

General Series Battery

JYC 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 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

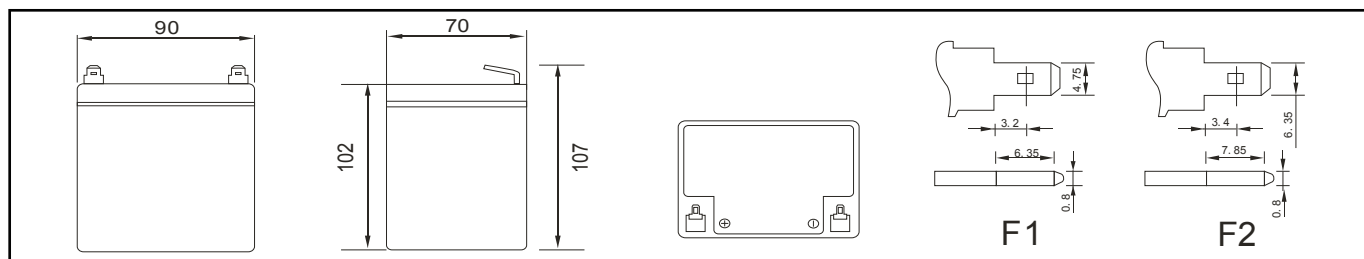
Construction

- * 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)		4.5Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	90mm (3.54 inches)	70mm (2.76 inches)	102mm (4.01 inches)	107mm (4.21 inches)
Approx Weight	1.35kg (2.97lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour (0.225A, 10.5V)	10 hour (0.45A, 10.5V)	5 hour (0.778A, 10.2V)	1 hour (2.55A, 9.6V)
	4.5Ah	4.5Ah	3.89Ah	2.55Ah
Max. discharge current	50A (5 Sec.)			
Internal Resistance	Full charged at 25°C (77°F) : Approx 40mΩ			
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 1.35A)		13.50-13.80V	

Outer dimension (mm)

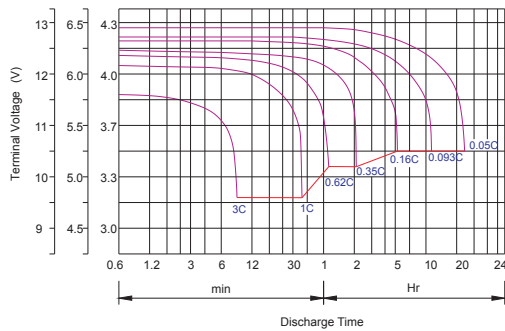


Terminal Type (mm)

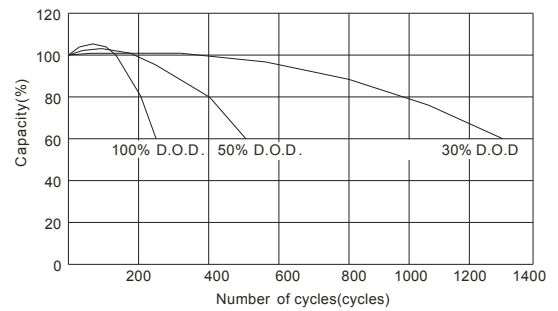
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

F.V/time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	15.390	20.347	8.100	4.870	2.550	1.866	1.609	1.146	0.782	0.573	0.467	0.247
	28.464	38.841	15.633	9.701	5.087	3.726	3.219	2.293	1.565	1.147	0.934	0.495
1.67V	13.663	18.988	7.679	4.766	2.532	1.848	1.601	1.140	0.778	0.569	0.460	0.235
	25.266	36.243	14.832	9.499	5.051	3.690	3.206	2.285	1.559	1.140	0.922	0.471
1.70V	12.934	18.308	7.490	4.724	2.513	1.846	1.597	1.137	0.778	0.563	0.454	0.229
	23.923	34.968	14.478	9.416	5.020	3.688	3.199	2.280	1.559	1.129	0.910	0.459
1.75V	11.706	17.229	7.174	4.641	2.476	1.822	1.587	1.130	0.773	0.561	0.450	0.225
	21.652	32.914	13.882	9.257	4.958	3.644	3.178	2.267	1.552	1.127	0.903	0.452
1.80V	10.458	16.070	6.880	4.537	2.458	1.809	1.577	1.124	0.771	0.556	0.443	0.218
	19.349	30.711	13.333	9.053	4.928	3.627	3.159	2.256	1.548	1.118	0.889	0.437
1.85V	9.211	14.910	6.522	4.412	2.421	1.789	1.563	1.114	0.767	0.549	0.435	0.210
	17.047	28.508	12.653	8.810	4.861	3.595	3.132	2.238	1.541	1.104	0.876	0.423

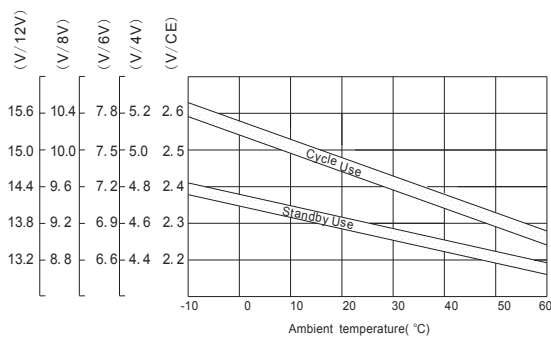
Discharge characteristic Curve



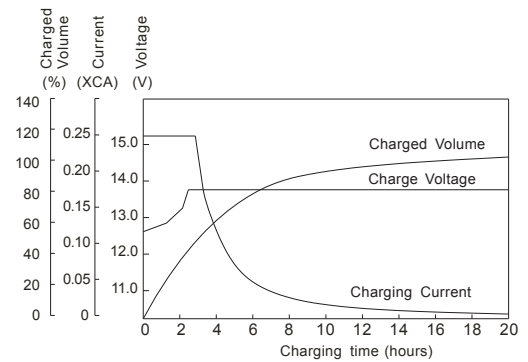
Cycle service life in relation to depth of discharge



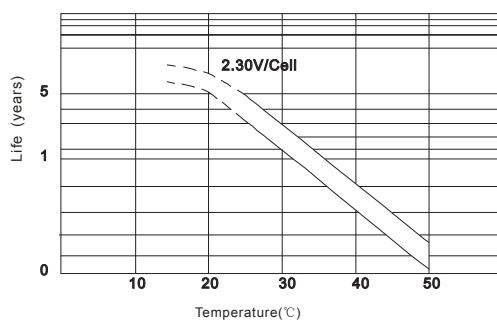
Relationship between charging voltage and temperature



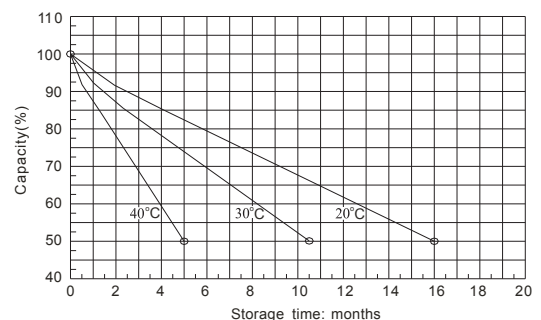
Constant voltage charging characteristic (0.25CA, at 25°C)



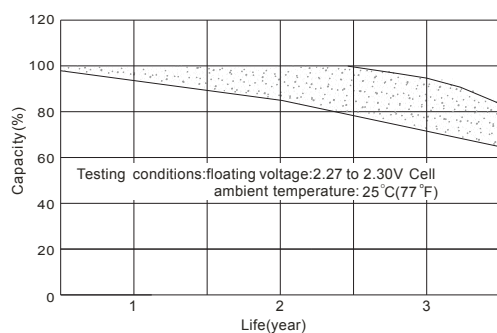
Temperature effects on float life



Self-discharge characteristic



Life characteristics of standby use



Charge characteristic Curve for standby use

