

**General Series Battery**

General (GP) Series VRLA batteries are designed with AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for common power backup system. GP Series Batteries are the general purpose batteries with 10 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

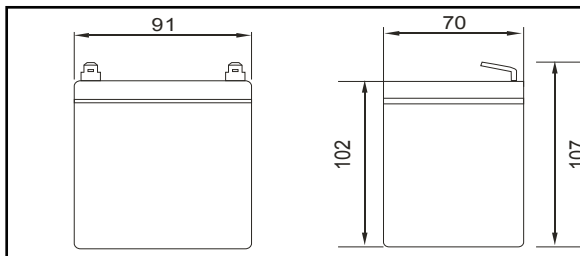
**Construction**

- \* 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

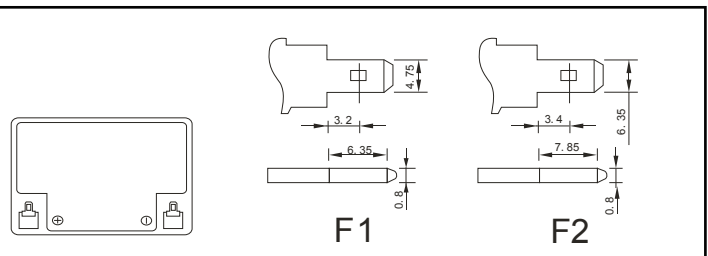
**Specification**

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(0.249A,10.5V)	10 hour rate(0.482A,10.8V)	5 hour rate(0.924A,10.5V)	1 hour rate(3.0A,9.6V)
	4.98Ah	9.64Ah	4.62Ah	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)**



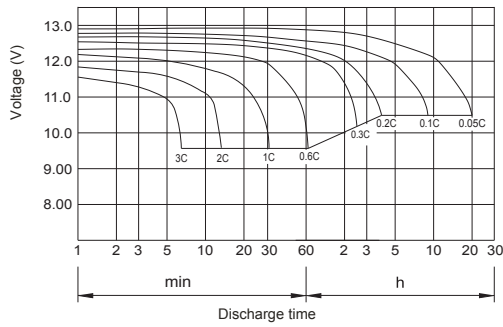
**Terminal Type (mm)**



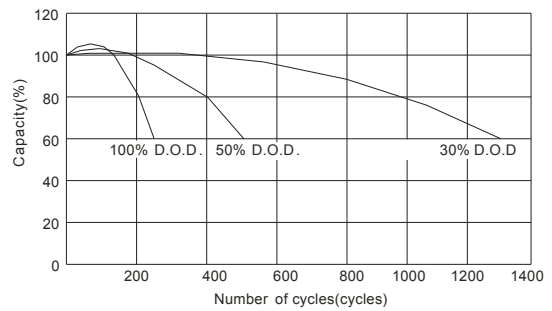
**Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)**

F.V/time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	16.500	11.502	8.700	5.120	3.000	2.196	1.922	1.369	0.934	0.624	0.508	0.274
	30.517	21.957	16.791	10.199	5.985	4.384	3.846	2.739	1.870	1.249	1.017	0.547
1.67V	14.648	10.734	8.248	5.011	2.978	2.174	1.912	1.362	0.929	0.619	0.501	0.260
	27.089	20.488	15.931	9.986	5.942	4.342	3.830	2.730	1.863	1.241	1.004	0.521
1.70V	13.867	10.350	8.045	4.967	2.957	2.172	1.908	1.359	0.929	0.613	0.494	0.253
	25.648	19.768	15.550	9.899	5.906	4.339	3.822	2.724	1.863	1.229	0.991	0.508
1.75V	12.550	9.739	7.706	4.879	2.913	2.143	1.896	1.350	0.924	0.611	0.490	0.249
	23.214	18.606	14.911	9.732	5.833	4.287	3.797	2.708	1.854	1.227	0.984	0.500
1.80V	11.213	9.084	7.389	4.770	2.891	2.128	1.884	1.343	0.922	0.606	0.482	0.241
	20.745	17.361	14.321	9.518	5.797	4.267	3.774	2.695	1.849	1.217	0.969	0.484
1.85V	9.875	8.429	7.005	4.639	2.848	2.104	1.867	1.331	0.916	0.598	0.474	0.233
	18.276	16.116	13.590	9.263	5.718	4.230	3.742	2.674	1.841	1.203	0.954	0.468

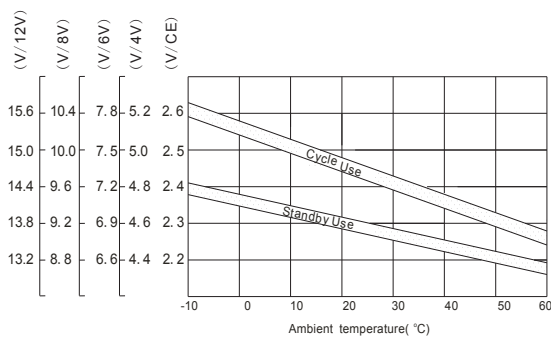
### Discharge characteristic Curve



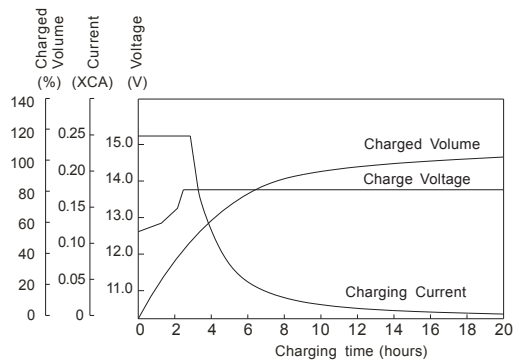
### Cycle service life in relation to depth of discharge



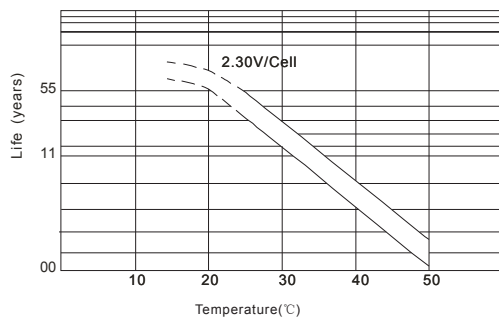
### Relationship between charging voltage and temperature



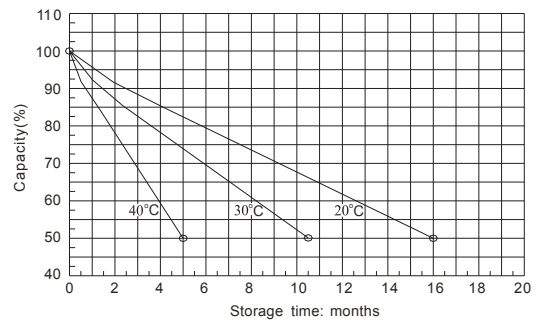
### Constant voltage charging characteristic (0.25CA, at 25°C)



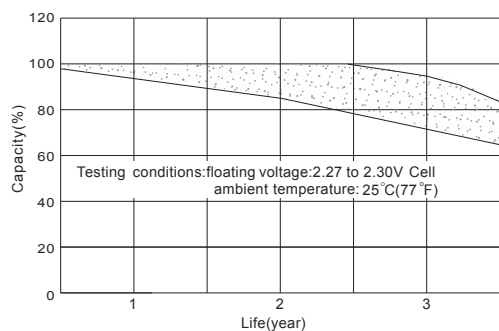
### Temperature effects on float life



### Self-discharge characteristic



### Life characteristics of standby use



### Charge characteristic Curve for standby use

