Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	91mm (3.58 inches)	70mm (2.75 inches)	102mm (4.01 inches)	107mm (4.21 inches)
Approx Weight	1.41kg(3.10lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour rate(0.25A,10.5V)	10 hour rate(0.45A,10.8V)	5 hour rate(0.85A,10.5V)	1 hour rate(3.0A,9.6V)
	5.0Ah	4.5Ah	4.25Ah	3.0Ah
Max. discharge current	75A (5 Sec.)			
Internal Resistance	Full charged at 25°C (77°F) : Approx 36mΩ			
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	
	14.40-14.70V (Initial charging current less than 1.5A)		13.50-13.80V	

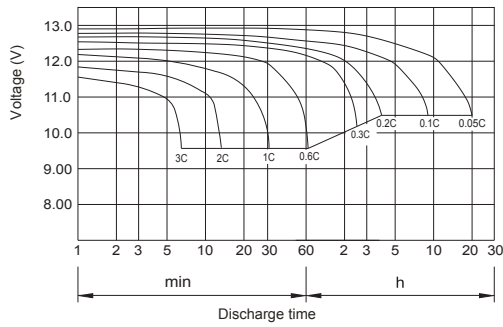
## Outer dimension (mm)



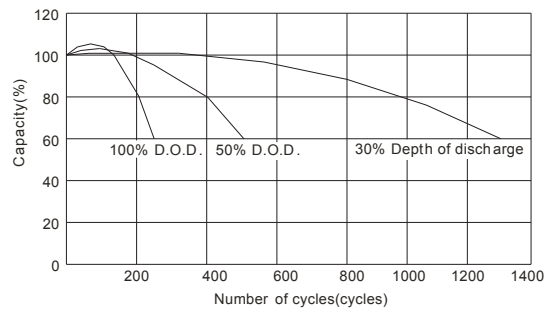
## Terminal Type (mm)

Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)													
F.V.TIME		5min	10min	15min	30min	1 hr	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	20 hr
9.60V	A	18.00	11.80	8.75	5.75	3.00	1.75	1.29	1.03	0.88	0.58	0.47	0.26
	W	212.30	133.30	100.80	61.00	34.60	20.30	14.90	11.96	10.15	6.69	5.48	3.00
10.20V	A	16.50	11.30	8.04	5.46	2.82	1.68	1.25	1.00	0.86	0.57	0.47	0.25
	W	199.80	126.30	94.80	60.60	32.50	19.40	14.48	11.58	9.96	6.58	5.38	2.92
10.50V	A	15.00	10.60	7.50	5.29	2.73	1.65	1.23	0.95	0.85	0.56	0.46	0.25
	W	192.90	122.50	90.60	60.00	31.50	19.10	14.23	11.00	9.90	6.52	5.33	2.90
10.80V	A	14.40	10.10	7.00	5.15	2.63	1.60	1.21	0.93	0.81	0.55	0.45	0.24
	W	169.20	118.80	87.30	59.80	30.60	18.70	14.06	10.86	9.46	6.25	5.21	2.83
11.10V	A	13.40	9.50	6.50	5.00	2.54	1.56	1.15	0.92	0.78	0.53	0.44	0.24
	W	163.50	114.80	83.10	59.40	30.20	18.50	13.65	10.83	9.25	6.04	5.10	2.81

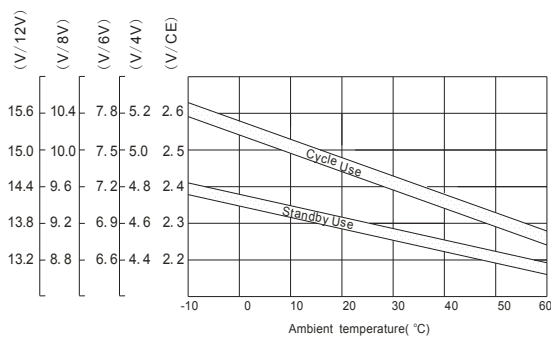
### Discharge characteristic Curve



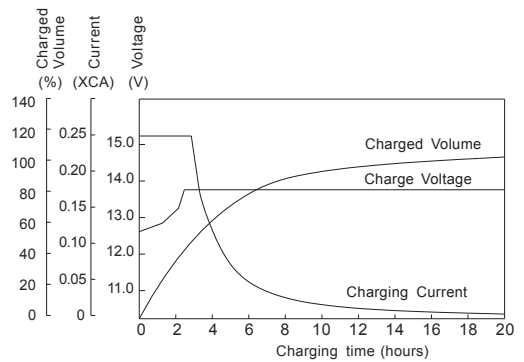
### Cycle service life in relation to depth of discharge



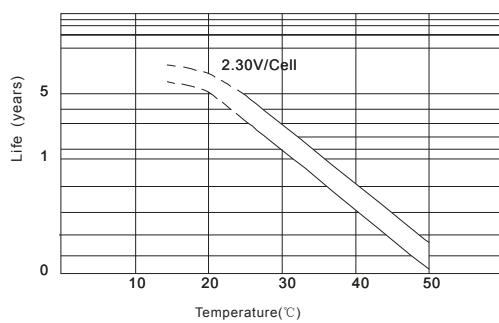
### Relationship between charging voltage and temperature



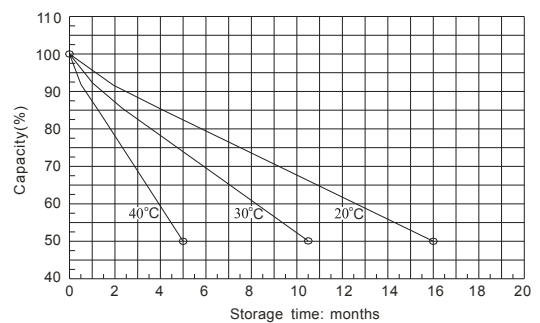
### Constant voltage charging characteristic (0.25CA, at 25°C)



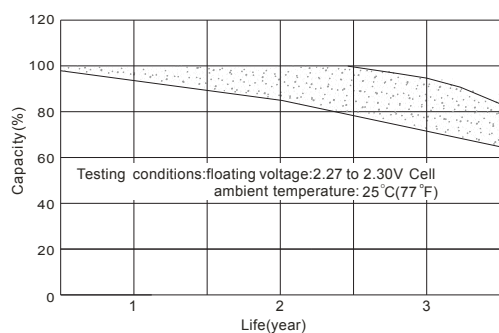
### Temperature effects on float life



### Self-discharge characteristic



### Life characteristics of standby use



### Charge characteristic Curve for standby use

